depoortere

User Manual

Self-propelled double flax picking machine

DAEAHY 2WD

For the latest version of the manual and for online web help, visit www.depoortere.be

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Content

Preface

Preface

You have made the right choice by purchasing a machine from Depoortere NV. This machine is the result of more than 90 years of expertise in the flax sector.

Depoortere NV constantly strives to enhance its products. Depoortere NV also reserves the right to make changes and modifications that the company deems necessary. Depoortere NV is NOT obliged to implement these changes on machines that have already been supplied.

We would like to thank you for the collaboration and for the trust that you have shown in our product.

Depoortere NV wishes you a great deal of satisfaction and success with this machine.

Rik Depoortere

Managing director

Depoortere NV

Use of the user manual

TIP
Consult the website of Depoortere NV for the most recent version of this user manual. This user manual is available as a pdf and as a responsive web help system.

See the MANUALS menu on the website or select https://www.depoortere.be/Support.

Before using the machine, but also when using the machine, it is mandatory to consult this user manual, thoroughly read the information supplied, and to perform the work strictly in accordance with that stated in this user manual.

This user manual is an intrinsic part of the machine and must, as prescribed by the current regulations, remain available for consultation until scrapping of the machine.

For example, from a safety point of view, it is advisable to ensure that everyone who comes into contact with the machine has immediate access to the user manual at all times. Look for a suitable permanent location for the user manual in the vicinity of the machine. This location for the user manual must be safe, dry, and screened from the sun.

Upon delivery of the machine, all user manuals are also supplied.

In the event of the user manual becoming damaged, you must request a new copy from Depoortere NV.

Support

Support	More information
Local dealer	Look for your local dealer on the map. See https://www.depoortere.be/Service

Support	More information
User manuals	Consult the website of Depoortere NV for the most recent version of the user manual. These user manuals are available as a pdf and as a responsive web help system. See https://www.depoortere.be/Support
Service	Mail the service department via service@depoortere.be
Contact	Contact Depoortere NV via the contact form. See https://www.depoortere.be/Contact

Target group

The objective of this user manual is to provide all users of the machine with all relevant information relating to safe working practices with or on the machine, and also to ensure that the machine is kept in optimal condition.

This user manual is applicable to all circumstances involving work with or on the machine. For example, transporting and storage, installing, using, adjusting, maintaining, taking out of service and scrapping of the machine.

The target group can be defined as follows:

- Operators
- Hauliers
- Qualified technicians (technical departments, electricians, maintenance technicians)
- Persons who are tasked with the final taking out of service and the scrapping of the machine

The above-mentioned persons with their specific tasks must possess sufficient demonstrable knowledge and/or level of experience. The machine may only be operated by or under the supervision of a qualified person. The operator must be at least 18 years old.

Symbols used

The following symbols are used in this user manual:

TIP
Provides the user with suggestions and advice for performing a procedure more easily or more conveniently.

NOTE
A general note that possibly provides a greater economic benefit.

ENVIRONMENT
Guidelines that must be followed when using hazardous substances and when recycling products and materials.

CAUTION
Denotes a hazardous situation that, if the safety instructions are not followed, can result in minor to moderate injury and/or damage to the machine or harm to the environment.

WARNING
Denotes a hazardous situation that, if the safety instructions are not followed, can result in serious injury or death and/or damage to the machine or harm to the environment.

DANGER
Denotes a hazardous situation that, if the safety instructions are not followed, can result in serious injury or death.

Abbreviations used

An overview of the abbreviations that are used in the manuals for the harvesting machines is provided below.

Abbreviation	More information
ATEX	**AT**mosphères **EX**plosives This is an explosive environment.
BRS	Binding rope system
DEF	**D**iesel **E**xhaust **F**luid This is another name for AdBlue as used in the United States.
DPA	**D**ébit **P**roportionnel à l'**A**vancement This is the proportional flow rate for driving, with ratio of the speed of the belts in relation to the driving speed.
DPF	**D**iesel **P**article **F**ilter This is a filter that is designed to filter soot from diesel engines.
EAT	**E**xhaust **A**fter **T**reatment Dit is het uitlaatgasnabehandelingssysteem. Bestaat uit een roetfilter (DPF) en een katalysator (SCR).
FMI	**F**ailure **M**ode **I**dentifier Identification of the fault mode.
LS	**L**oad **S**ensing The pressure and the flow rate of the hydraulic oil is adapted to the demand from the system. This ensures more efficient use of energy and less heat generation.
PU	**P**ick**U**p This is the pick-up that is used to collect the product.
PWM	**P**ulse **W**idth **M**odulation This is the pulse width modulation.
SCR	**S**elective **C**atalytic **R**eduction This is a system for the post-treatment of waste gases with the aid of a catalyser.
NSP	**S**uspect **P**arameter **N**umber Number of suspect parameter
PTO	**P**ower **T**ake-**O**ff This is the power take-off of the tractor for mechanically driving coupled machines via a drive shaft.

1 Introduction

1.1 Intended use

DAEAHY comes from the French name **D**ouble **A**rracheuse **E**taleuse **A**utomotrice **HY**draulique. This means it is a self-propelled double flax picking machine, whose functional parts are hydraulically driven.

The sole use of the machine is to pick fibrous crops (flax, hemp) that have a maximum length of 1,100 mm.

1.2 Prohibited use

It is prohibited to use the machine for purposes other than those stated in this user manual, in safety instructions, or in other safety documents that are supplied with the machine.

It is prohibited to use the machine for transporting goods, animals or people.

Any modification to the machine can affect safety and the guarantee! The removal of parts is also regarded as a modification to the machine.

The machine may not be used in an ATEX zone.

It is prohibited to install parts on the machine that have not been approved by Depoortere NV. These can:

- Adversely affect the operation of the machine
- Endanger the safety of the user or other people
- Shorten the service life of the machine
- Jeopardise conformity with EC directives

It is prohibited to use this machine to process products other than those described in the intended use.

1.3 Service life of the machine

The expected service life of the machine is 40 years.

1.4 Type designation

In all communication with the manufacturer or distributor, you must always state the data on the identification plate (2). You can read the chassis number (1) on the frame.

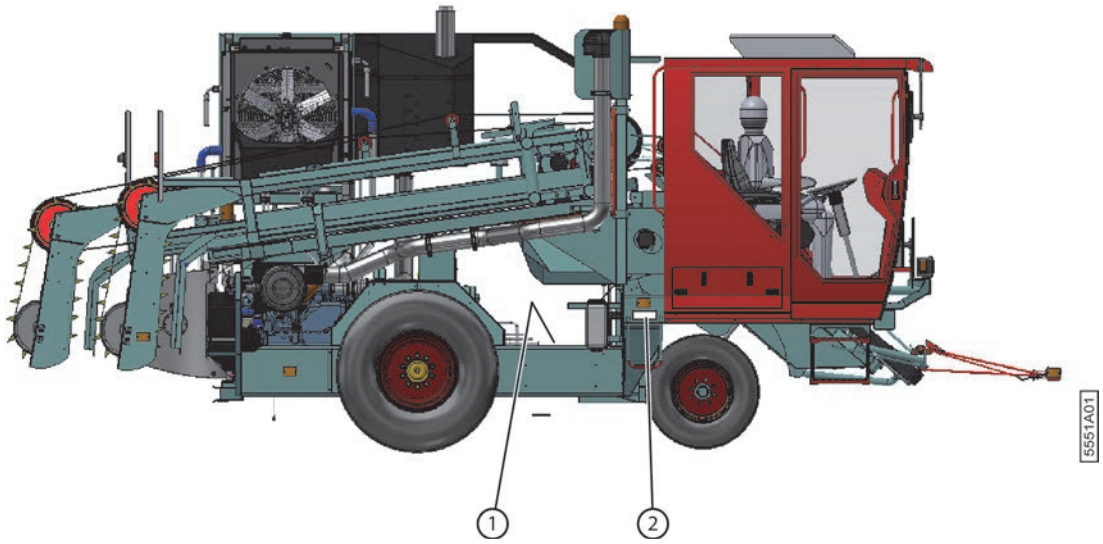


Fig. 1: The location of the identification plate for the machine

Fig. 2: Example of an identification plate

Label	Value	Additional explanation
Type	DAEAHY	The type of machine
N° série	For example: 17,602	The serial number of the machine = the chassis number.
T.T.G / P.T.A.C	10,500 kg	T.T.G. = Toegestaan totaalgewicht P.T.A.C. = Poids Total Autorisé en Charge
Max. toegelaten gewicht / Poids maxi admissible :		
Trekhaak/Attelage	1,500 kg	The maximum permissible weight on the tow bar
As 1/essieu 1	5,100 kg	The maximum permissible weight on axle 1
As 2/essieu 2	6,490 kg	The maximum permissible weight on axle 2
As 3/essieu 3	Not applicable	The maximum permissible weight on axle 3
Motor/Moteur	TCD6.1L6	The type of engine The serial number of the engine
Vermogen/Puissance	160 kW	The engine power
Jaar/Année	For example: 2017	Year of construction
Goedkeuring frankrijk / Réception française :		
Datum/Date	Is filled in, if applicable.	Date of approval in the United Kingdom

Label	Value	Additional explanation
Plaats/Lieu	Is filled in, if applicable.	Date of approval in the United Kingdom

1.5 Layout

The arrow shows the driving direction of the machine, The machine consists of:

- Flax-laying section (1)
- Spreading tables (2)
- Cabin (3)
- Picking element (4)

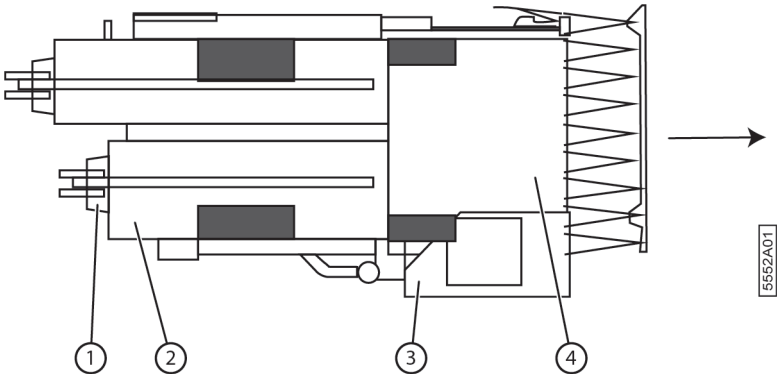


Fig. 3: Layout of machine

1.6 Technical data

1.6.1 Machine data

Data	Explanation
Type	DAEAHY
Engine	DEUTZ TCD 6.1 L6
Power	160 kW
Weight	10,500 kg
Height	3.205 mm
Width	3.500 mm
Length	7.575 mm
Ambient temperature	0 °C to 40 °C
Relative humidity	0 to 100%
Noise level	> 85 dB outside the cabin

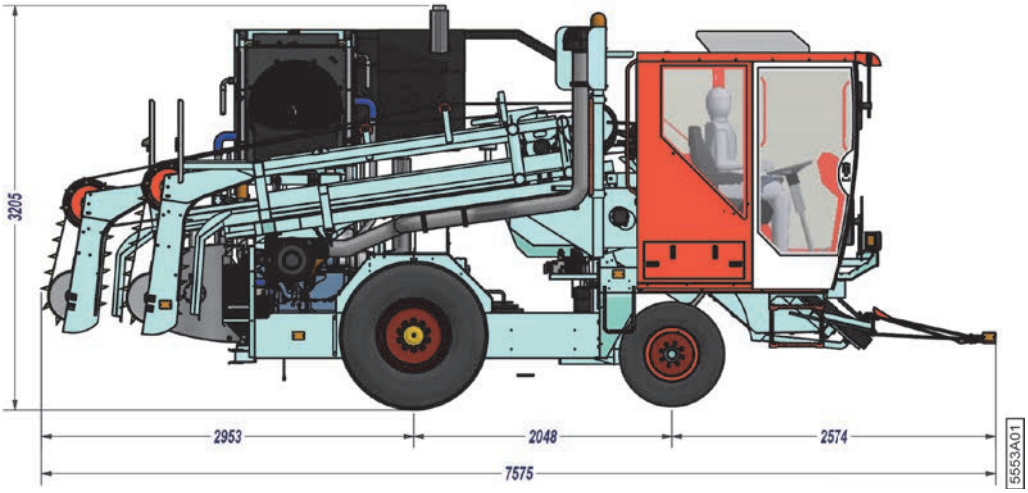


Fig. 4: Dimensions (length and height)

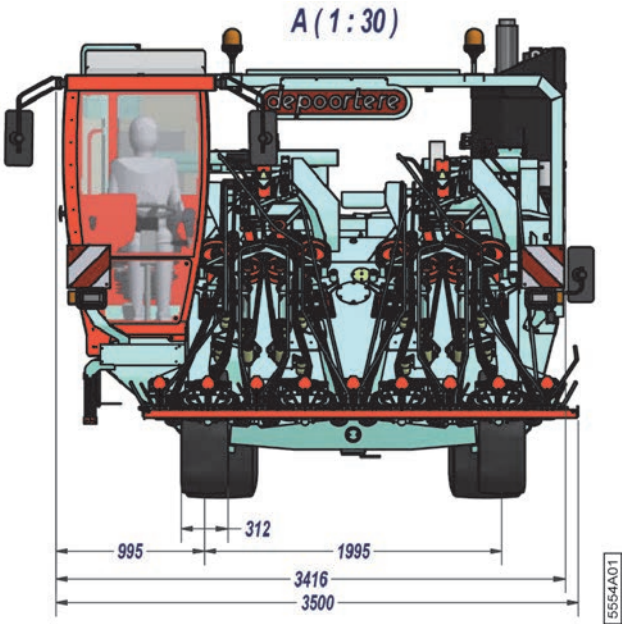


Fig. 5: Dimensions (width at front)

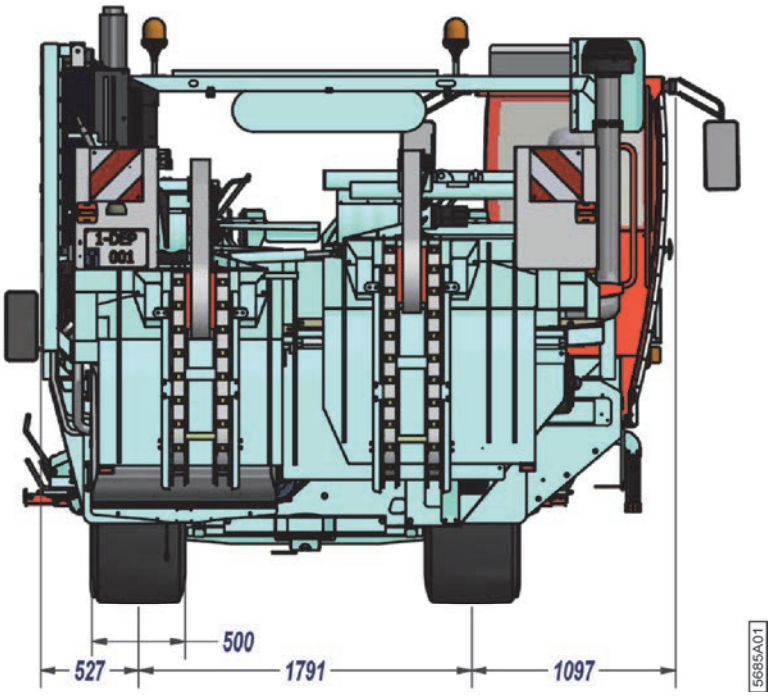


Fig. 6: Dimensions (width at rear)

1.6.2 Production data

Data	Explanation
Production speed	The machine can pick 1 hectare of flax per hour.

2 Description

2.1 Machine versions

The name DAEAHY is derived from French Double Arracheuse Etaleuse Automotrice Hydraulique.

The machine exists in 4 versions:

- DAEAHY 2WD - 2018 - picking width 2.4 m with cabin
- DAEAHY 2WD - 2018 - picking width 2.6 m with cabin
- DAEAHY 2WD - 2018 - picking width 2.4 m without cabin
- DAEAHY 2WD - 2018 - picking width 2.6 m without cabin

See also

- 2.4 Accessories and options on page 50

2.2 Overview of the machine

2.2.1 Left-hand front view

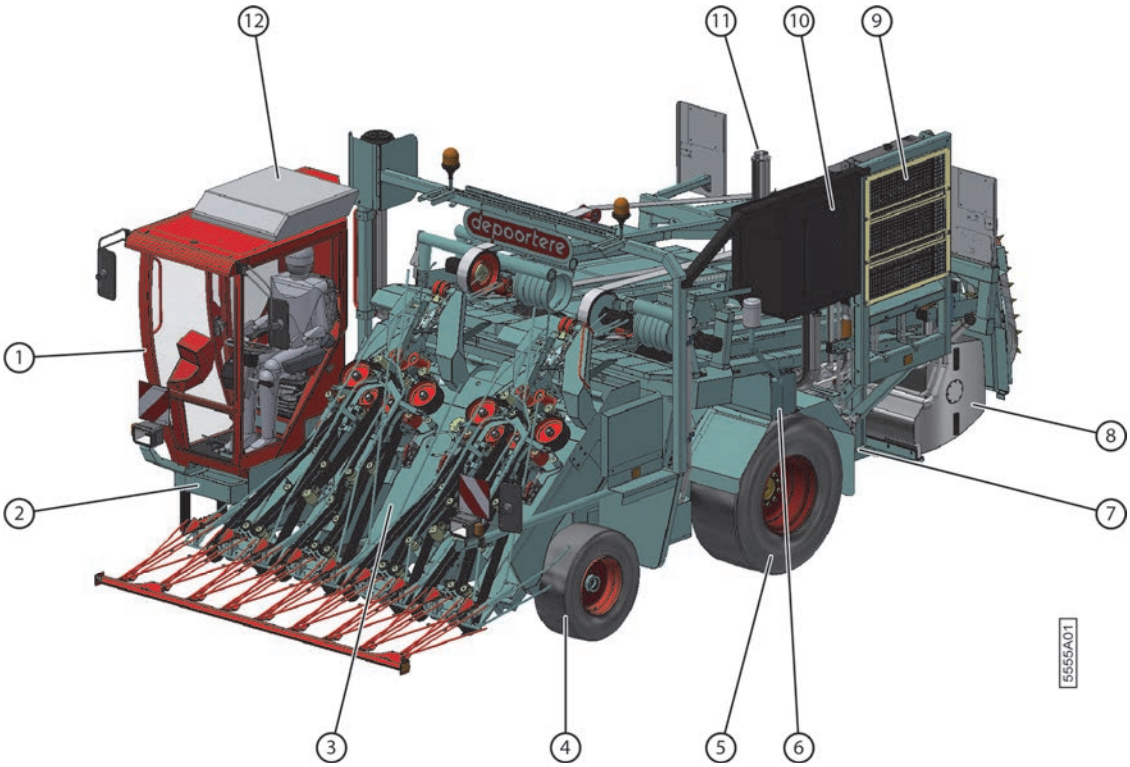


Fig. 7: Left-hand front view of the machine

Nr.	Name
1	Cabin

Nr.	Name
2	Cabinet for the remote control
3	Picking element
4	Right-hand front wheel
5	Right-hand rear wheel
6	Hydraulic tank
7	Engine
8	Fuel tank
9	Radiator
10	Exhaust gas post-treatment system
11	Exhaust pipe
12	Air conditioning system

2.2.2 Rear view, right-hand side

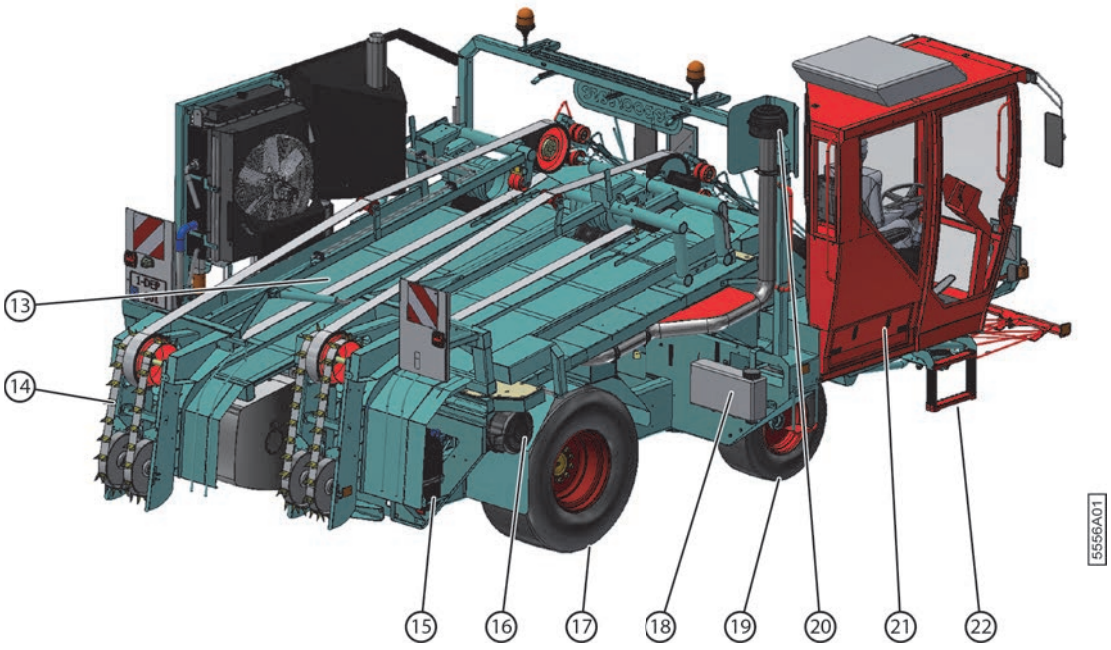


Fig. 8: Rear view, right-hand side of the machine

Nr.	Explanation
13	Spreading tables
14	Flax-laying section
15	AdBlue tank (only EU)
16	Air filter
17	Right-hand rear wheel
18	Water reservoir air conditioning system
19	Right-hand front wheel
20	Pre-filter of the air filter
21	Storage compartment with controllers, electrical cabinet and user manuals
22	Ladder

2.3 Layout and names

2.3.1 Overview of cabin

The outside of the cabin is equipped with:

- Windscreen wipers
- Windscreen washer reservoir
- Door
- Ladder
- Mirrors
- Flashing light
- Work lights

The inside of the cabin is equipped with:

- Steering column
- Accelerator pedal
- Brake pedal
- Emergency stop button
- Driver’s seat
- Control console + joystick
- Control screen
- Controls
- Cabin lighting
- Radio
- Sunblind

2.3.2 The door

The cabin door is a sliding door that has an aluminium handle (1) and (3) on the inside and outside. The handles are only used for unlocking the door. The handles may not be used for entering or exiting the cabin. Use the handle (2) to slide the door open and closed when you are seated in the cabin. In the open and closed positions, the door is locked by the handle (1). On the outside, a key can be used to lock the door. The cabin is equipped with 2 iron handgrips (4) and (5). These handgrips enable you to easily and safely enter or exit the cabin.

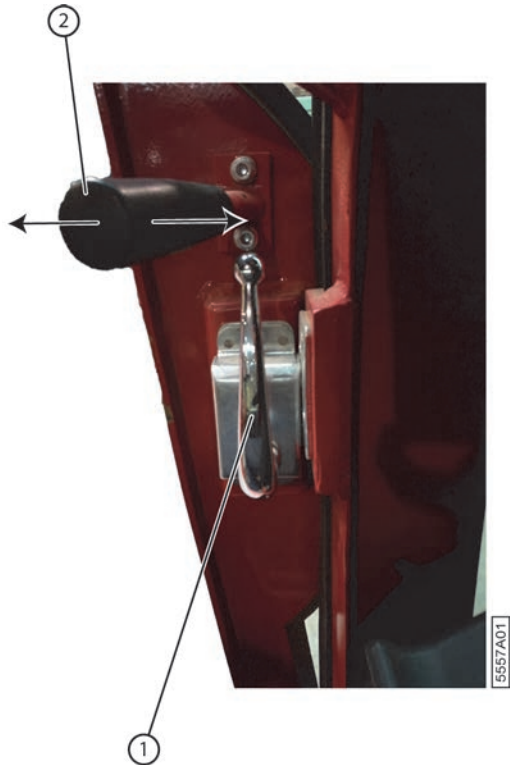


Fig. 9: The door handle on the inside of the cabin

Fig. 10: The door on the outside of the cabin

2.3.3 The ladder

The ladder consists of 2 metal anti-slip steps (1) and 2 rubber uprights (2). The rubber uprights are robust enough to use the ladder for entering the cabin. The rubber uprights are also movable when coming into contact with objects nearby.

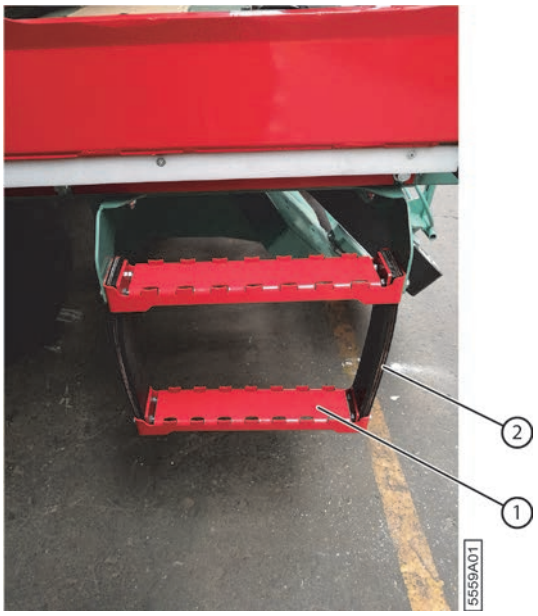


Fig. 11: The ladder

2.3.4 The mirrors

3 mirrors are installed in order to ensure that you have optimal visibility on and around the machine.

The right-hand mirror (1) is mounted on the cabin. The left-hand mirror (3) that is mounted on the chassis, provides visibility for the left-hand side of the machine. The mirrors must be manually adjusted so that the blind spot for vulnerable road users is minimised. The left-hand mirror (2) that is mounted on the cabin, provides visibility for the machine itself.

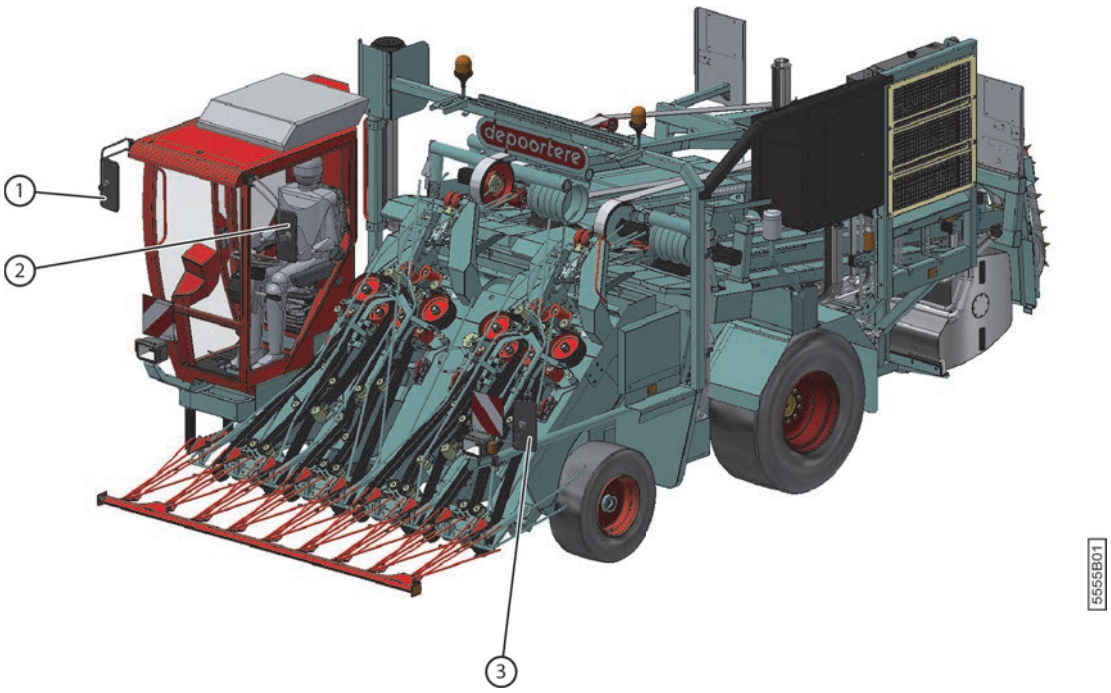


Fig. 12: The location of the mirrors

2.3.5 The flashing light

As soon as the machine is placed in Road mode, the flashing lights (1) are automatically activated. The flashing light can also be activated via the control button on the control console, when the battery key is switched ON.

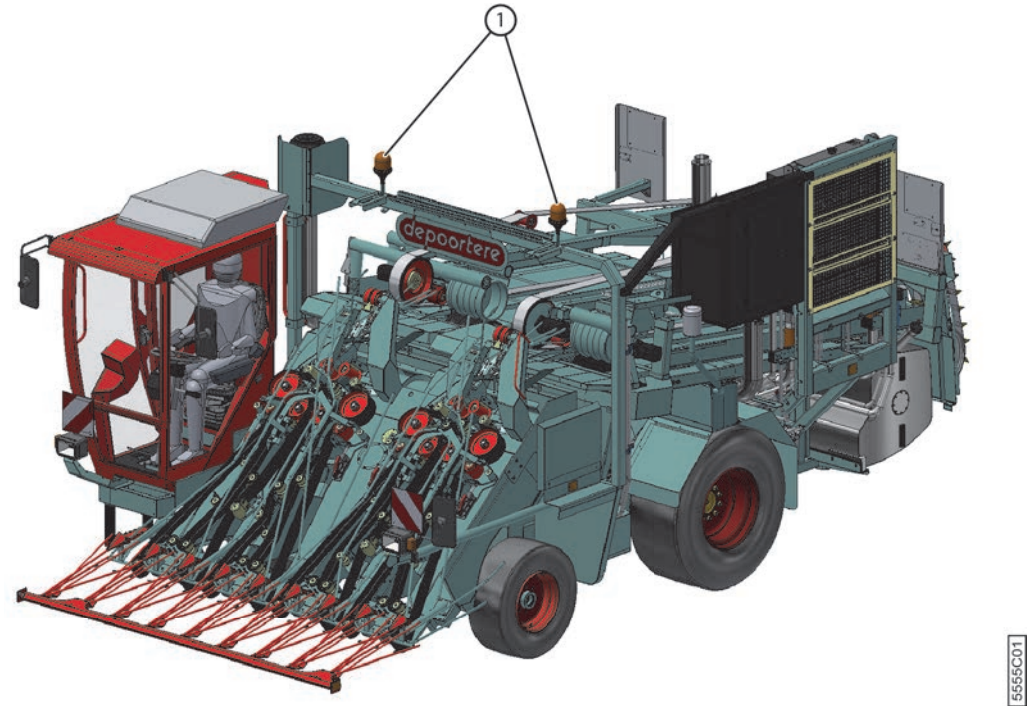


Fig. 13: The flashing lights

2.3.6 The windscreen wipers and the windscreen washer reservoir

The windscreen wiper and the windscreen washer are operated by the buttons in the cabin. The windscreen wiper can be switched ON or OFF. The windscreen washer reservoir (1) is located in the rear of the cabin.

Fig. 14: The windscreen washer reservoir

2.3.7 The work lights

The work lights may not be used on public roads. They can dazzle oncoming traffic or traffic behind.

The machine is equipped with the following work lights:

- 2 work lights (1) and (2) at the front on the roof, provide optimal lighting of the driving direction and the picking of the flax.
- 1 work light (3) at the rear on the roof of the cabin, provides optimal lighting of the picking element of the machine.
- 1 work light (4) that provides optimal lighting for the space underneath the spreading tables. This is where, for example, the battery key is located.
- 1 work light (5) that provides optimal lighting for the spreading tables.

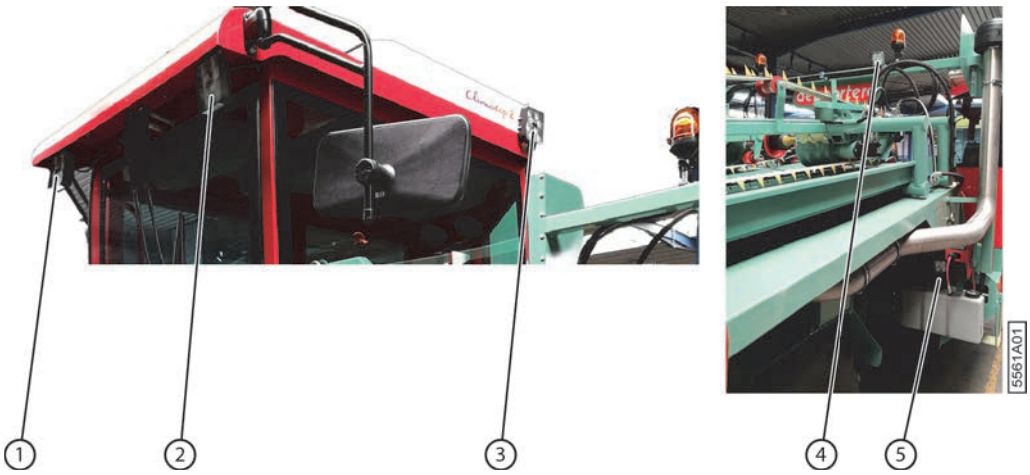


Fig. 15: Work lights

See also

- 8.2.19 Switching ON or switching OFF the lights of the machine (version 2) on page 98

2.3.8 The battery key

The battery key is located underneath the spreading tables and is accessible from the right-hand side of the machine.

The battery key enables you to switch OFF all electrical power to the machine. This action isolates electrical power from the entire machine including the engine and the controls.

WARNING

Switching OFF the electrical power using the battery key, without switching OFF the ignition to the machine, and without first waiting for 3 minutes, is only permitted in the event of an emergency!

Switching OFF in this manner can cause serious damage to the engine and to the hydraulic system.

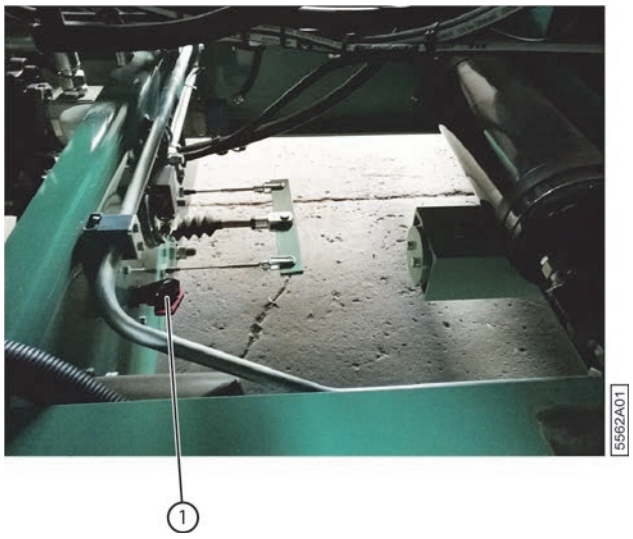


Fig. 16: Battery key

See also

- 8.2.1 Starting the engine on page 91

2.3.9 The controls in the cabin

At the front

Fig. 17: Controls at the front in the cabin

Nr.	Explanation
1	Radio
2	Sunblind
3	Controls for lights and windscreen wipers
4	Fuses

2.3.10 The air conditioning system

3 types of air conditioning system are available:

- Air conditioning system with manual operation (manual version), see 2.3.11 The air conditioning system (manual version) on page 33.
- Air conditioning system with bluetooth operation (bluetooth version), see 2.3.12 The air conditioning system (bluetooth version) on page 34.
- Air conditioning system (airco version), see 2.3.13 The air conditioning system (airco version) on page 34.

2.3.11 The air conditioning system (manual version)

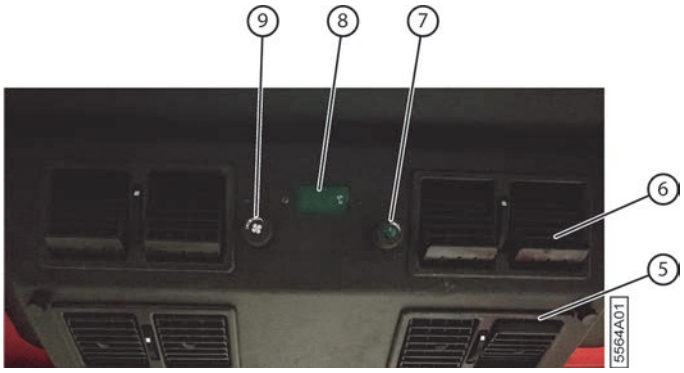


Fig. 18: The air conditioning system (manual version)

Nr.	Explanation
5	Adjustable ventilation grill (vertical)
6	Adjustable ventilation grill (horizontal)
7	Control knob for adjusting the temperature
8	Temperature display
9	Control knob for ventilation

2.3.12 The air conditioning system (bluetooth version)

The air conditioning system is completely controlled by an app on the smartphone. A smartphone on which the app is installed is supplied. The smartphone is secured to the chassis of the cabin by a magnet. You can also install the app on your own smartphone. The smartphone is linked to the air conditioning system via bluetooth or via the supplied cable.

Fig. 19: Air conditioning system (bluetooth version)

Nr.	Explanation
1	Ventilation grill
2	Control knob for ventilation grill
3	Cable for linking the smartphone to the air conditioning system.

2.3.13 The air conditioning system (airco version)

Fig. 20: The air conditioning system (airco version)

Nr.	Explanation
1	Adjustable ventilation grill
2	Control knob for adjusting the temperature
3	ON/OFF switch for air conditioning
4	Switch for setting 3 speeds for ventilation
5	Adjustable ventilation grill
6	Fixed ventilation grill

2.3.14 The driver's seat

The driver's seat is equipped with air suspension and can be adjusted.

You can find more information about the driver's seat in the user manual for the driver's seat that, just like other user manuals, is supplied with the machine. If the cabin door is locked, the storage compartment is only accessible from outside the cabin.

WARNING
A passenger may not be present in the cabin.

2.3.15 The steering column

The steering powers the front wheel in order to steer the machine in a certain direction. Via the lever on the steering column, you can:

- Adjust the height of the steering wheel
- Tilt the steering column

See also
- 9.1.2 Adjusting the height of the steering wheel on page 127
- 9.1.3 Tilting the steering column on page 127

2.3.16 The accelerator pedal

The accelerator pedal (2) is the pedal on the far right, beside the steering column, and is operated with the right foot. In the Pedal driving mode, the pedal is used in combination with the joystick to drive the machine in the Field mode and in the Road mode. The accelerator pedal controls the revs./min. and the speed of the machine.

Fig. 21: The accelerator pedal

See also

- 8.1.7 The accelerator pedal on page 88

2.3.17 The brake pedal

The brake pedal (1) is located on the right, next to the steering column, and is operated with the right foot.

Fig. 22: The brake pedal

See also

- 8.1.6 The brake pedal on page 88

2.3.18 The control unit

Fig. 23: The control unit

The control unit consists of a joystick (1), and a control console (2). The control console consists of a horizontal part with, for example, the 3-position switch, and a vertical part with, for example, the ignition.

See also

- 8.1.1 The joystick on page 83

2.3.19 The control screen

The machine is operated via the control screen.

Via the control screen you can:

- Place the machine in a specific mode (Road, Field, Loading)
- Place the machine in a specific driving mode (joystick or pedal)
- View the inputs and outputs
- View fault messages
- View engine information

The control screen is a touchscreen.

Fig. 24: The control screen

2.3.20 The remote control

The remote control is stored in the front of the machine. The remote control is used when replacing picking belts or removing blockages. You can use the remote control to rotate the picking element forwards or backwards at a reduced speed.

Fig. 25: Storage compartment with remote control

2.3.21 The fuel tank

The fuel tank is located on the left-hand side of the machine. The fuel tank is manufactured from aluminium and has a capacity of 450 litres.

For information about the fuel to be used, see supplied user manual for the DEUTZ engine.

See also

- 10.3.9 Checking the fuel level on page 210

2.3.22 The fire extinguisher

The fire extinguisher is located on the left-hand side of the machine, underneath the radiators. The fire extinguisher can be easily removed by undoing the 2 belts.

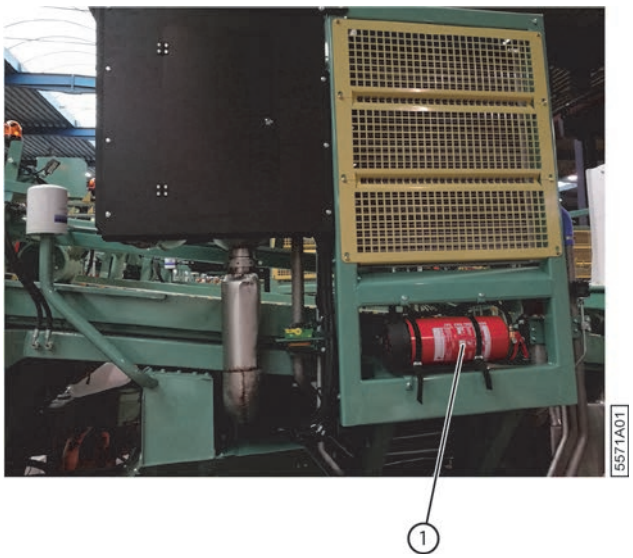


Fig. 26: Fire extinguisher

NOTE
Inspect the fire extinguisher in accordance with the current local regulations.

2.3.23 The air filter

The air filter prevents dust particles from entering the combustion chamber of the engine. The air filter consists of a filter element and a housing. The filter element can be removed for cleaning or replacement.

The air supply to the air filter is first filtered by a pre-filter.

2.3.24 The pre-filter

A pre-filter is provided to keep the air filter clean for longer. This pre-filter does not require maintenance.

2.3.25 The electrical cabinet

The electrical cabinet (2) with the fuses is located in the storage compartment in the cabin. The rest of the fuses are located in the cabin. The electrical cabinet (1) for the engine is located underneath the spreading tables.

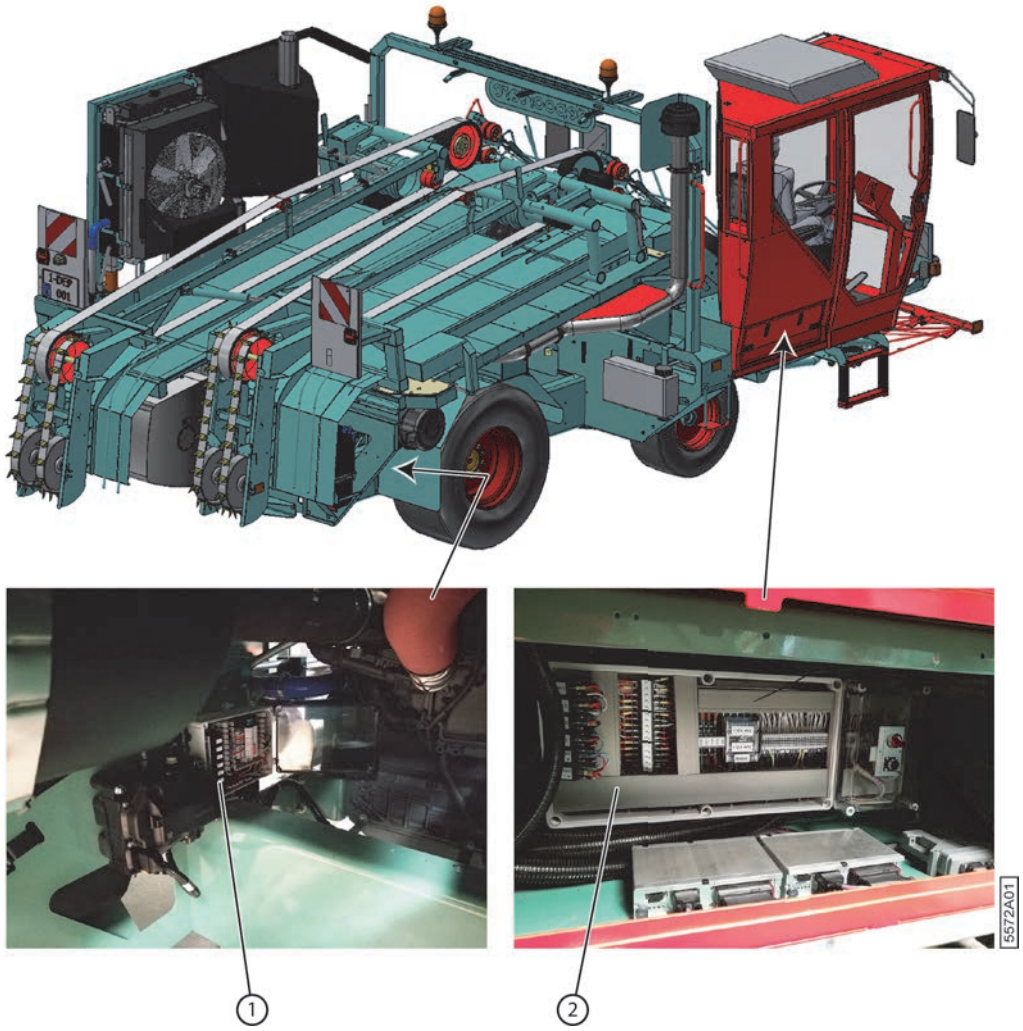


Fig. 27: Location of the electrical cabinets

2.3.26 The controllers

The controllers take care of the communication between the various parts of the machine.

There are 5 controllers on the machine:

- 1 controller (1) is located behind the pressure regulator and manometer for the crushing rollers.
- 3 controllers (2) (3) (4) are located in the storage compartment in the cabin.
- The control screen (5) is also a controller.

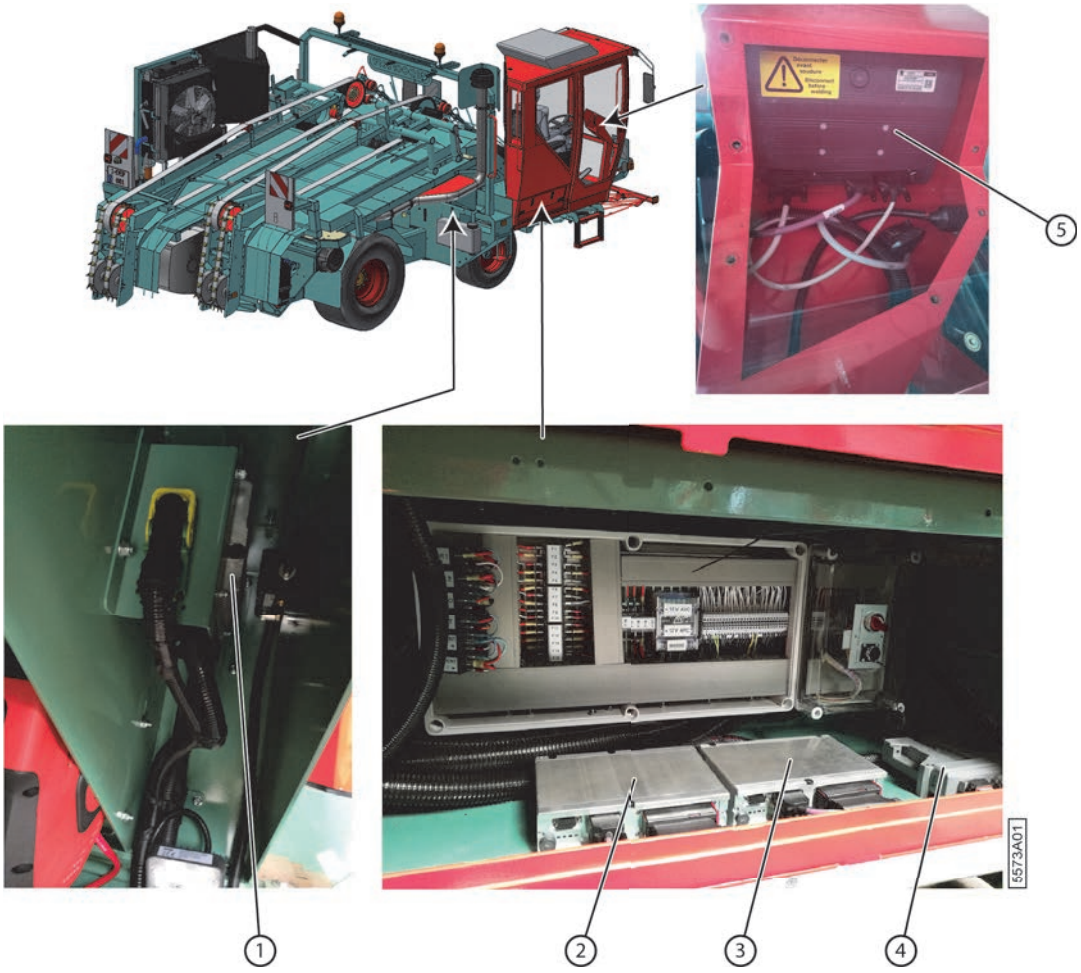


Fig. 28: Location of the controllers

2.3.27 The radiators

The radiators are located behind a protective grill on the left-hand side of the machine. A fan that provides cooling is located at the rear of the radiators.

The radiators have the following functions:

- Intercooler for the turbo of the engine (1)
- Cooling for the engine (2)
- Cooling of the hydraulic oil (3)

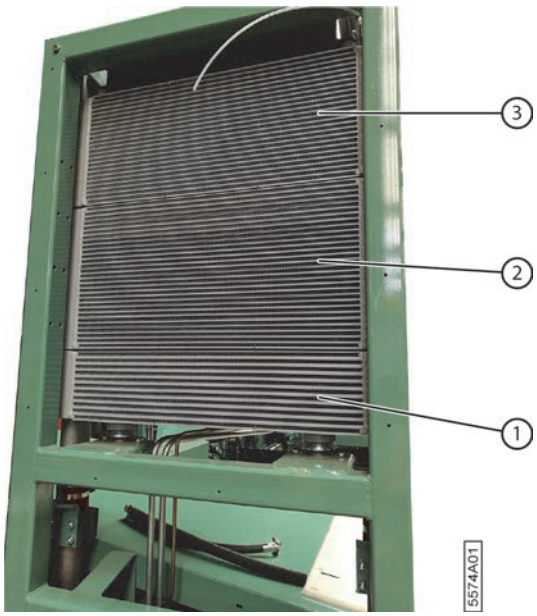


Fig. 29: Radiators

2.3.28 The picking element

The picking element takes care of the picking of the flax. The picked flax is transported by the picking element to the top of the machine and is turned anti-clockwise by 90°.

The picking element consists of a metal chassis (5). A distributor (3) is mounted at the front to distribute the flax across the various picking belts (4). The distributor consists of metal pins. Before driving on public roads, the distributors of the picking element must be protected by a protective panel (2). 8 rubber belts are installed: The rubber belts are routed in line with the various metal pulleys. Per belt, there is one driven pulley (6). Moreover, the picking element mainly consists of pulleys that are equipped with a scraper (1) and guides (7) for guiding the flax. A hydraulic motor drives the 8 driven pulleys via gearing.

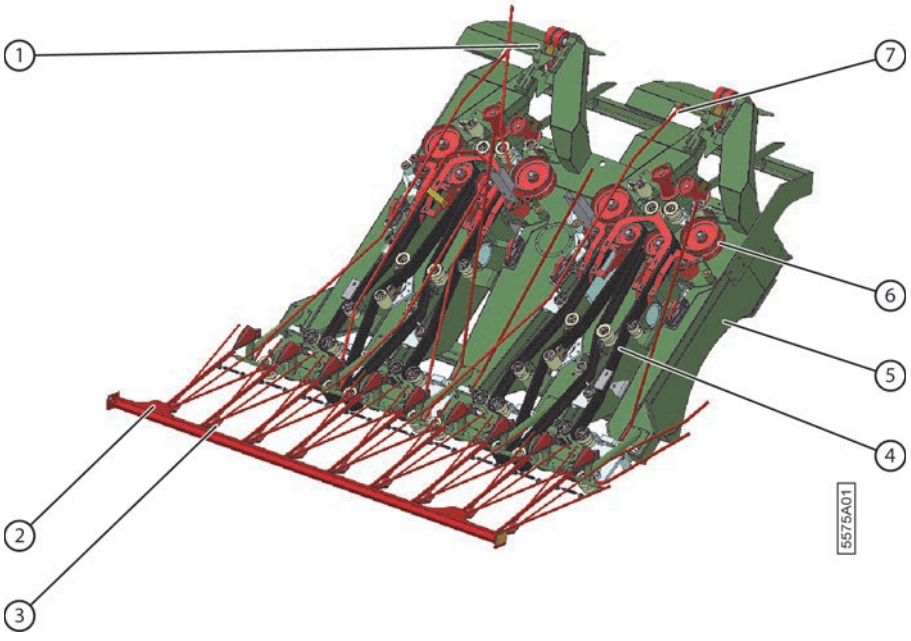


Fig. 30: The picking element

Nr.	Part
1	Scraper
2	Spray-suppression device
3	Distributor
4	Picking belt
5	Chassis
6	Driven pulley
7	Guides

2.3.29 The spreading tables

The part that takes care of the further transport and the spreading of the picked flax, consists of two metal tables (4) and (9). At the front, there are metal crushing rollers (7) that crush the flax at a preset pressure. A screw conveyor (5) is mounted underneath the transition between the picking element and the spreading tables. The screw conveyor transports the dislodged waste to the left-hand side of the machine and ejects the waste onto the field. The crushed flax is transported via conveyor belts across the 2 metal tables. The conveyor belts (8) consist of plastic belts on which metal attachments are mounted. Tape is affixed to the conveyor belts to prevent blockage of the flax. This tape covers all connections so that the flax does not get stuck. The conveyor belts are driven by rubber-coated pulleys (6) that are, in turn, driven by 2 hydraulic motors. The driven pulleys are connected to a drive shaft to guarantee synchronisation. At the rear, the conveyor belts are driven by a triple pulley (1). The centre pulley is used for the conveyor belt of the spreading tables. The outermost pulleys are used for the conveyor belts of the flax-laying section.

The metal tables are equipped with 2 cylinders. One cylinder (2) displaces the tables in relation to the machine. One cylinder (10) displaces the tables in relation to each other.

Scrapers remove dirt from the crushing rollers and the conveyor belts.

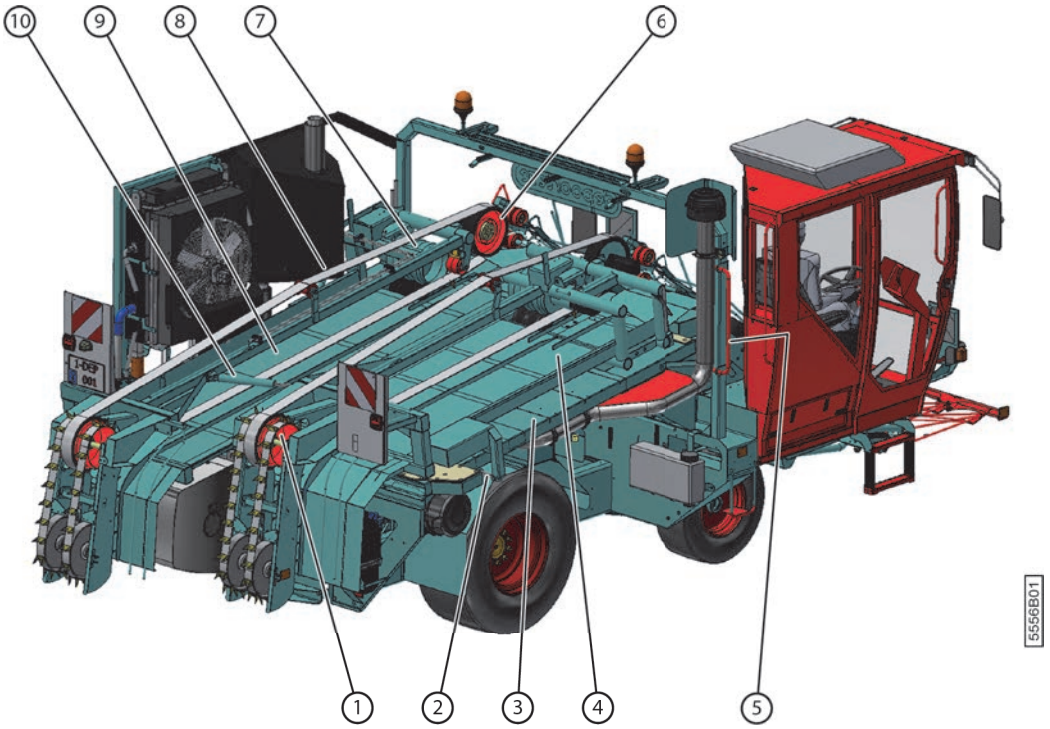


Fig. 31: The spreading tables

Nr.	Part
1	Triple pulley

Nr.	Part
2	Cylinder (movement of both spreading tables)
3	Chassis
4	Right-hand spreading table
5	Screw conveyor
6	Driven pulley
7	Crushing roller
8	Conveyor belt
9	Left-hand spreading table
10	Cylinder (movement between spreading tables)

See also

- 9.2.1 Adjusting the tables in relation to each other on page 130
- 3.2.3 The spreading tables on page 52

2.3.30 The flax-laying section

The flax-laying section consists of vertically-mounted conveyor belts (2). The flax-laying section is also driven by the conveyor belts for the spreading tables. The conveyor belts consist of plastic belts on which metal attachments are mounted. Tape is affixed to the conveyor belts to prevent blockage of the flax. The tape covers all connections so that the flax does not snag on these connections. The flax-laying section also includes metal guide profiles and guide plates.

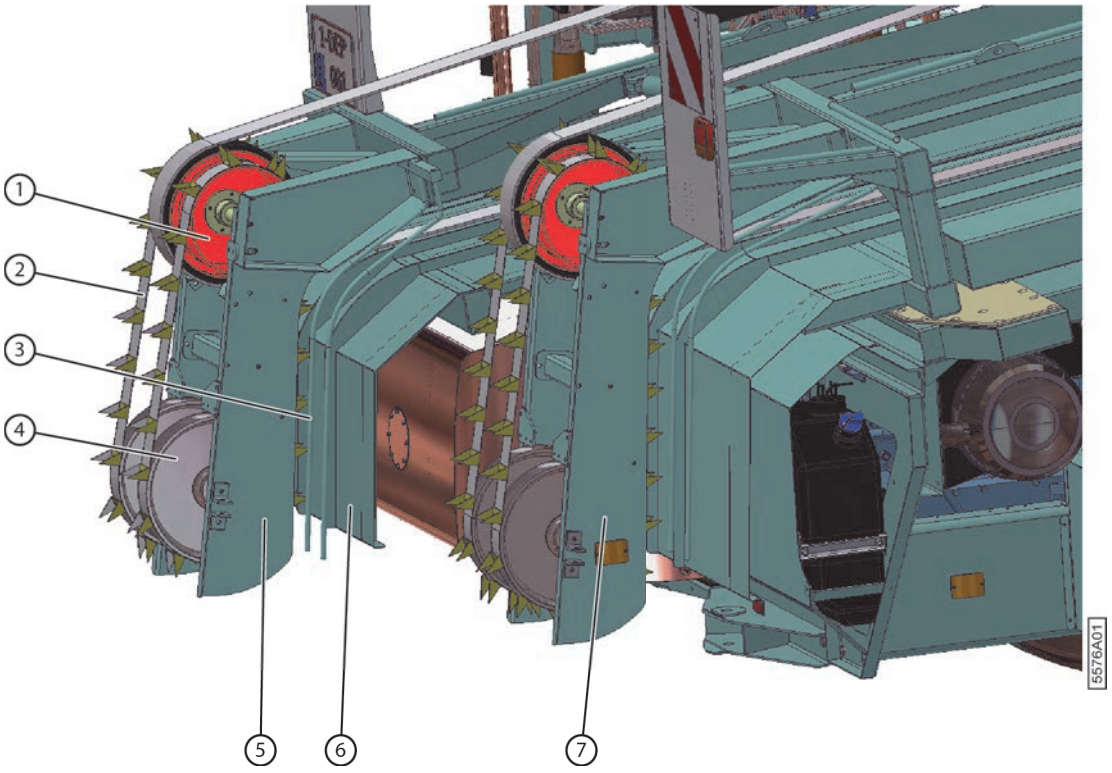


Fig. 32: The flax-laying section

Nr.	Part
1	Triple pulley
2	Conveyor belt or flax-laying belt
3	Guide profiles
4	Pulley

Nr.	Part
5	Chassis left-hand side flax-laying section
6	Guide plates
7	Chassis right-hand side flax-laying section

2.3.31 The compressor

The machine is equipped with a compressor (1). The compressor is mounted on the engine and is used for the air brake. The pressure vessel (2) and the winder (3) are mounted underneath the spreading tables. The winder is equipped with a compressed air hose that is approximately 8 metres long. The compressed air hose is equipped with a quick-release coupling that can be connected to an air gun or to a tyre inflator. You can use the air gun to blow dust off the machine. You can use the tyre inflator to check the the tyre pressure and, if necessary, inflate the tyres to the required pressure. Upon delivery, the air gun and the tyre inflator are located in the tool cabinet. The compressor can supply a pressure of up to 8 bar.

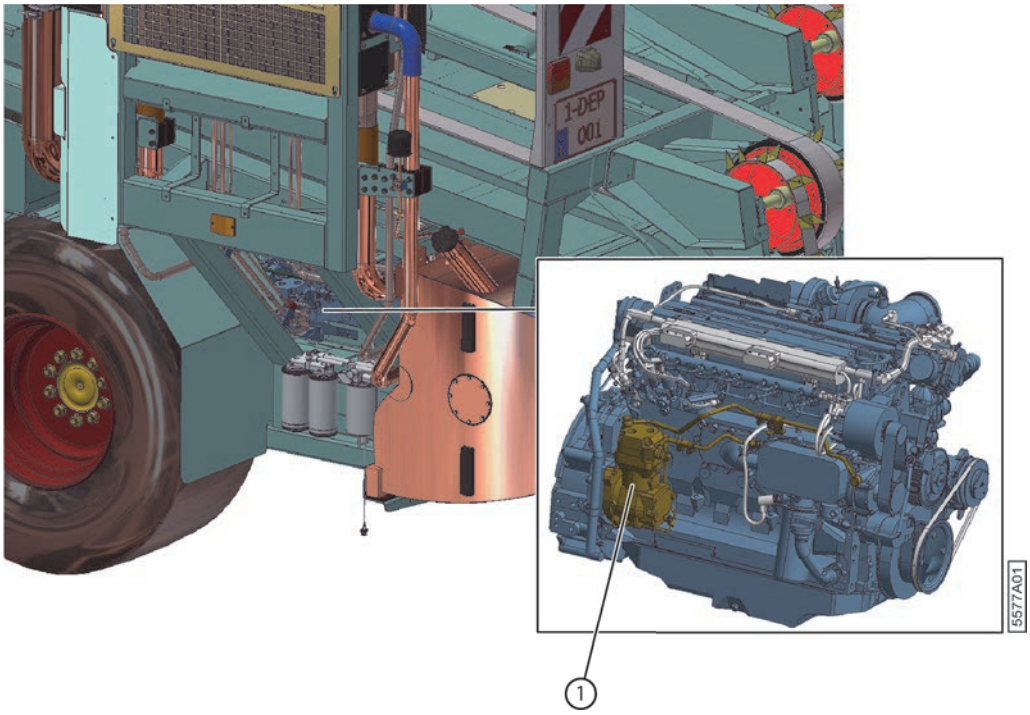


Fig. 33: The compressor

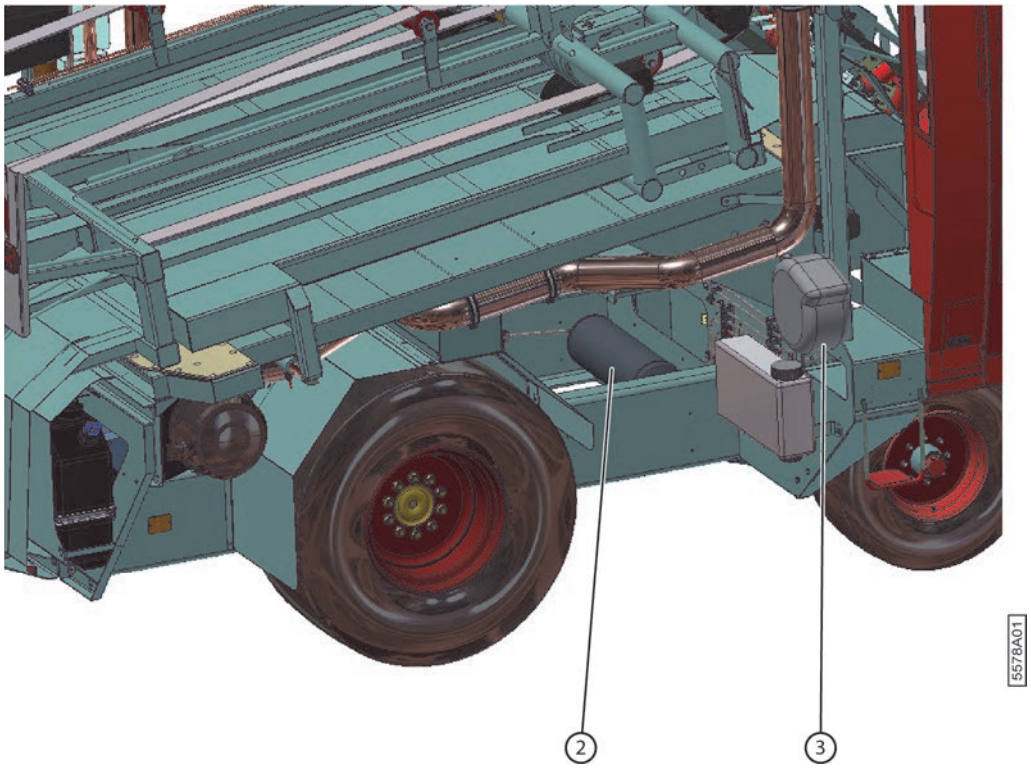


Fig. 34: The pressure vessel and the winder

See also

- 2.3.34 Storage compartments on page 47

2.3.32 The engine compartment

The engine compartment is located underneath the machine.

The engine used is a DEUTZ TCD 6.1 L6.

4 hydraulic pumps are connected to the engine (5).

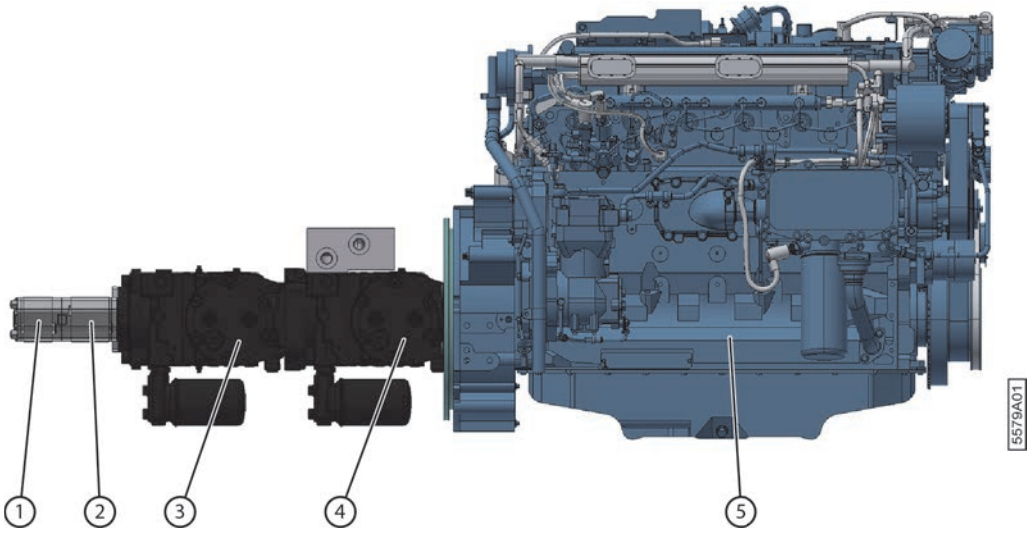


Fig. 35: Engine and hydraulic pumps

Nr.	Function
1	Power steering.
2	Movement of the working elements. Move picking element up and down, slide tables in relation to the machine, slide tables in relation to each other.
3	Working functions: driving the picking belts, driving the conveyor belts.
4	Driving functions: driving the wheels.

2.3.33 The AdBlue tank

AdBlue (DEF) is a colourless, non-toxic liquid that is used to reduce harmful emissions from diesel engines. AdBlue is added to exhaust gases in order to reduce air pollution and satisfy environmental standards.

The quality and the level of AdBlue in the tank is measured.

For information about the storage of AdBlue and about the selection of the fuel used, see user manual supplied with the DEUTZ engine.

The AdBlue tank (1) is a plastic tank that is installed on the right-hand side of the machine.

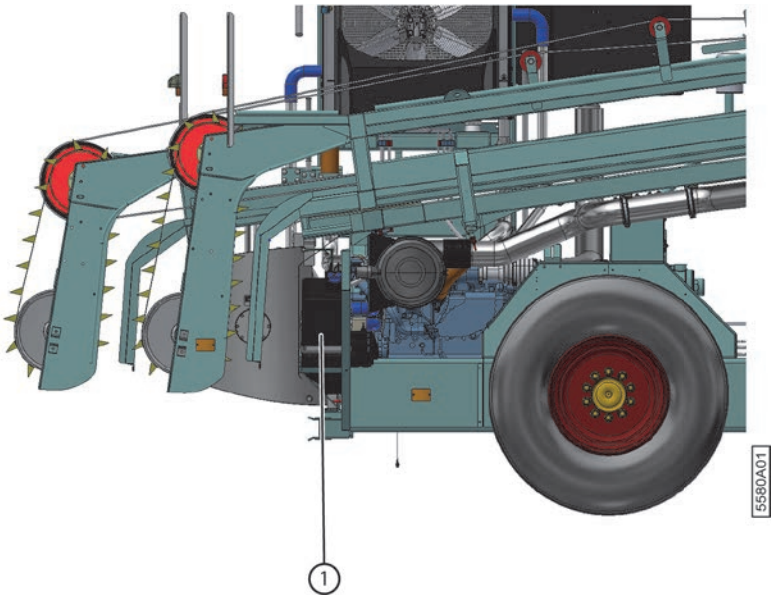


Fig. 36: The AdBlue tank

See also

- 10.2.42 Checking the level of AdBlue on page 174

2.3.34 Storage compartments

There are 2 storage compartments on the machine:

- Storage compartment (1) for tools. The storage compartment can be locked.
- Storage compartment (2) with controllers, electrical cabinet and user manuals. If the cabin door is locked, the storage compartment is only accessible from outside the cabin.

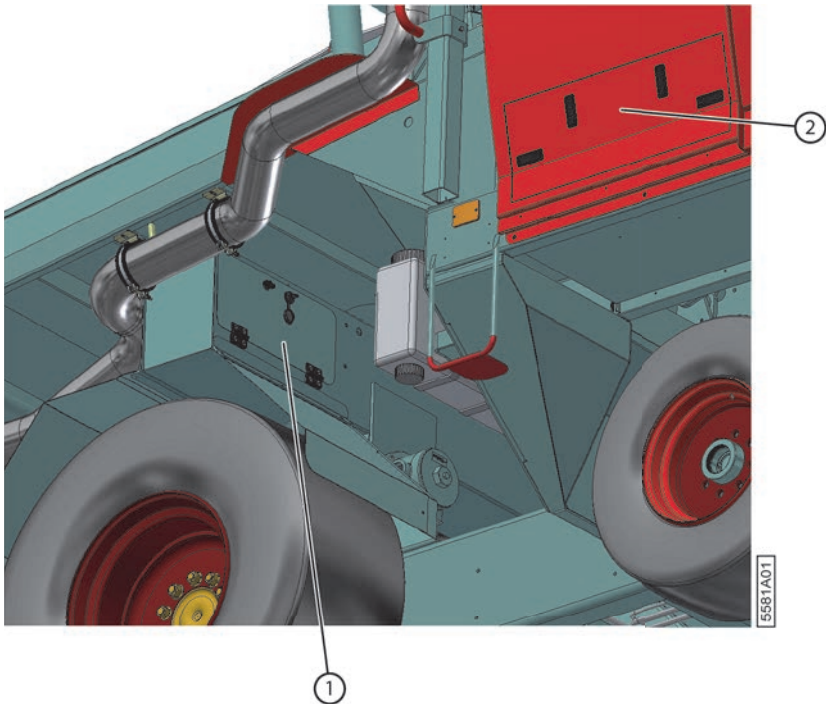


Fig. 37: Storage compartments

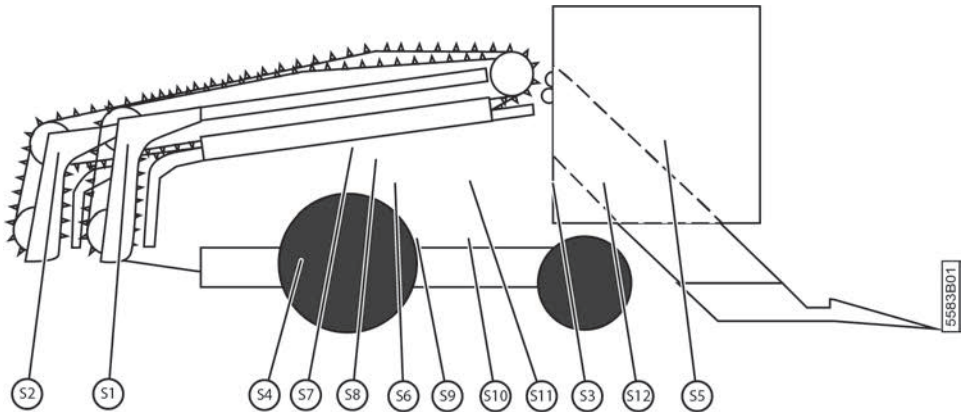
The storage compartment (1) for tools contains the following tools:

- Air gun
- Tyre inflator
- Lubricating pump
- Set of 6-32 flat spanners
- Set of 6-32 ring spanners
- Flat spanner 30, 36, 41, 46, 50, 55
- 6-piece set of screwdrivers
- Set of Allen keys (Umbraco)
- Gripping pliers (vice-grip)
- Chisel
- Punch 5 mm

See also

- 2.3.31 The compressor on page 45

2.3.35 Overview of the sensors



The machine is equipped with the following sensors:

Nr.	Explanation
S1	Sensor detects a blockage on the right-hand flax-laying belt.
S2	Sensor detects a blockage on the left-hand flax-laying belt.
S3	Sensor records the height of the picking element.
S4	Sensor records the driving speed. This sensor is mounted on the right-hand rear wheel.
S5	Sensor in the driver's seat checks that the driver is present.
S6	Sensor detects if the hydraulic filter is clogged.
S7	Sensor records the level of the hydraulic oil.
S8	Sensor records the temperature of the hydraulic oil.
S9	Sensor detects if the filter for the Drive pump is clogged.
S10	Sensor detects if the filter for the Harvest pump is clogged.
S11	Sensor records the feed pressure.
S12	Sensor records the speed of the picking belts. This sensor is installed on the motor that drives the picking element.

Access to the sensor S3 (2), that records the height of the picking element, is gained by removing the plate (1).

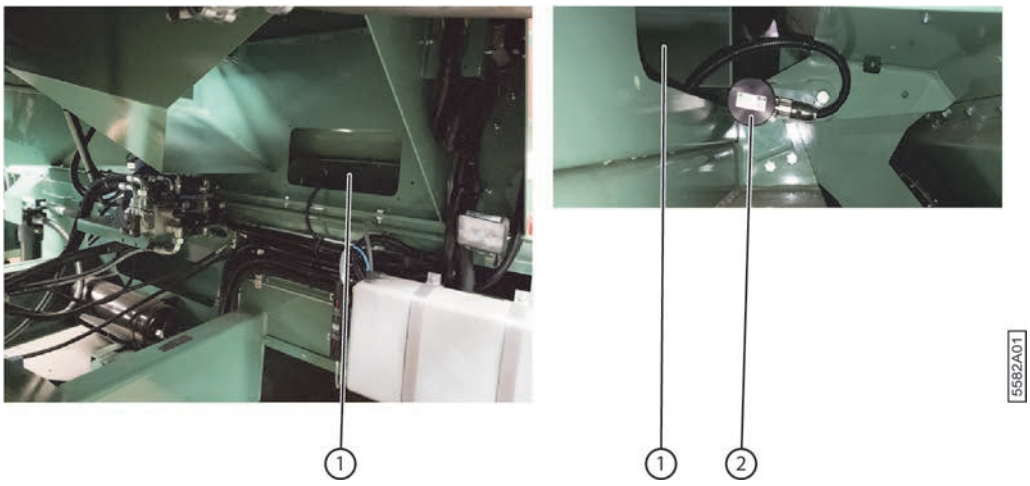


Fig. 38: Location of sensor S3

See also

- 10.3.16 Replacing a sensor on page 216

2.4 Accessories and options

The following options are available:

- Picking element with total width of 2.40 m (2 x 1.20 m)
- Rear tyres: Michelin CARGOXBIB

See also

- 2.1 Machine versions on page 25

3 Operation

3.1 The picking of the flax

The following mechanical operations take place during the harvesting of the flax:

1. The picking or harvesting of the flax.
2. The turning over of the flax.
3. The rolling-up of the flax.
4. The scutching of the flax.

3.2 The operation of the self-propelled double flax picking machine

3.2.1 The operation

The machine consists of:

- The picking element (1)
- The spreading tables (2)
- The flax-laying section (3) of the machine

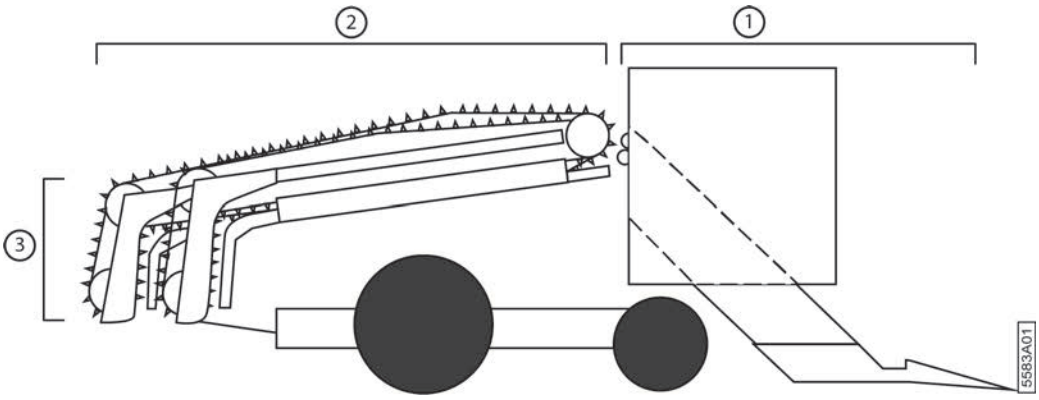


Fig. 39: Operation

3.2.2 The picking element

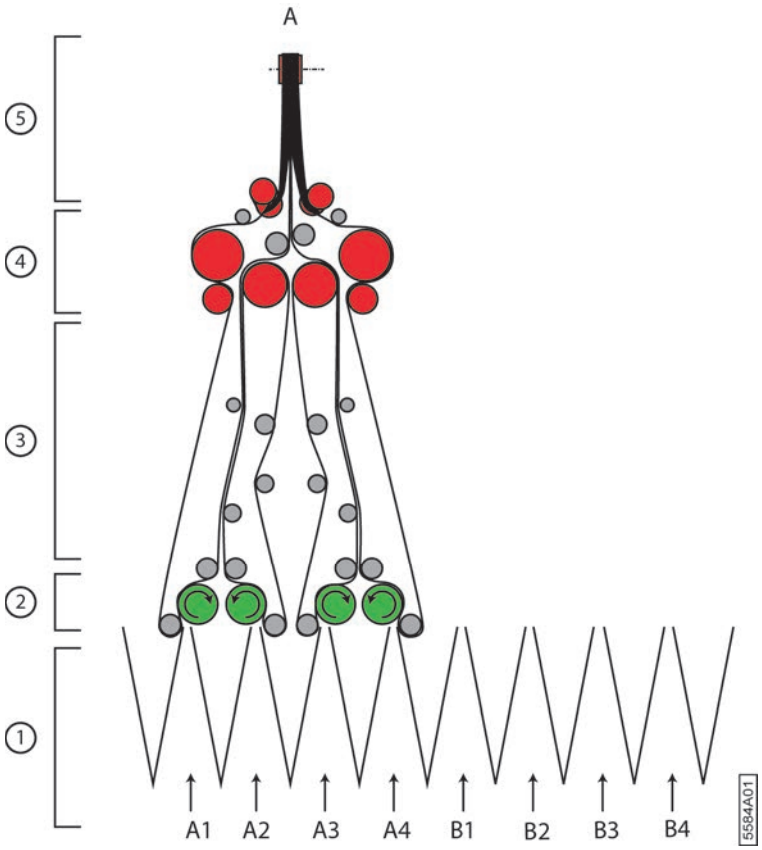


Fig. 40: Operation picking element

(1): The flax is distributed by the distributors into 8 zones (A1 + A2 + A3 + A4 + B1 + B2 + B3 + B4).

(2): Per zone, the flax comes between the rubber-coated disk and the rubber belt. This action picks the flax out of the ground. After the flax has been picked, the flax is combined in zones A1 and A2. The flax is also combined in zones A3 and A4, B1 and B2, B3 and B4.

(3): The flax from A1 and A2 is clamped between 2 rubber belts and transported further upwards.

(4): The flax from A1 and A2 is combined with the flax from A3 and A4. The flax from B1 and B2 is also combined with the flax from B3 and B4.

(5): The flax is turned anti-clockwise by 90° by the rubber belts.

3.2.3 The spreading tables

The flax is transported across 2 tables (1) and (4) to the rear of the machine. At the start of the transport section, the flax passes between the crushing rollers (3) and (6). By crushing the stems of the flax, the flax will separate from the stems more easily. The flax is transported via conveyor belts (2) and (5) across the tables to the flax-laying section of the machine. In addition to the transport, the tables also take care of the spreading of the flax onto the field. The tables can be moved in relation to each other (C), and they can also be moved in relation to the machine (B).

2 hydraulic motors drive the tables. The driven pulleys are connected to a drive shaft to guarantee synchronisation. The same drive is also used for the flax-laying section.

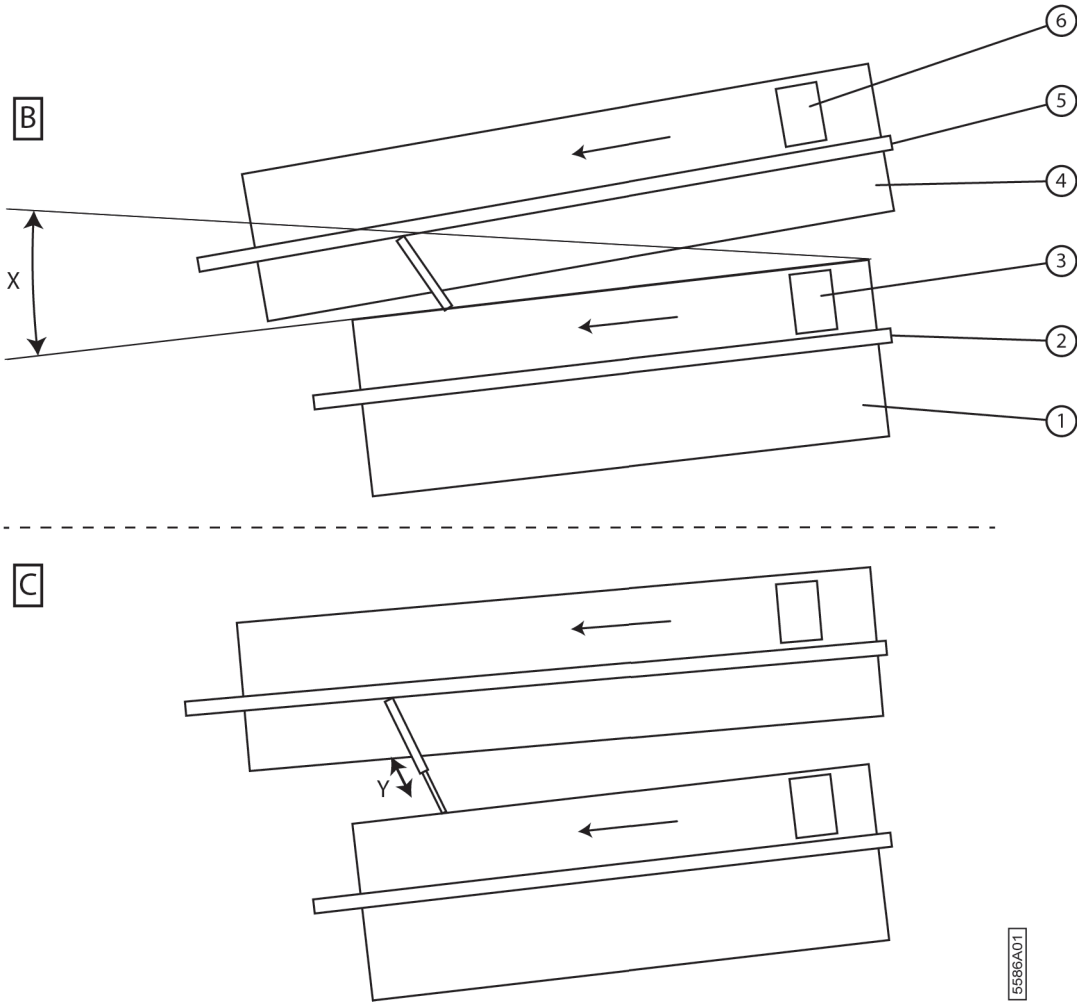


Fig. 41: The spreading tables

See also

- 2.3.29 The spreading tables on page 43
- 8.2.32 Retracting or extending the tables in relation to the machine on page 111
- 8.2.33 Adjusting the tables in relation to each other on page 111
- 9.2.1 Adjusting the tables in relation to each other on page 130
- 9.2.2 Adjusting the tables in relation to the machine on page 132

3.2.4 The flax-laying section

The flax-laying section ensures that the picked flax is deposited on the field in 2 rows. The flax-laying section consists of conveyor belts that transport the flax vertically downwards onto the field. The conveyor belts also drive the flax-laying section. The ratio of the pulleys ensures that the conveyor belts for the flax-laying section rotate slower than the conveyor belts for the tables. This causes the flax layer to be thickened, and the flax to be deposited onto the field at the same location as the flax was picked. The angle between the conveyor belts for the tables and the conveyor belts for the flax-laying section can be adjusted depending on the thickness of the flax layer.

The flax-laying section of the left-hand table protrudes more than the flax-laying section of the right-hand table. If the tables are not correctly adjusted, then the flax layer of one row overlaps the flax layer of the other row, however the flax layers are never mixed with each other. This enables the flax to be turned. Prevent the flax layers from overlapping each other by adjusting the spreading via the spreading tables.

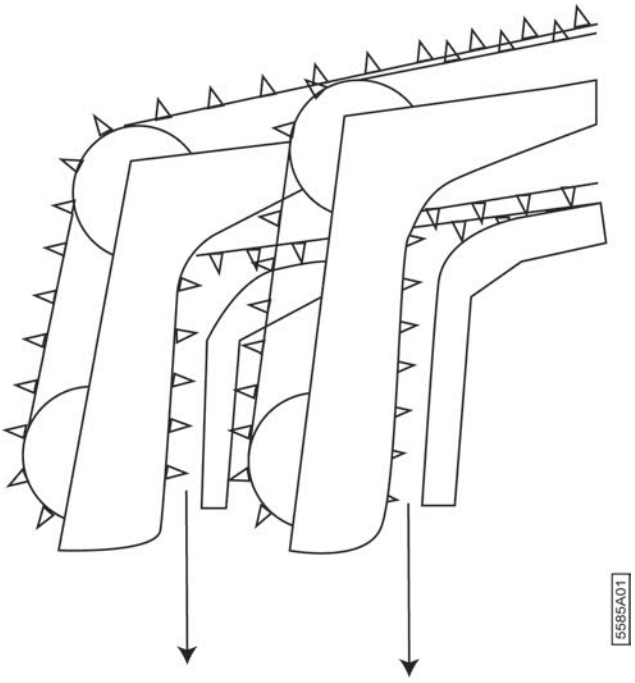


Fig. 42: The flax-laying section

3.3 The quality of the work

The technical implementation of the picking of the flax requires precision in order to achieve quality work.

The objective quality of the work during the picking is determined by:

- The uniform thickness of the swath, see 3.3.1 The thickness of the swath on page 54
- The alignment of the swath, see 3.3.2 The alignment of the swath on page 55
- The alignment of the stems
- The deflection and displacement of the flax, see 3.3.4 The deflection and displacement of the flax on page 55
- The absence of flax that has been pulled and destroyed

3.3.1 The thickness of the swath

If the flax layer is too thick, the flax fibres will not be separated from the stem of the plant.

The thickness of the swath is determined by:

- Uniform growth of the swath. A thinner flax layer is obtained at locations where the flax is thinner.
- The condition of the ground. Uneven ground causes uneven movement of machine and uneven ejection of the flax.
- The operating speed If the operating speed of the machine is too high, this will result in greater movement of the machine, and uneven ejection of the flax. If the operating speed is too high, this will also make it more difficult to steer the machine so that the entire width of the machine is no longer used for picking.
- The condition of the machine. See 3.3.3 The condition of the machine on page 55. Worn parts (for example, worn picking belts, conveyor belts, ...) can cause the thickness of the flax layer to be uneven.

3.3.2 The alignment of the swath

The more accurate the alignment of the swath is, the easier it is to perform other manipulations of the flax (turning, rolling-up, scutching). Optimal alignment prevents blockages and faults during turning, rolling-up, and scutching.

The alignment of the swath is determined by:

- The condition of the ground. Uneven ground can make it difficult to pick some pieces. Uneven ground causes uneven movement of machine that can result in the formation of bundles of flax.
- The operating speed. A faster operating speed results in the flax no longer being deposited neatly on the field. At higher speeds, steering movements will cause the deposited rows of flax to become wavy.
- The adjustment of the spreading tables.

See also
- 8.2.61 Setting the DPA on page 119
- 9.2.1 Adjusting the tables in relation to each other on page 130
- 9.2.2 Adjusting the tables in relation to the machine on page 132

3.3.3 The condition of the machine

Keep the machine in good condition. Carefully follow the maintenance schedule. The distributors must be correctly adjusted. The picking belts and conveyor belts must be in optimal condition.

See also
- 10.2 Preventive maintenance on page 150

3.3.4 The deflection and displacement of the flax

During the picking, the flax that is not in line with the opening between the picking belt and the rubber-coated wheel is deflected. The further away the flax is from the opening, the greater the deflection.

The deflection of the flax is determined by:

- The picking height. The greater the picking height, the less the flax is deflected.
- The position of the distributors. The greater the angle of the distributors, the greater the deflection of the flax.
- The operating speed. The greater the operating speed, the lower you must pick the flax, and the more the flax is deflected.
- The spraying rows. Due to the spraying rows, a part of the flax is compacted, this results in the flax passing underneath the distributors.
- The adjustment of the machine. The length of the distributors, the adjustment of the entrances for the flax, the condition of the picking belts and the rubber-coated wheels, the adjustment of the bascules.

3.3.5 The clamping pressure

The clamping pressure can be manually controlled by adjusting the picking opening.

- If the clamping force is too low, then the flax will not be held or not be adequately held between the picking belts. This will cause flax to be left behind on the field, and flax will also slip between the picking belt and the picking roller.
- If the clamping force is too high, then the flax can get stuck at the entrance to the picking element.

See also
- 9.4.5 Adjusting the picking opening on page 141

4 Safety

4.1 Layout safety systems + safety precautions

4.1.1 Layout of safety systems

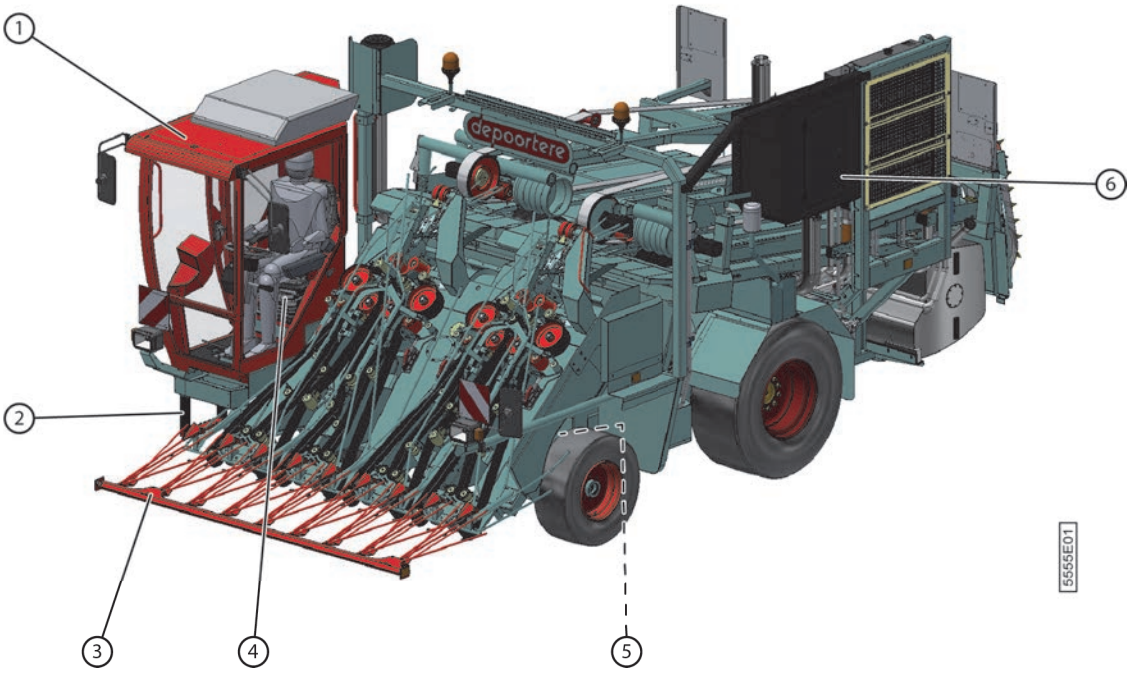


Fig. 43: Layout of safety systems

Nr.	Explanation
1	Fully enclosed cabin (if the type with cabin has been chosen)
2	Ladder
3	Protective panel distributors
4	Driver's seat with safety belt and presence sensor
5	Safety valves for the movement of the picking element
6	Protective panel for the exhaust pipe

See also

- 4.1.4 Safety precautions on page 58

4.1.2 Location of the emergency stop button

The emergency stop button (1) is located in the cabin at the bottom of the control screen. If you press the emergency stop button, the electrical power supply is disconnected and the engine is stopped, so that control is no longer possible.

Fig. 44: Location of the emergency stop button

See also

- 4.6.3 Pressing the emergency stop button on page 69

4.1.3 The emergency hammer

At the front of the cabin, in the left-hand corner, you can find an emergency hammer (1). In the event of an emergency, this emergency hammer enables you to break the windscreen of the cabin, if you can no longer open the door.

Fig. 45: The emergency hammer

4.1.4 Safety precautions

During the design phase, it was decided to eliminate or minimise the risk. Where risks exist, tangible safety precautions have been implemented, or the users are informed. An overview of the safety precautions that have been implemented is stated below:

Safety precaution	Explanation
Fully enclosed cabin	Only if opting for a machine with cabin. Protects the user from moving parts, dust and noise.

Safety precaution	Explanation
Ladder	Provides safe access to the driver's position.
Protective panel distributors	Protects the environment from contact with sharp disrtibutors and also inhibits access to the picking element of the distributors.
Driver's seat with safety belt and presence sensor	In the event of sudden movements or an accident, thanks to the seat belt, the driver remains in his seat. The presence sensor switches OFF the machine when the driver leaves the driver's seat.
Protective panel of the exhaust pipe	The exhaust system is protected by a cabinet that prevents contact with the hot elements. The exhaust pipes are protected by insulation.
Emergency hammer	In the event of an emergency, this emergency hammer enables you to break the windscreen of the cabin, if you can no longer open the door.

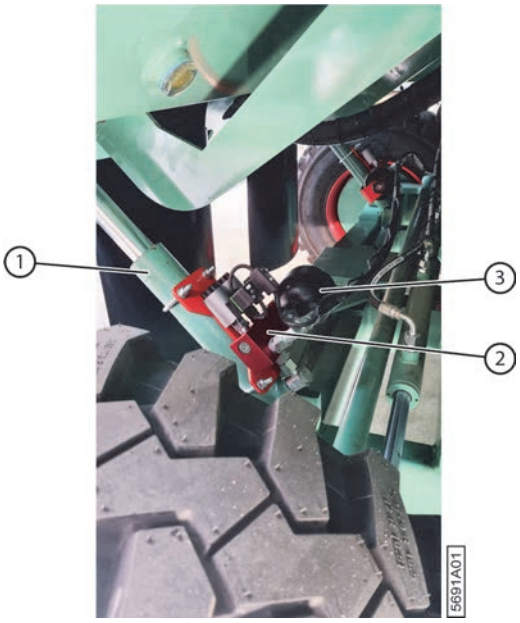
See also

- 4.1.1 Layout of safety systems on page 57

4.1.5 Presence sensor in the driver's seat

In the Road mode or in the Field mode, a sensor detects the presence of the driver on the driver's seat. If the machine is moving and the driver leaves the driver's seat, an alarm is activated. If the alarm stays ON for the set time, then the machine decelerates and comes to a standstill. Before you can use the machine again, you must sit in the driver's seat and move the joystick back to the neutral position.

4.1.6 Safety valves picking element



The cylinders (1) that raise and lower the picking element, are equipped with safety valves (2). These safety valves, for example, prevent the picking element from inadvertently lowering if the hydraulic pipe for the cylinder becomes ruptured.

In addition to the safety function, the nitrogen accumulator (3) also provides suspension for the picking element, thus producing a more comfortable ride on the road.

DANGER
The picking element must be correctly supported before performing work on the safety valves or the nitrogen accumulator.

4.1.7 Safety via the software

Via the software, the following points are provided in relation to the safe use of the machine:

- You can only place the machine in a different mode when the joystick is in neutral and the machine is at standstill.
- The default setting is that the machine is always driven via the pedal in combination with the joystick. If the driver inadvertently moves the joystick, without pressing the pedal, nothing happens.

WARNING
The setting that determines how you drive (joystick, or pedal in combination with joystick) can be changed by the operator in the parameters! See 8.2.28 Changing the driving mode of the machine on page 107.

4.2 Meaning of the warning signals

Signal	Meaning
Reversing signal	A continuous signal sounds to warn the bystanders that the machine is reversing.
Blockage	A continuous signal sounds to warn the driver in the event of a blockage in the picking element. This is the same signal as the reversing signal.

4.3 Specific safety regulations

This section describes the remaining risks from the risk analysis.

4.3.1 General safety regulations for persons

WARNING
Only use the machine for the purpose for which it was designed.

WARNING
The machine may only be operated by persons who have read the user manual and who are thus adequately informed about the operation, the control, and the maintenance of the machine as described in the user manual.

WARNING

NEVER use your hands to try to seal a hydraulic leak! High-pressure liquid can cause damage to your skin and clothing. Immediately summon a doctor if an accident occurs.

You can use paper or cardboard to easily detect leaks in a hydraulic system!

WARNING
Never stand behind the machine. You can become trapped between the machine and another object.

WARNING
Never leave the driver's seat without taking the ignition key with you.

WARNING
Never allow children, animals, or unauthorised persons to come into the vicinity of the machine.

WARNING
It is strictly prohibited to touch moving parts or to be between moving parts. Keep your body, especially your face, hands and feet far away from moving parts.

WARNING
The zone for the machine is extremely dangerous. You may NEVER use your hands or feet or any other way to feed-in flax.

WARNING
A blockage may NEVER be rectified manually when the machine is still running.

CAUTION
Hold the steering wheel, without the spokes between your fingers.

WARNING

Be aware of the risk of tipping over when you drive the machine on a slope or on hilly terrain!

- Drive slowly!
- Do not turn too abruptly!

WARNING
You may not enter or leave the driver's seat when the machine is operating.

WARNING
Keep away from high-voltage power lines when operating the machine. Contact between a high-voltage power line and the machine, or a discharge between the high-voltage power line and the machine can result in the death of the driver.

WARNING
In the event of lightning, remain in the cabin. Close all windows and doors. Do not touch the chassis of the machine. During lightning, an open field is not a safe location. Keep away from high trees, masts, high-voltage power lines. Stay at least 3 metres away from railings and fences. Bring yourself and your machine in safety. The best protection is a closed building, away from electricity and sanitary facilities.

4.3.2 Safety regulations for the machine

CAUTION
Ensure that the hydraulic connections are always clean and always fit plastic protective caps after disconnecting a hydraulic connection.

4.3.3 Safety regulations relating to the environment

ENVIRONMENT
For all products that are used in the machine and for all products that are used for the maintenance and the cleaning of the machine, follow the current local statutory regulations.

ENVIRONMENT
Store new and discharged products in accordance with the current local statutory regulations.

ENVIRONMENT
Spilled liquid must be removed in accordance with the regulations for the liquid and in accordance with the current local statutory regulations.

4.4 Personal protection equipment

Item of personal protection equipment	Who?	When?
Safety shoes	Operator / maintenance technician	Always
Helmet	Maintenance technician	If, during the work, objects or parts can fall onto your head.
Safety spectacles	Operator / maintenance technician	For all work where dust- or other particles can end up in your eyes.
Safety gloves	Operator / maintenance technician	For all work on the machine.
Hearing protection	Operator / maintenance technician	Always The noise level exceeds 85 dB!
Breathing mask	Operator / maintenance technician	For all work where dust and/or substances that are hazardous to respiration are released.

4.4.1 Safety regulations for personal protection

WARNING
Ensure that work clothing fits well. Do not wear loose clothing or jewellery. If you wear these, you can become trapped by rotating machine parts.

WARNING
Conceal long hair, so that it is not possible for long hair to become trapped.

4.5 Signs and symbols

The machine is equipped with a sticker stating safety instructions.

WARNING
Ensure that safety instructions always remain visible. Regularly clean the safety instructions, and if the safety instructions are damaged or illegible, replace them. The safety instructions can be ordered from Depoortere NV.

Pictogram	Explanation	Where?
	Read the user manual before using the machine.	In the cabin.

Pictogram	Explanation	Where?
	Always wear your seat belt.	In the cabin.
	Disconnect the battery and the controllers before performing welding on the machine.	In the cabin.
	Before starting maintenance, remove the key and read the user manual.	In the cabin.
	Smoking is prohibited in the cabin and in the vicinity of the machine.	In the cabin.
	Only 1 person may be present in the cabin.	In the cabin.
	Be aware of the risk of tipping over if you drive the machine on a slope.	In the cabin.

Pictogram	Explanation	Where?
	The wearing of personal protection equipment is mandatory.	In the cabin.
	The cabinet contains live electrical components.	On the electrical cabinet.
	Indication of the place where the machine can be jacked up.	At the locations where you can jack up the machine.
	Indication of the place where the machine can be lifted.	At the locations where you can lift the machine.

Pictogram	Explanation	Where?
	Hot surface. Risk of burns.	On the engine and on the exhaust of the engine.
	Danger of ending up underneath the picking element. Always install the safety device before you perform work on the picking element.	On the picking element
	Keep parts of your body away from the screw conveyor.	On the picking element
	It is prohibited to climb onto the machine.	On the picking element
	Always place the protective guard on the distributors if the machine is on a public road. Be careful when using the remote control.	• On the picking element • On the protective guard for the distributors • On the remote control

Pictogram	Explanation	Where?
	Persons other than the operator must be kept a safe distance away from the machine, so that they do not come into contact with the machine.	On the picking element
	Keep away from rotating belts.	On the picking element
	Do not step onto the picking element.	On the picking element
	Stay away with your feet. Maintain sufficient distance.	Beside the red flax-splitting bar on the edge of the picking element

Pictogram	Explanation	Where?
	Risk of crushing exists during movement of the tables. Risk of crushing in gap between the crushing rollers.	Beside the crushing rollers
	Risk of crushing beside the rotating flax-laying belts.	Beside the flax-laying section
	Risk of crushing by the conveyor belts. Risk of crushing by the motor belts.	Beside the spreading tables Beside the motor

Pictogram	Explanation	Where?
	Risk of crushing between the tables and the chassis. Keep a safe distance away.	Beside the spreading tables
	Risk for outward movement of the tables. Keep a safe distance away.	Beside the spreading tables
	Risk of crushing between the crushing rollers.	Beside the crushing rollers of the spreading tables
	Indication of the place where the fire extinguisher is located.	On the left-hand side of the machine

Pictogram	Explanation	Affixed where?
	Wait 3 minutes after switching OFF the engine.	On the battery key

4.6 Emergencies

4.6.1 Switching OFF the electrical power

In the event of an emergency, you can use the battery key to switch OFF electrical power to the machine. This action isolates electrical power from the entire machine including the engine and the controls.

Only do this in the event of an emergency. In all other situations, you first switch OFF the ignition to the machine in the usual manner.

WARNING

Switching OFF the electrical power using the battery key, without switching OFF the ignition to the machine, and without first waiting for 3 minutes, is only permitted in the event of an emergency!

Switching OFF in this manner can cause serious damage to the engine and to the hydraulic system!

See also

- 8.2.4 Stopping the machine on page 93

4.6.2 Switching OFF the hydraulic pumps

The hydraulic pumps are directly connected to the engine. By switching OFF the engine, you also stop the hydraulic pumps.

See also
- 8.2.2 Stopping the engine on page 92

4.6.3 Pressing the emergency stop button

In the event of an emergency, you can press the emergency stop button in the cabin. This disconnects the electrical power and all movement is stopped. The engine of the machine continues to run in order to prevent damage to the hydraulic components as a result of pressure loss.

CAUTION
Pressing the emergency stop button activates the parking brake!

TIP
To also stop the engine, turn the ignition switch fully anti-clockwise.

TIP
To also interrupt the power supply, turn the battery switch fully anti-clockwise.

See also
- 4.1.2 Location of the emergency stop button on page 57

4.6.4 Fire: the machine can catch fire

1. Move the machine away from other flammable materials.
2. Extinguish a fire using a fire extinguisher See 6.1 What is supplied with the machine? on page 79.

4.7 Hazardous substances

CAUTION
Carefully read the Safety Information Sheets for the hazardous substances.

The user must request the latest Safety Information Sheets from the supplier for the following products:

- AdBlue
- Hydraulic oil
- Engine coolant
- Fuel (diesel)
- Windscreen washer liquid
- Engine oil
- Lubricating grease
- Airco coolant

5 Transport and storage

5.1 Moving the machine

5.1.1 Loading the machine onto the lorry

Fig. 46: Loading the machine onto the lorry

1. Select a completely level zone for loading the machine.
2. Fence off the zone where the machine will be loaded onto the lorry. Ensure that the safety zone is large enough, so that if the machine tips over, sufficient space exists to run away from a tipping load.
3. Keep unauthorised persons away from this safety zone.
4. Placing the machine in the Loading mode
5. Drive the machine onto the loading platform of the lorry.
6. Use wheel chocks to prevent the machine from rolling away.
7. Use chains or tension straps to secure the machine:
    1. Secure via 2 chains or tension straps to the towing eye at the front (1).
    2. Secure via 2 chains or tension straps to the sidehooks behind the wheels (2).
    3. Secure via 2 chains or tension straps to the towing hook at the rear (3).

5.1.2 Unloading the machine from the lorry (preparation)

1. Select a completely level zone for unloading the machine.
2. Fence off the zone where the machine will be unloaded. Ensure that the safety zone is large enough, so that if the machine tips over, sufficient space exists to run away from a tipping load.
3. Keep unauthorised persons away from this safety zone.
4. Disconnect the chains or tension belts.
    1. Disconnect the 2 chains or tension belts from the towing eye (1) at the front.
    2. Disconnect the 2 chains or tension straps from the sidehooks behind the wheels (2).
    3. Disconnect the 2 chains or tension straps from the towing eye at the rear (3).

Fig. 47: Unloading the machine from the lorry (preparation)

5. Remove the wheel chocks.
6. Place the machine in the Loading mode.
7. Drive the machine onto the loading platform of the lorry.

See also

- 5.1.3 Driving the machine off the lorry on page 72

5.1.3 Driving the machine off the lorry

First of all, ensure that the machine is prepared for driving off the lorry. See 5.1.2 Unloading the machine from the lorry (preparation) on page 72.

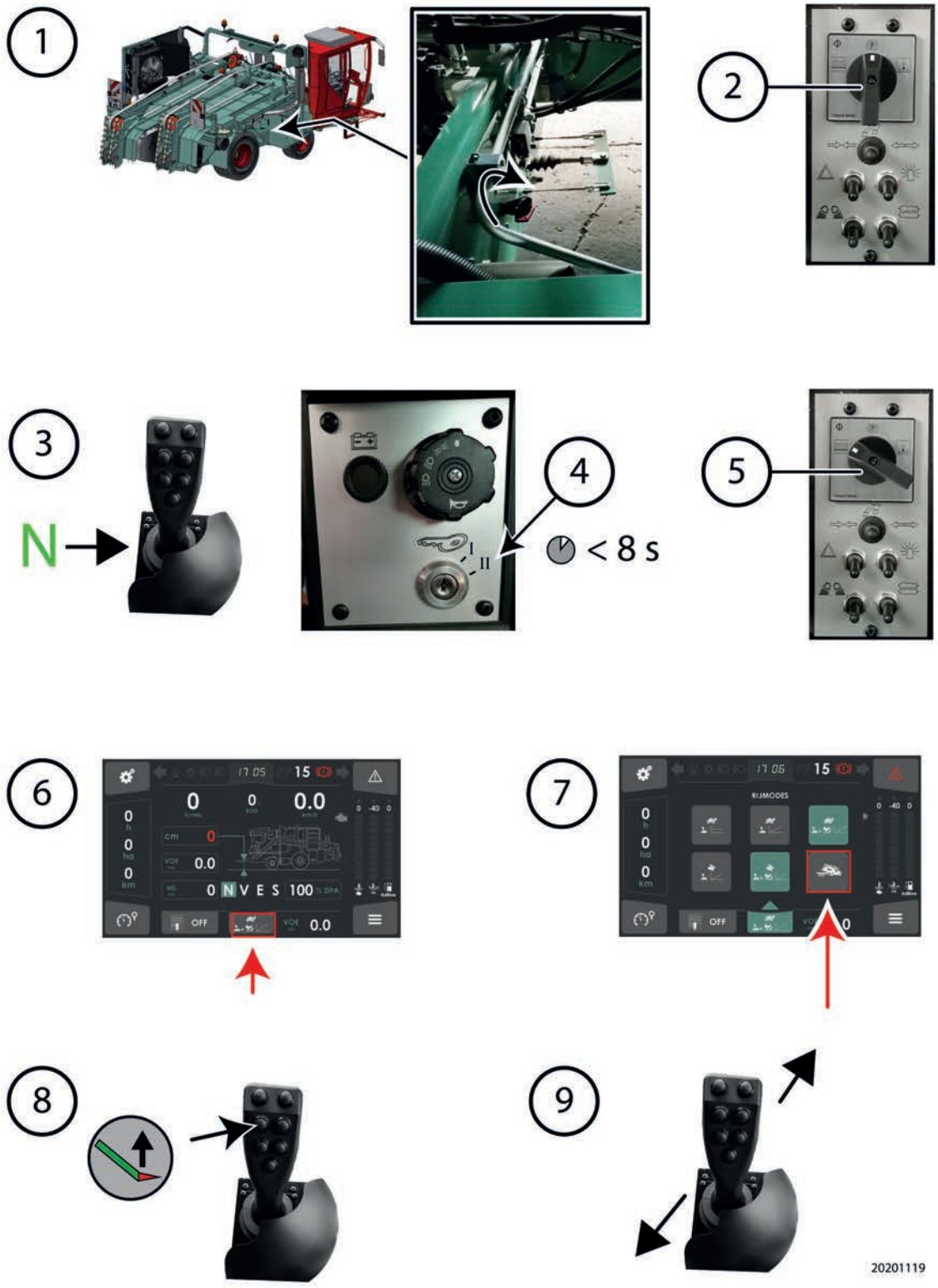


Fig. 48: Steps to be performed when driving the machine off the lorry

1. Place the battery key to ON.
2. Place the switch on the control console to Stationary mode.
3. Place the joystick in NEUTRAL.
4. Turn the ignition switch to position 2, and release it when the engine starts.

Do not start the engine for longer than 8 seconds. This prevents the battery from becoming fully discharged, or the starter motor and engine cabling from becoming too hot. Wait 15 to 20 seconds between the 1st and 2nd starting attempt so that the starter motor and the engine cabling can cool down.

5. Place the switch on the control console to Field mode.
6. Tap the driving mode icon at the bottom. For example  .
7. Select  .
   The button becomes green and the Loading mode is activated.
8. Raise the pick-up element by pressing button 3.
9. Carefully move the joystick in the desired direction.

See also

- 5.1.2 Unloading the machine from the lorry (preparation) on page 72

5.2 Storing the machine

Check the machine very carefully so that it is ready to start in the next season. A thorough check and maintenance of the machine can save extra costs, minimise downtime, and enhance the operational reliability of your machine.

When storing the machine, perform the points in the following checklist:

1. Check that flax is no longer present in the machine.
2. Follow the maintenance plan.
3. Follow the lubrication plan.
4. Fill the fuel tank.
5. Place the machine in an area that satisfies the following conditions.
   - Entry to the area is prohibited for unauthorised persons.
   - The area is dry and protects the machine against the effects of weather.

     For example: sunlight adversely affects rubber and plastic.
   - NO fertilisers containing ammonia are stored in the area.

     When humidity is present, ammonia reacts with certain metals.
   - The area is closed off to vermin.
6. Clean all hydraulic cylinders, lubricate them with grease, and fully retract them.
7. Follow the instructions for storing a machine with AdBlue.
8. Lubricate all threaded rods, adjusting bolts, and bare machine parts using grease or oil to prevent rust.
9. Jack up the machine and place it on supports in order to relieve the load on the tyres.
10. Check the full operation of the machine. Replace worn parts.
11. Check the bolted connections.
12. Connect the battery to a charger so that crystals of lead sulphate do not form on the electrodes of the battery.

See also

- 10.2.11 Cleaning the machine using a pressure washer on page 157

5.2.1 Regulations for storing a machine with AdBlue

The following regulations are applicable in the event of switching OFF an engine with a SCR system for a prolonged period.

After switching OFF the SCR system in accordance with the instructions (wait at least 3 minutes so that the system can complete its full cycle), the machine can, depending on the ambient temperature, be taken out of service for a maximum of 4 months in a deactivated state.

At standstill

	Duration of the storage # 2 months	Duration of the storage between 2 and 4 months
Ambient temperature to be respected	Between -40 °C and 40 °C	Between -40 °C and 25 °C

The following conditions must be taken into account:

- If the machine has been at standstill for a prolonged period, this must take place in a covered area (for example, in a garage or hall).
- Completely fill the AdBlue tank with AdBlue.

  Evaporation of the water component of AdBlue must be prevented.
- Do not disconnect any electrical or hydraulic connections.

5.2.2 Instructions for putting a machine with AdBlue back into service after a prolonged period at standstill

If the standstill exceeds 4 months, the following procedure must be followed:

1. Completely empty the tank.
2. Completely fill the tank with new AdBlue.
3. Replace the filter cartridge of the feed pump.
4. Allow the engine to reach operating temperature.
5. Load the engine by carefully accelerating. This increases the pressure by pressurising and modifying the AdBlue dosage.

If a fault message is displayed on the control screen:

1. Stop the engine.
2. Wait at least 3 minutes so that the system can perform its complete cycle.
3. Start the engine several times if necessary.

   If the fault message does not disappear, contact Depoortere NV.

5.2.3 Draining the AdBlue tank

NOTE

- The storage conditions determine the expected period of use for the AdBlue.
- AdBlue slowly starts to decompose at -11°C and above +35°C.
- Avoid direct sunlight on unprotected stored stock of AdBlue!
- Drums of AdBlue may not be stored for longer than one year!
- AdBlue freezes when the ambient temperature is -11°C.
- AdBlue may remain in the tank for a maximum of 4 months.

Carefully read the Safety Information Sheet for the AdBlue used.

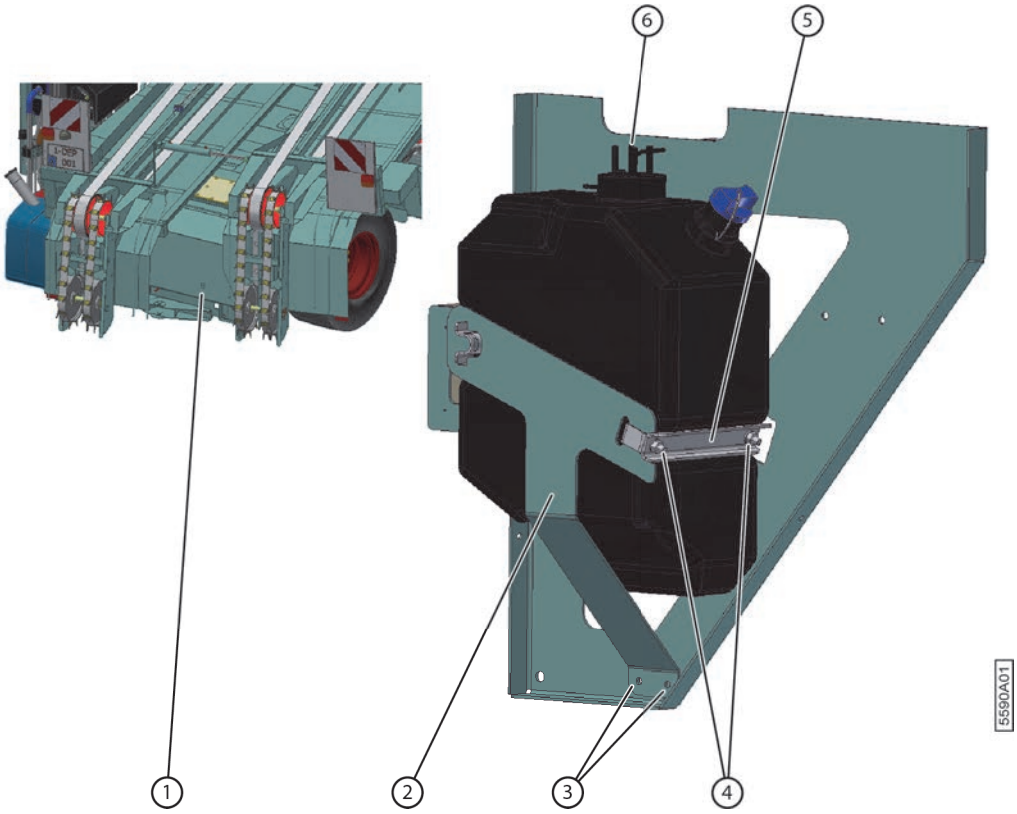


Fig. 49: Removing the AdBlue tank

1. Disconnect all connections to the tank (2).
2. Disconnect the plate (1) from the chassis by unscrewing the 3 bolts.
3. Remove the bracket (5).
4. Undo the bolts (4).
5. Hold the tank and disconnect the support (3).
6. Remove the tank from the machine.
7. Unscrew the filler cap and drain the tank.

5.2.4 Storing AdBlue

The shelf life and quality of the AdBlue depends on the conditions in which the AdBlue is stored and for how long it is stored.

Take the following points into account:

- AdBlue slowly starts to decompose at -11°C and above +35°C.
- Avoid direct sunlight on unprotected stored stock of AdBlue.
- Drums of AdBlue may not be stored for longer than one year!
- AdBlue freezes when the ambient temperature is -11°C.
- AdBlue may remain in the tank for a maximum of 4 months.

5.2.5 Checklist for starting engine after storage during winter

After storing the machine during winter, you must always check the following items before restarting the engine.

NOTE
The checklist below is only intended for the engine, and not for the entire machine. Thus carefully perform all tasks included in the maintenance schedules. This ensures that the entire machine is ready to be started.

Check	OK?
Check the filter elements of the air filter. If necessary, replace them.	
Check the level of engine oil. If necessary, top up the engine oil or replace it.	
Check level of coolant for the engine. If necessary, top up the level.	
Check the condition of the radiator. If dirty, clean the radiator.	
Check the fuel feed system. Unscrew the drain plug from the fuel filter to drain the water.	
Use a refractometer to check the quality of the AdBlue. If the value is NOT OK, then drain the AdBlue tank, then fill it with new AdBlue.	
Check that the filling filter of the AdBlue tank is not damaged or punctured.	
Check that the AdBlue tank is clean, and check that there is no crystallisation.	
Replace the breather filter of the AdBlue tank if it is blocked.	
Check the engine for engine oil leaks, coolant leaks, or fuel leaks.	
Check the engine for contamination (flax, grass, mud, ...). Remove this contamination.	
Check the condition of the battery.	
Check the condition of the belts. The belts are more susceptible to wear in a dusty environment. If necessary, replace them.	

6 Assembly and installation

6.1 What is supplied with the machine?

Check that the following items have been supplied; if not supplied, contact your distributor.

- 2 ignition switch keys
- 2 door keys for the cabin
- 2 keys for opening the electrical cabinets
- 2 keys for opening the tool cabinet
- User manual for the machine
- User manuals for the engine
- User manual for the driver’s seat
- User manual for the radio
- User manual for the optional camera monitors
- Spare parts list
- EC declaration
- Warning triangle
- First aid kit
- Fluorescent jacket

7 Putting into service

7.1 Checklist for putting into service

After receipt of your machine, carefully check the list below.

Part	Check	OK?
Wheels	10.2.37 Checking the tyre pressure on page 172	
	10.2.38 Tightening the wheel nuts on page 173	
	10.2.39 Checking the operation of the brakes on page 173	
Engine	Check the engine oil level. See the user manual for the DEUTZ engine.	
	Check the coolant level. See the user manual for the DEUTZ engine.	
	Check the air filter for the engine. See the user manual for the DEUTZ engine.	
	10.3.9 Checking the fuel level on page 210	
	10.2.42 Checking the level of AdBlue on page 174	
Cabin	7.1.1 Checking that the user manuals are present on page 81	
	The users have read the user manuals.	
	10.2.44 Checking level of the windscreen washer liquid on page 175	
	10.2.48 Checking the level of the hydraulic oil on page 177	
Hydraulic system	10.2.48 Checking the level of the hydraulic oil on page 177	
	10.2.51 Checking the hydraulic system for leaks on page 180	
Electrical system	10.2.52 Checking the battery on page 180	
	10.2.54 Checking the electrical system on page 181	
Lubrication	Check that all lubricating points have been optimally lubricated. See the lubrication plan 10.2.61 The lubricating schedule on page 187.	

After all items on the checklist are OK, the machine can be used in accordance with the instructions stated in this user manual.

7.1.1 Checking that the user manuals are present

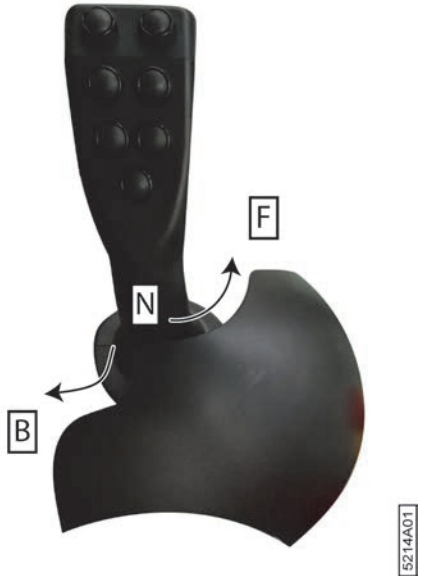
1. Check whether the following user manuals are present:
   - User manual for the machine
   - User manuals for the engine, the driver's seat, the radio.
   - User manuals for the camera monitors (if present).
2. If a user manual is not present, ask your distributor for a new copy.

8 Control

8.1 Control elements

8.1.1 The joystick

The positions of the joystick



The position of the joystick determines the driving direction and the speed of the machine. For example: the further you push the joystick forwards, the faster the machine will move forwards. The joystick does NOT automatically return to the neutral position! The joystick can be placed in the following positions:

- Forwards: the machine moves forwards (F)
- Neutral: the machine does not move (N)
- Backwards: the machine moves backwards (B)

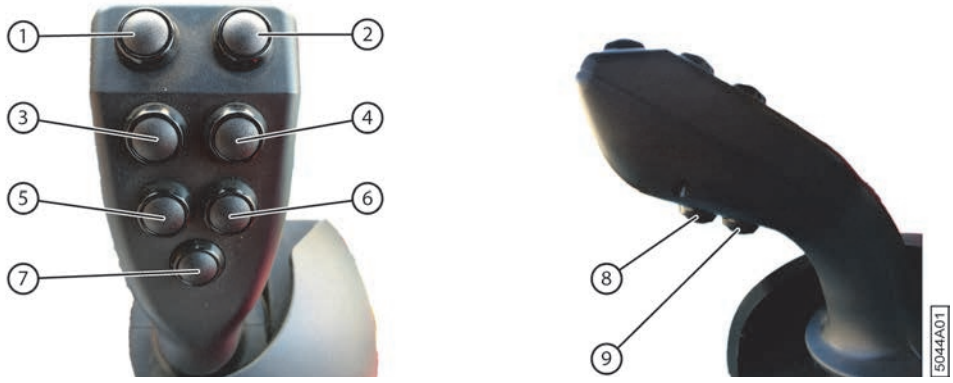


Fig. 50: Joystick

Nr.	Field mode	Road mode	Stationary mode
1	Press and hold: Retract tables	No function.	Press and hold: Retract tables
2	Press and hold: Extend tables	No function.	Press and hold: Extend tables
3	Press and hold: Slowly raise picking element.	No function.	Press and hold: Slowly raise picking element.
4	Press once: Increase the speed of the picking belts. Press and hold: Boost function.	No function.	Press and hold: All belts rotate forwards.
5	Press and hold: Slowly lowers picking element.	Briefly press once: Left-hand indicator flashes for 30 seconds	Press and hold: Slowly lowers picking element.
6	Press and hold: Decreases the speed of the picking belts	Briefly press once: Right-hand indicator flashes for 30 seconds	Press and hold: Picking belts rotate backwards
7	Briefly press once: the work mode changes from: • Entering to working • Working to exiting • Exiting to working Press and hold. The picking belts are switched ON or switched OFF. Example 1: If the picking element is in the Raised position, you can stilll operate the belts. Example 2: If the picking element is in the Work position, you can stop the belts if there is no flax, or to eject the flax at a different location.	No function.	No function.
8	Press the button and then release it, so that the picking element is raised to the next set position. Only in the exiting mode, does the picking element go from the lowest position to the highest position.	Press and hold: Slowly raises picking element.	Press the button and then release it, so that the picking element is raised to the next set position.
9	Press the button and then release it, so that the picking element is lowered to the next set position.	No function.	Press the button and then release it, so that the picking element is lowered to the next set position.

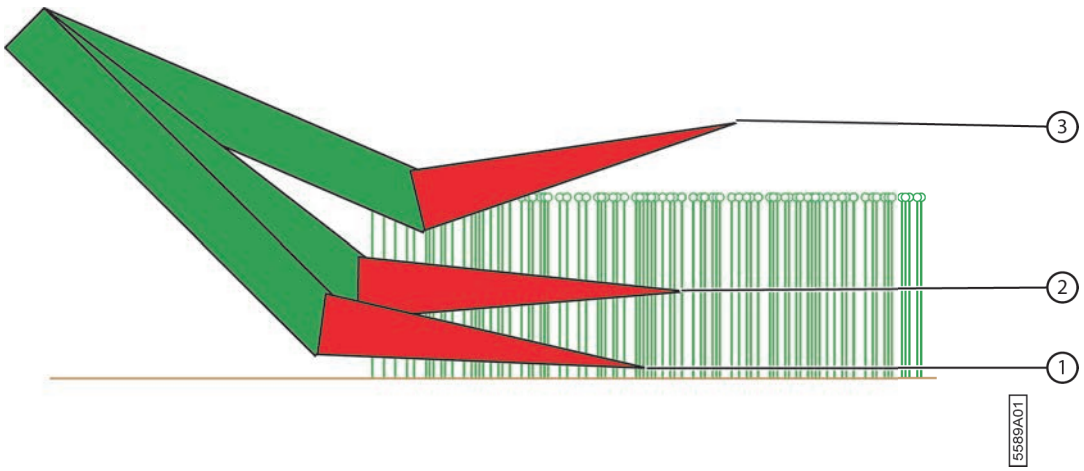


Fig. 51: Positions of the picking element

The picking element can be placed in 3 different positions:

Nr.	Position	Explanation
1	Cases	This position is used if the flax is horizontal (i.e. lying flat) instead of being nice and vertical. The picking element is lowered.
2	Work	This position is used for picking flax under normal conditions.
3	High	This position is used when flax is not picked.

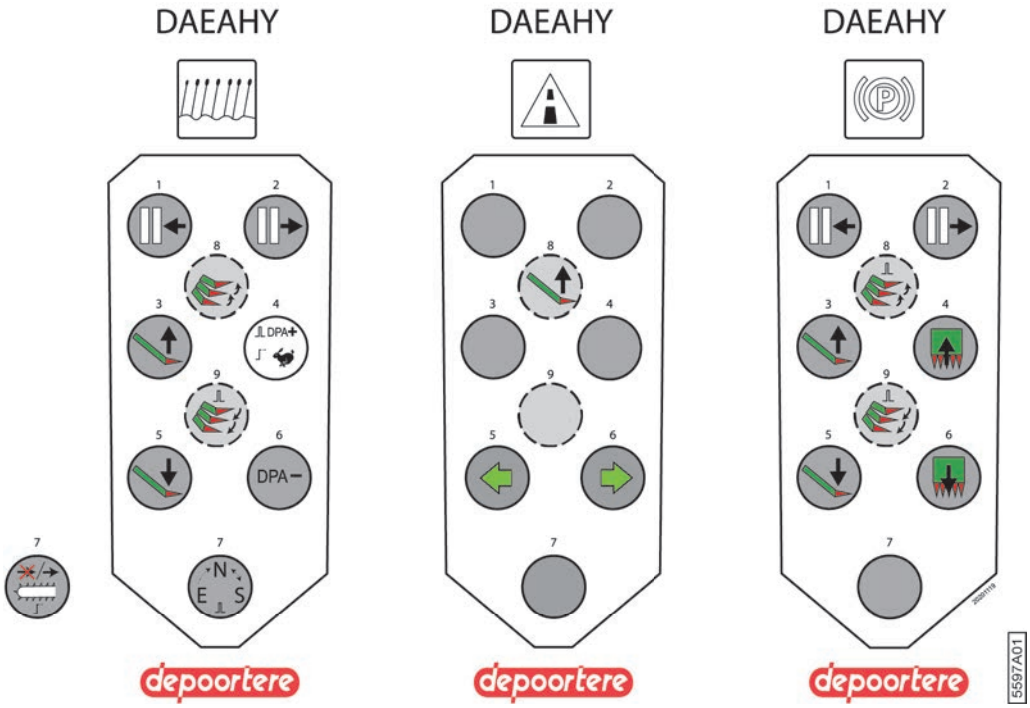


Fig. 52: Overview of joystick functions

See also

- 2.3.18 The control unit on page 37

8.1.2 The top control console (version 1)

Fig. 53: Top control console

Nr.	Explanation
1	Horn
2	Battery lamp The battery lamp is lit as soon as the ignition switch is in position 1. The battery lamp is extinguished when the engine is running and the battery is being charged.
3	Red indicator lamp This lamp is lit if too much soot accumulates in the soot filter, and the soot filter must be cleaned.
4	Green indicator lamp This lamp is lit if a problem is encountered with the AdBlue. Flashes when regeneration takes place.
5	Ignition switch key From fully anti-clockwise (position 0) to fully clockwise: • Position 0: Engine OFF • Position 1: Ignition switched ON, so that the engine can be started. Only turn further clockwise when the engine is running and the battery is being charged. • Position 2: Sidelights ON • Position 3: Dipped beam headlights ON • Position 4: Main beam headlights ON
6	Button for starting the engine when the ignition switch key (5) is in position 1.

8.1.3 The top control console (version 2)

Fig. 54: Top control console

Nr.	Explanation
1	Battery lamp The battery lamp is lit as soon as the ignition switch is in position 1. The battery lamp is extinguished when the engine is running and the battery is being charged.

Nr.	Explanation
2	Ignition switch key From fully anti-clockwise (position 0) to fully clockwise: • Position 0: Engine OFF • Position 1: Battery ON • Position 2: Starting engine
3	Light switch + horn From fully anti-clockwise (position 0) to fully clockwise: • Position 0: No lights ON • Position 1: Sidelights ON • Position 2: Dipped beam headlights ON • Position 3: Main beam headlights ON Press the button to sound the horn.

8.1.4 Bottom control console

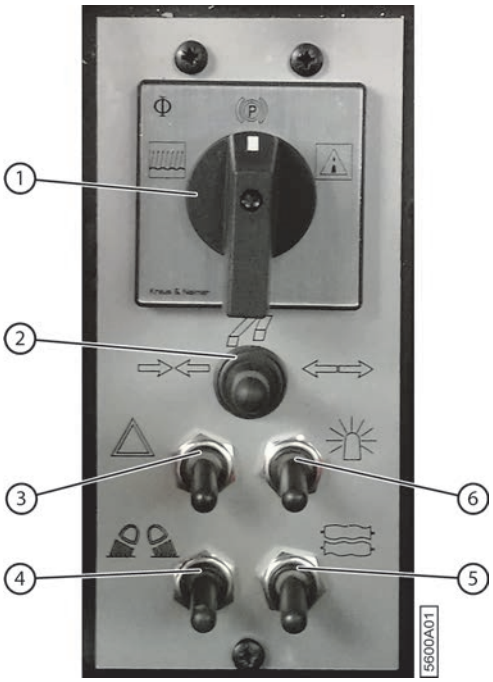


Fig. 55: Bottom control console

Nr.	Explanation
1	Switch for selecting: • Field mode • Parking brake • Road mode
2	Switch for controlling the distance between the tables.
3	Switch for switching ON or switching OFF the 4 indicators.
4	Switch for switching ON or switching OFF the work lights.
5	Switch for switching ON or switching OFF the crushing rollers.
6	Switch for switching ON or switching OFF the flashing light.

8.1.5 The parking brake

The parking brake is operated from the control console. Always activate the parking brake when the machine is stationary.

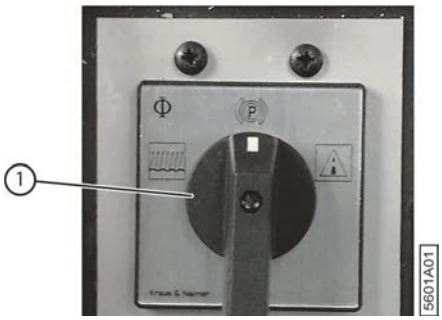


Fig. 56: Parking brake

8.1.6 The brake pedal

You can use the brake pedal (1) to slow down the machine or bring it to a standstill.

Fig. 57: The brake pedal

See also

- 2.3.17 The brake pedal on page 36

8.1.7 The accelerator pedal

By operating the accelerator pedal (2), the engine will run from 0% to 100% of the set revs./minute. Depending on the mode selected, the revs./minute and/or the speed of the machine will vary accordingly.

Fig. 58: The accelerator pedal

See also

- 2.3.16 The accelerator pedal on page 35

8.1.8 The remote control

The remote control is stored in the front of the machine. The remote control is used when replacing picking belts or removing blockages. You can use the remote control to rotate the picking element forwards or backwards at a reduced speed.

The remote control consists of a switch (3) that you can use to switch ON or switch OFF the remote control. As soon as the remote control is switched ON, it is no longer possible to use the controls in the cabin.

You can move the picking belts forwards (button 2) or backwards (button 1). The remote control has a long cable so that you can operate the picking belts a safe distance away.

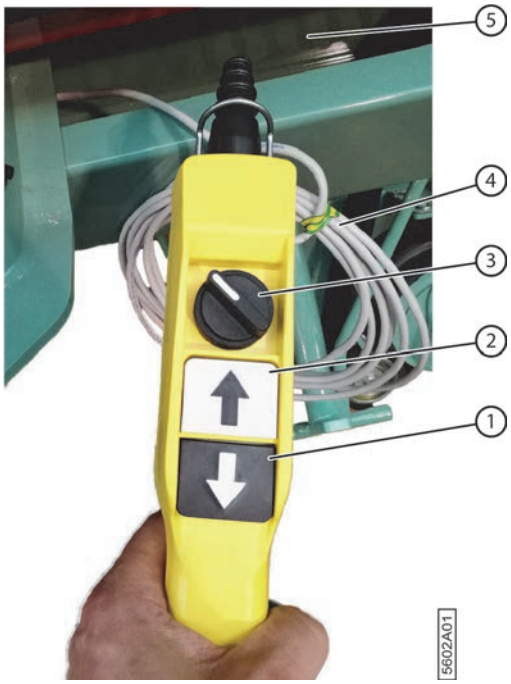


Fig. 59: The remote control

8.1.9 The control screen

The control screen is a robust integrated touchscreen.

Fig. 60: The control screen (front)

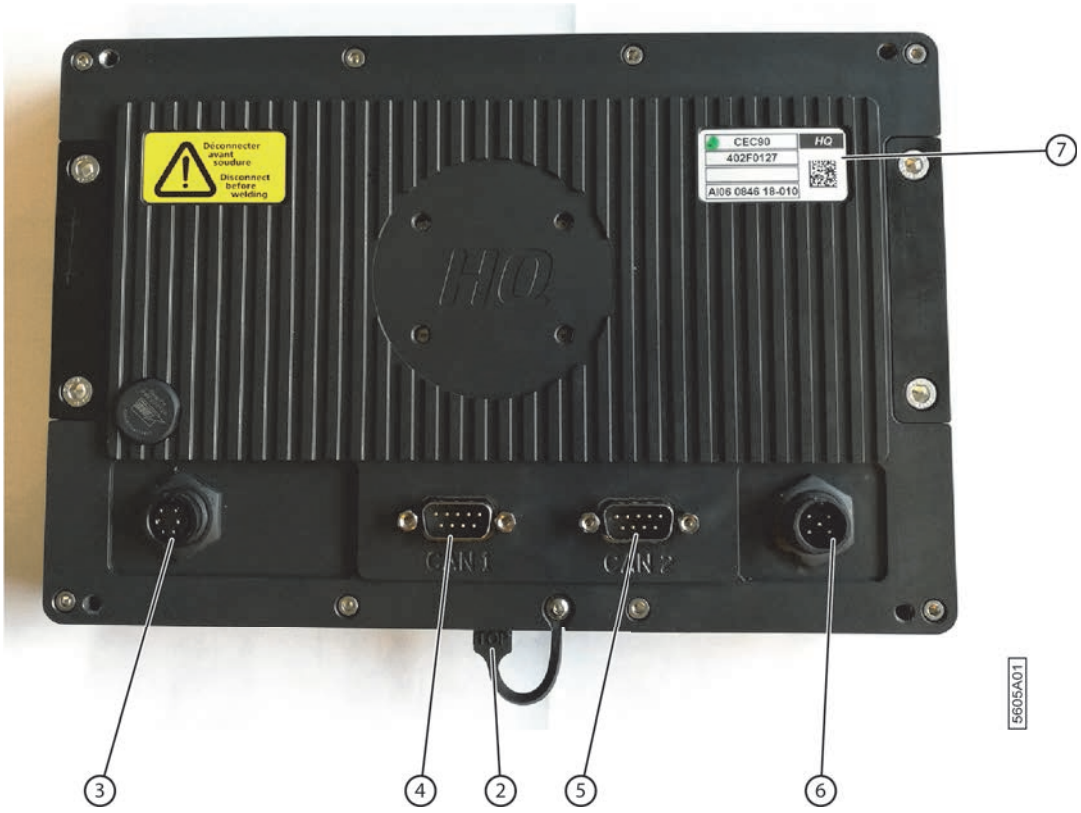


Fig. 61: The control screen (rear)

Nr.	Explanation
1	7-inch touchscreen
2	USB port, protected against dirt with rubber plug
3	Connection power connector
4	Connection CAN-bus 1
5	Connection CAN-bus 2
6	Connection for camera (is not used)
7	Identification plate with serial number

8.2 Control instructions

8.2.1 Starting the engine

1. Place the battery key to ON. Turn the battery key clockwise.
2. Sit in the driver's seat and adjust the driver's seat according to your needs.
3. Close the cabin door.
4. Put on your seat belt.
5. Place the joystick in the neutral position,

   You can only start the engine of the machine when the joystick is in the neutral position.
6. Place the parking brake to AUTO (automatic)
7. Turn the ignition key to position 2, and release the key when the engine starts. When the ignition key is set to position 1, the ignition is switched ON, but the engine is not yet started.

NOTE
Do not start the engine for longer than 8 seconds. This prevents the battery from becoming fully discharged, or the starter motor and engine cabling from becoming too hot. Wait 15 to 20 seconds between the 1st and 2nd starting attempt so that the starter motor and the engine cabling can cool down. If the engine does not start, check the voltage and the condition of the battery. If the battery is no longer serviceable, then request a specialist technician to replace it.

See also
- 2.3.8 The battery key on page 32

8.2.2 Stopping the engine

Turn the ignition switch key anti-clockwise to the 0 position.

See also
- 4.6.2 Switching OFF the hydraulic pumps on page 69

8.2.3 Starting the machine

WARNING
- The machine may only be operated by persons who have the requisite experience.
- The machine may not be operated by persons who are intoxicated by alcohol or under the influence of other substances.
- The starter motor must ALWAYS be operated from the driver's seat and may NEVER be activated by short-circuiting the starter motor.
- The machine may only be operated when the cabin door is closed.

1. Check that persons or animals are not in the vicinity of the machine, and check that the machine does not exhibit any abnormalities (oil leak, damaged pipe, open protective panel, etc.).
2. Insert the battery key. Turn the battery key clockwise (to the ON position).
3. Enter the cabin. See 8.2.5 Entering the cabin on page 93.
4. Check that loose objects (tools, parts, etc.) are not present in the cabin.
5. Sit in the driver's seat and adjust the driver's seat according to your needs.
6. Put on your seat belt.
7. Place the joystick in the neutral position,

   You can only start the engine of the machine when the joystick is in the neutral position.
8. Briefly sound the horn, so that persons around the machine are informed that the engine will be started. Give them enough time to leave the danger zone.
9. Turn the ignition switch to position 2, and release it when the engine starts.

NOTE
Do not start the engine for longer than 8 seconds. This prevents the battery from becoming fully discharged, or the starter motor and engine cabling from becoming too hot. Wait 15 to 20 seconds between the 1st and 2nd starting attempt so that the starter motor and the engine cabling can cool down. If the engine does not start, check the voltage and the condition of the battery. If the battery is no longer serviceable, then request a specialist technician to replace it.

NOTE
Never press your foot hard down on the accelerator pedal during a cold start! Give the hydraulic oil time to warm up. During a cold start, the oil is still thick, and this can block the filter.

8.2.4 Stopping the machine

1. Stop the engine.
2. Wait until at least 3 minutes after the engine has stopped.

   This is necessary in order to store all engine data and to completely end the AdBlue cycle.

   CAUTION
   If you do not wait long enough, AdBlue remains in the circuit and in the winter the AdBlue can freeze in the circuit and cause damage to the circuit.

3. Place the battery key in the OFF position.

See also
- 4.6.1 Switching OFF the electrical power on page 68

8.2.5 Entering the cabin

Only enter the cabin when the machine is stationary.

Carefully enter the cabin with your face towards the machine. Only use the handles and the ladder. Do not use any other items as a handle.

8.2.6 Exiting the cabin

Only exit the cabin when the machine is stationary.

1. Place the joystick in the neutral position.
2. Switch OFF the engine and remove the key from the ignition.
3. Carefully the cabin with your face towards the machine. Only use the handles and the ladder. Do not use any other items in the cabin as a handle.
4. Close the cabin door.
5. Alight via the ladder.

   NEVER jump out of the cabin, unless it is an emergency.

8.2.7 Switching ON the control screen

Turn the ignition switch key from 0 to 1.

Fig. 62: Initialisation page

The initialisation page is displayed on the control screen. This displays the version of the screen (2) and the progress of the initialisation. At the end of the initialisation, the start page is displayed, possibly with fault messages.

8.2.8 Switching OFF the control screen

Turn the ignition switch key from 1 to 0.
This action switches OFF the entire machine! The data is stored.

CAUTION

If the power supply is suddenly interrupted, the settings can be lost!

For example, by switching OFF via the battery key, without first switching OFF the ignition.

8.2.9 Viewing an active fault message

When switching ON the control screen, fault messages can already be displayed. All of these fault messages must be read and confirmed before you can continue to use the control screen. Fault messages can also be displayed when the machine is being used.

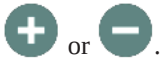
1. Tap  .
   If there are active fault messages, the first active fault message is displayed and a BEEP signal is sounded.
2. Carefully read the fault message and solve the problem.
3. Tap **NEXT** or **Close** to confirm the fault message.
   The BEEP signal stops.
4. If there are more fault messages, carefully read the fault message, solve the problem, and tap **NEXT** or **Close**.

8.2.10 Setting the language of the control screen

1. Perform one of the following actions:
   - Select  .
   - In the Road window, select  .
2. Select the language that you want to use on the screen.
3. Press **OK**.

8.2.11 Setting the brightness of the control screen

The control screen has a level of brightness that can be used during the daytime, and a level of brightness that can be used at night.

1. Perform one of the following actions:
   - Select  .
   - Select  in the Road window.
2. Perform one of the following actions for **Brightness Day** and **Brightness Night**:
   - Tap  .

- Move the slider to the left or to the right.

8.2.12 Selecting the day mode or night mode of the control screen

1. Perform one of the following actions:
   - Select  >  .
   - In the Road window, select  .
2. Tap  or  .
   The screen uses the set values for brightness.

8.2.13 Setting the date on the control screen

1. Go to the menu via  .
2. Select  .
3. Select  .
4. Enter the date.
   Type `290419` to enter 29 April 2019.
5. Tap **OK**.

See also

- 8.2.25 Overview of the common icons on page 105

8.2.14 Setting the time on the control screen

1. Go to the menu via  .
2. Select  .
3. Select  .
4. Enter the time.
   Type `0936` to enter the time of 09:36.
5. Tap **OK**.

8.2.15 Returning to the Field mode window or Road mode window

You can return to the Road window or the Field window, depending on the selected mode. The screen for the selected mode is automatically displayed after 10 seconds of inactivity.

Tap  .

8.2.16 Switching ON the hazard lights

In the event of danger, you can switch ON the hazard lights. Check the current local statutory regulations relating to the use of hazard lights on public roads.

Fig. 63: Switching ON the hazard lights

Move the switch (3) on the bottom control console as follows:

- UPWARDS to switch ON the hazard lights
- DOWNWARDS to switch OFF the hazard lights

8.2.17 Switching ON the flashing light

In the Road mode, the flashing light is automatically switched ON. In the Road mode, you cannot switch OFF the flashing light. In the Field mode or in the Stationary mode, if desired, you can switch ON the flashing light yourself.

Fig. 64: Switching ON the hazard lights

Move the switch (6) on the bottom control console as follows:

- UPWARDS, to switch ON the flashing light
- DOWNWARDS, to switch OFF the flashing light

The flashing light pictogram on the Road mode window and Field mode window, becomes orange  .

8.2.18 Switching ON or switching OFF the lights of the machine (version 1)

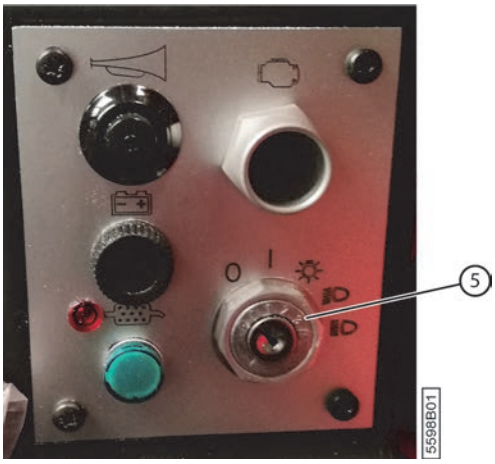


Fig. 65: Version 1 with ignition switch key

Turn the ignition switch key to the following positions. The positions are indicated on the ignition switch (5).

Position	Type of light
2	Sidelights
3	Dipped beam headlights

Position	Type of light
4	Main beam headlights

The corresponding symbol is lit on the control screen.

8.2.19 Switching ON or switching OFF the lights of the machine (version 2)

Fig. 66: Version 2 with rotary knob

Turn the rotary knob (3) to the following positions:

Position	Type of light
1	Sidelights
2	Dipped beam headlights
3	Main beam headlights

The corresponding symbol is lit on the control screen.

See also

- 2.3.7 The work lights on page 31

8.2.20 Switching ON or switching OFF the work lights on the machine

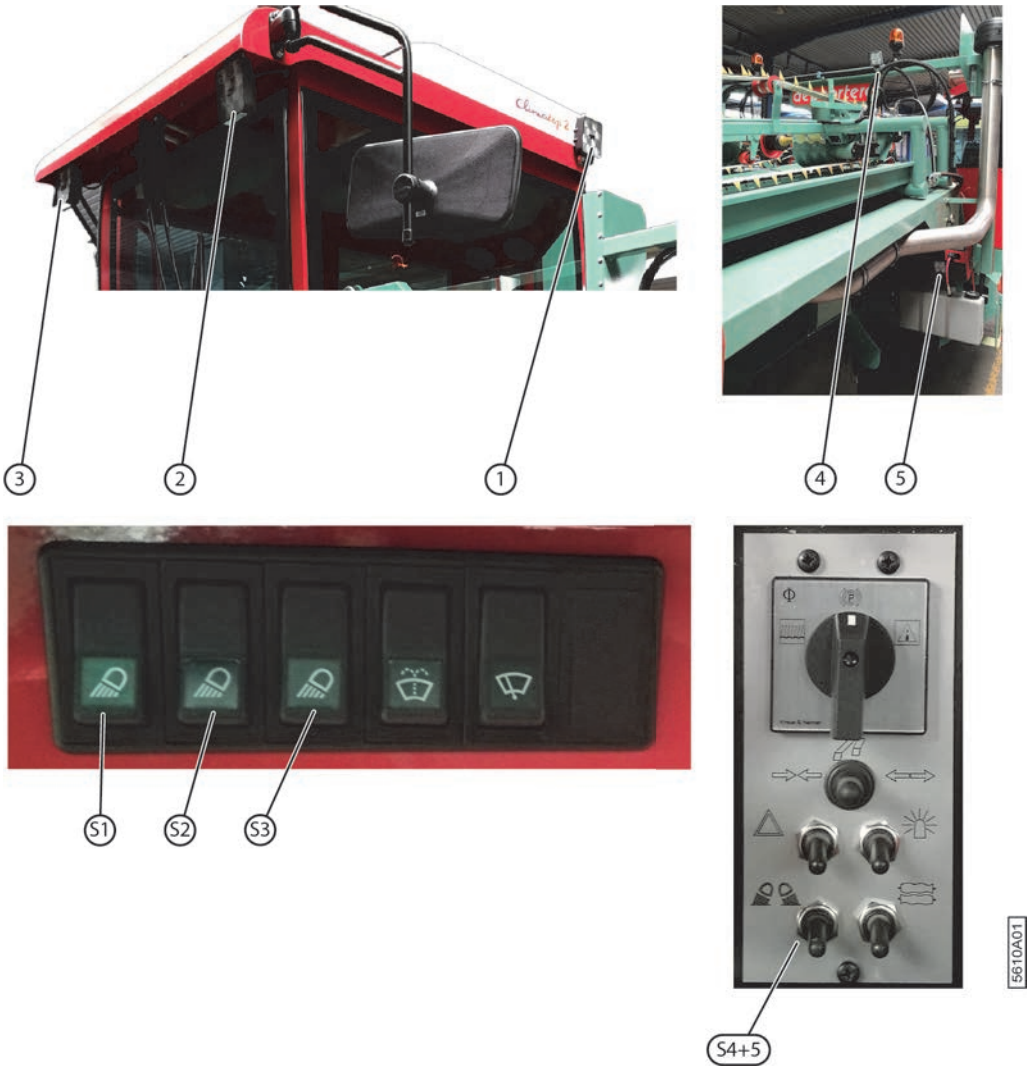


Fig. 67: Work lights and switches

Press one of the following switches:

Switch	Work light
S1	For switching ON the work light (1) on the left-hand side of the cabin.
S2	For switching ON the work light (2) on the left-hand side at the front of the cabin.
S3	For switching ON the work light (3) on the right-hand side at the front of the cabin.
S4+5	For switching ON the work lights (4) (5) directed at and underneath the spreading tables.

8.2.21 Placing the machine in the Field mode.

This mode is used pick flax in the field. This mode is also used for manoeuvring in the field.

You can only place the machine in a different mode when the joystick is in neutral and the machine is at standstill.

Turn the switch (1) on the control console to Field mode .

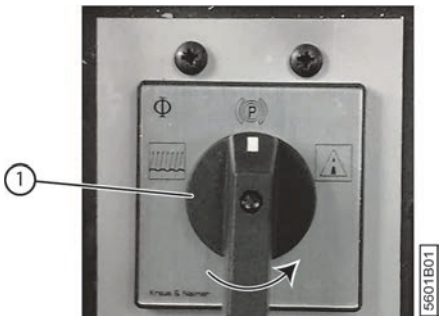


Fig. 68: Place the switch in the Field mode

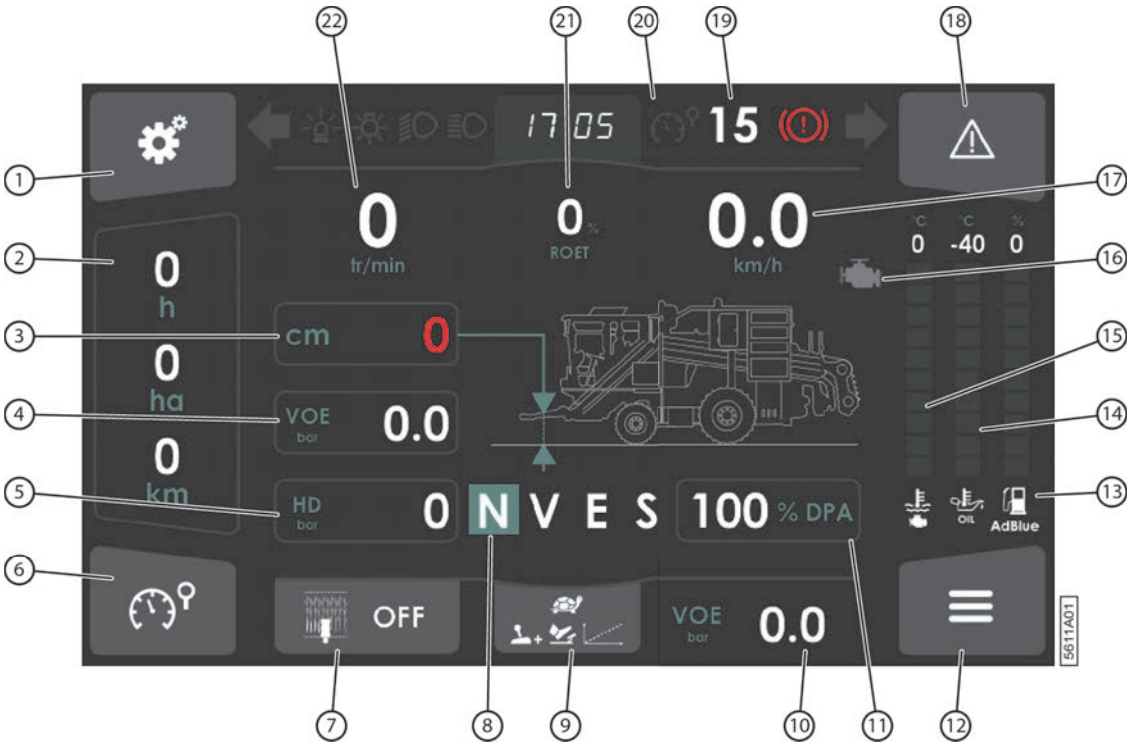
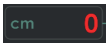


Fig. 69: Field mode window

Nr.	Pictogram	Explanation
1		Click on this button to go to the machine settings.
2		Displays the values of the various counters: • Work hours • Hectares • Kilometres

Nr.	Pictogram	Explanation
3		Displays the set picking height in centimetres.
4		Displays the feed pressure for the Harvest pump.
5		Displays the pressure of the picking element The greater the quantity of flax passing through the picking element, the higher the pressure. In the event of a blockage in the picking element, the pressure will substantially increase.
6		Press this button to activate or deactivate the speed limitation. • Active = orange • Non-active = white
7		Displays whether the crushing rollers are active **ON** or non-active **OFF**.
8		Displays the work mode: • **N** (French: “Normal”), normal work mode • **V** (French: “Verser”), is used if the flax is lying flat instead of being nice and vertical. • **E** (French: “Entrer), is used to enter the flax. • **S** (French: “Sortie”), is used to exit the flax.
9		Displays the selected driving mode.
10		Displays the feed pressure for the Drive pump.
11		Displays the set DPA height as a percentage.
12		Click on this button to go to the menu.
13		Visual representation of the level of AdBlue in % (only EU).
14		Visual representation of the temperature of the hydraulic oil in °C.
15		Visual representation of the temperature of the coolant for the engine in °C.
16		Is lit if there is a serious engine fault.
17		The driving speed in kilometres per hour (km/hour).
18		Indicates whether there is a fault message: • Red: there is a fault message • White: there is no fault message

Nr.	Pictogram	Explanation
19	15	Displays the maximum speed at which the machine can drive when the speed limitation is active.
20		Indicates whether the speed limitation is active (orange) or non-active (grey).
21	0	Displays the percentage of soot measured in the soot filter (only EU).
22	0 tr/min	The speed of the engine in revolutions per minute (revs./ minute)

The Field mode window is displayed.

8.2.22 Placing the machine in the Road mode

The Road mode is used to drive on public roads.

You can only place the machine in a different mode when the joystick is in neutral and the machine is at standstill.

Turn the switch (1) on the control console to  .

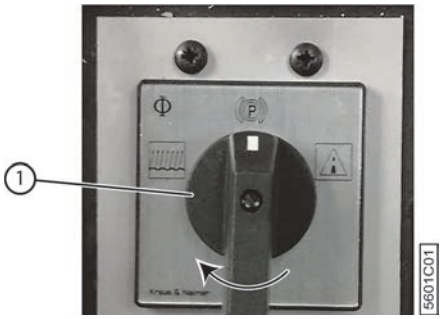


Fig. 70: Place the switch in the Road mode:

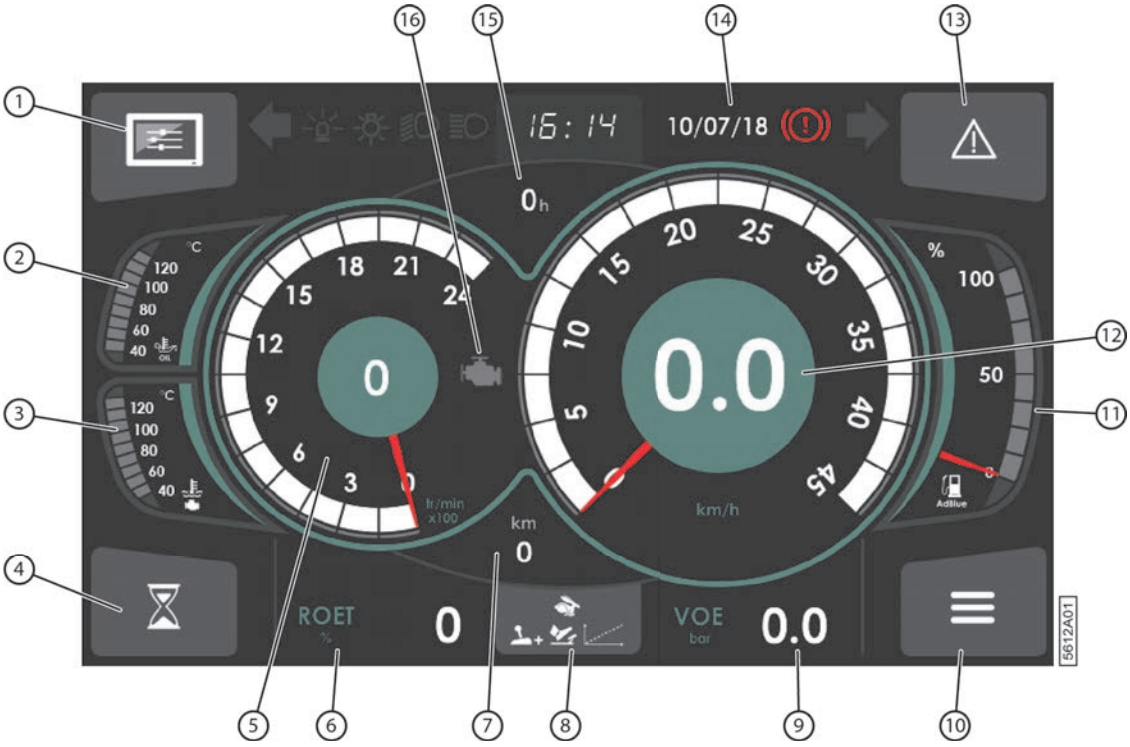
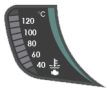


Fig. 71: Road mode window

Nr.	Pictogram	Explanation
1		Click on this button to go to the **SCREEN SETTINGS**.
2		Visual representation of the temperature of the hydraulic oil in °C.
3		Visual representation of the temperature of the coolant in °C.
4		Click on this button to go to the counters.
5		The speed of the engine in revolutions per minute (revs./ minute)
6		Indicates the percentage of soot measured in the soot filter (only EU).
7		The total number of kilometres travelled.
8		Indicates the selected driving mode.
9		Indicates the feed pressure for the Drive pump.
10		Click on this button to go to the menu.

Nr.	Pictogram	Explanation
11		Visual representation of the level of AdBlue in % (enkel EU).
12		The driving speed in kilometres per hour (km/hour).
13		Indicates whether there is a fault message: • Red: there is a fault message • White: there is no fault message
14		Indicates the current date.
15		Indicates the number of work hours.
16		Is lit if there is an engine fault.

The Road mode window is displayed on the control screen.

8.2.23 Retrieving the menu

You can retrieve the menu and modify data while the machine is in the Field, Road, Manual, Stationary, or Loading mode.

Press  to go to the menu.

8.2.24 Overview of the menus

From most screens, you can return to the menu by tapping  .

Menu	Explanation
	To return to the Road screen or the Field screen, depending on the selected mode. The screen for the selected mode is automatically displayed after 10 seconds.
	**SCREEN SETTINGS** For adjusting the brightness of the screen, and setting the date, time, and the language.
	**MACHINE SETTINGS MENU** On the DPA, setting the height, the speed of the picking element, the speed of the tables, the control of the engine and the control of the cooler. For activating or stopping the regeneration, or to force the EAT system.

Menu	Explanation
	**MACHINE CONFIGURATION** Only accessible for a service technician delegated by Depoortere NV.
	**CALIBRATION PICKING ELEMENT** Only accessible for a service technician delegated by Depoortere NV.
	Counters record the harvested surface area of the field, the number of kilometres travelled, the total number of hours, the field hours, and the engine hours. For all data, there is 1 counter that cannot be reset, and also for all data, except for the engine hours, there is 1 counter that can be reset.
	**FAULT LOGBOOK** Here, you receive an overview of all faults with the date and time when they occurred. You can also retrieve faults per group. For example: all faults for the sensors. The faults can also be reset.
	**MAINTENANCE** To display the expected maintenance, and to record maintenance performed.
	**SENSORS ACTUATORS** Information about the signals from the power supply for the controllers, engine, DPF, analogue inputs, PWM outputs, digital inputs and outputs, joystick buttons and signalisation outputs.
	**CODIFICATION** Overview of the controllers and software used.

8.2.25 Overview of the common icons

In the Road mode or the Field mode, the same icons remain available at the top of the screen.

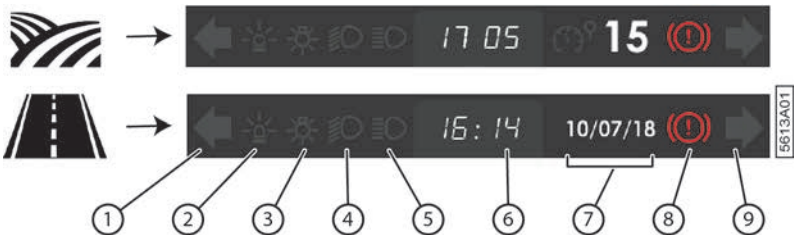


Fig. 72: Overview of common functions

Nr.	Function	Explanation
1		Lamp for the left-hand indicator.
2		Is lit when the flashing light is activated. In the Road mode, the flashing light is automatically activated.

Nr.	Function	Explanation
3		For switching the sidelights ON or OFF. • White = non-active • Green = active
4		For switching the dipped headlights ON or OFF. • White = non-active • Green = active
5		For switching the main beam headlights ON or OFF. • White = non-active • Green = active
6		Indicates the current time.
7		In the Field mode: • Indicates whether the speed limitation is active (orange) or non-active (grey). • Indicates the maximum speed at which the machine can drive when the speed limitation is active. In the Road mode: • Indicates the current date.
8		Light is red when the parking brake is active.
9		Lamp for the right-hand indicator.

See also
- 8.2.13 Setting the date on the control screen on page 95

8.2.26 Driving the machine (in driving mode with pedal)

In Field mode and in the Road mode, the driving mode of the machine is displayed at the bottom. The driving mode with pedal is the safest mode.

1. Place the machine in Field mode or Road mode.
2. Perform one of the following actions:
   - To drive forwards, gently press the joystick away from you.
   - To drive backwards, gently pull the joystick towards you.

   The extent to which the joystick is moved, determines the maximum speed that can be attained using the pedal.
3. When using the pedal, gently press your foot down.
   The machine drives in the desired direction. When the pedal is pressed fully down, the position of the joystick determines the maximum revs./minute and speed of the engine.
4. Combine the position of the joystick and the pedal to attain the desired speed and revs./minute.

See also
- 8.2.27 Driving the machine (in driving mode with only the joystick) on page 107
- 8.3.2 Driving on public roads on page 125

8.2.27 Driving the machine (in driving mode with only the joystick)

In Field mode and in the Road mode, the driving mode of the machine is displayed at the bottom. The driving mode with pedal is the safest mode.

WARNING
In a driving mode with only joystick, movement of the joystick immediately results in movement of the machine in the same direction!

1. Place the machine in Field mode or Road mode.
2. Perform one of the following actions:
   - To drive forwards, push the joystick gently away from you.
   - To drive backwards, pull the joystick gently towards you.

   The extent to which the joystick is moved, determines the revs./minute of the engine and the speed of the machine. The machine drives in the desired direction.

See also
- 8.2.26 Driving the machine (in driving mode with pedal) on page 106

8.2.28 Changing the driving mode of the machine

The machine has a total of 5 driving modes:

- 2 driving modes in the Road mode
- 3 driving modes in the Field mode

Some driving modes only use the joystick, and some driving modes use the joystick in combination with the pedal.

WARNING

The safest mode is the driving mode where driving takes place via the joystick in combination with the pedal!

In a driving mode with only the joystick, the machine will be driven if you accidentally move the joystick!

In Road mode and in Field mode, the driving mode of the machine is displayed at the bottom.

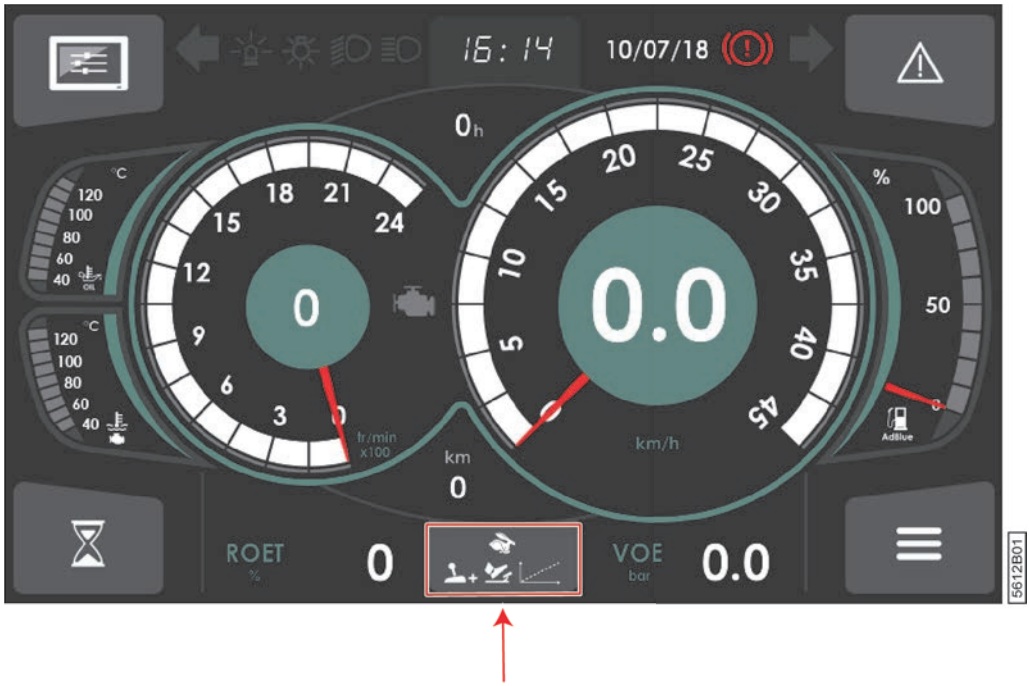


Fig. 73: Changing driving mode

1. Select the Field mode or the Road mode on the control screen.
2. Press the Driving mode icon at the bottom.
3. Depending on whether you have selected Field mode or Road mode, select one of the following driving modes:

Table 1: Road mode

Driving mode	Explanation
	To drive, you only use the joystick. The joystick determines the direction. The position of the joystick proportionally determines the revs./minute and the speed of the machine.
	To drive, you use the joystick in combination with the pedal. The position of the joystick determines the direction and the maximum speed. With the pedal, you proportionally determine the revs./minute and the speed of the machine.

Table 2: Field mode

Driving mode	Explanation
	To drive, you only use the joystick. As soon as you move the joystick from the neutral position, the revs./minute immediately increases to the maximum revs./minute. The maximum revs./minute is defined by the software and cannot be changed. The joystick determines the direction. The position of the joystick determines the speed of the machine.
	To drive, you only use the joystick. The joystick determines the direction. The position of the joystick proportionally determines the revs./minute and the speed of the machine.
	To drive, you use the joystick in combination with the pedal. The position of the joystick determines the direction and the maximum speed. With the pedal, you proportionally determine the revs./minute and the speed of the machine.

In Road mode and in Field mode, the selected driving mode is constantly displayed at the bottom of the screen.

8.2.29 Removing a blockage on the picking belts by machine (in the Field mode)

WARNING
Check that nobody is in the vicinity of the machine.

Before removing the blockage, you must look for the cause and eliminate the cause.

In the event of a blockage, you can move the picking belts backwards slightly and then forwards in order to try to remove the blockage. This action can only take place in the Stationary mode.

1. Placing the machine in the Stationary mode.
2. Perform one of the following actions:
   - Press button 6 to move the picking belts in the reverse direction (backwards).
   - Press button 4 to move the picking belts in the normal direction (forwards).
3. Repeat from step 1 if the blockage is still not removed, or try the remove the blockage manually in accordance with the 8.2.30 Removing a blockage manually on page 109 procedure.

See also
- 8.2.30 Removing a blockage manually on page 109

8.2.30 Removing a blockage manually

First try to remove the blockage by machine. See 8.2.29 Removing a blockage on the picking belts by machine (in the Field mode) on page 109.

Combine this task with the 8.2.31 Looking for and eliminating cause of a blockage on page 110 task.

DANGER
It is prohibited to eliminate the cause of the blockage if the machine is still switched ON!

WARNING
Wear safety gloves when removing the blockage.

1. Switch OFF the machine safely.
2. Perform one of the following actions, depending on where the blockage is located:

Section	Action
Picking section	Loosen the picking belts. • 10.2.24 Loosening / tightening an outermost picking belt on page 166 • 10.2.25 Loosening / tightening the innermost picking belt on page 166
Crushing rollers	Switch OFF the pressure on the crushing rollers. See 8.2.72 Switching ON or switching OFF the crushing rollers on page 123. Disable the crushing rollers. See 9.2.5 Disabling the crushing rollers on page 135.
Flax-laying section	Open the flax-laying section. See 9.3.2 Adjusting the opening of the flax-laying section on page 138.

3. Remove the blockage.
4. Perform one of the following actions, depending on where the blockage was located:

Section	Action
Picking section	Tighten the picking belts. • 10.2.24 Loosening / tightening an outermost picking belt on page 166 • 10.2.25 Loosening / tightening the innermost picking belt on page 166
Crushing rollers	Enable the crushing rollers. See 9.2.5 Disabling the crushing rollers on page 135. Switch ON the pressure on the crushing rollers. See 8.2.72 Switching ON or switching OFF the crushing rollers on page 123.
Flax-laying section	Adjust the opening of the flax-laying section. See 9.3.2 Adjusting the opening of the flax-laying section on page 138.

See also

- 8.2.29 Removing a blockage on the picking belts by machine (in the Field mode) on page 109

8.2.31 Looking for and eliminating cause of a blockage

WARNING
It is prohibited to look for and eliminate the cause of the blockage if the machine is still switched ON.

Always look for the cause of the blockage and eliminate the cause.

1. Switch OFF the machine safely.
2. Check the cause of the blockage and eliminate the cause:

Cause	Solution
The thickness of the flax layer has not been correctly set.	See 8.2.42 Reading the counters on page 114.
The flax layer is locally too thick.	Spread out the flax in a uniform manner.
A stone is present between the flax.	Remove the stone.
A guide has been moved.	Move the guide back to its original position and check the alignment.
A guide is bent or damaged.	Straighten the guide or replace the guide.
Dirt has accumulated.	Remove all of the dirt.
An attachment is damaged.	Repair or replace the attachment. See 10.3.12 Replacing an attachment on the conveyor belt on page 212.
A distributor is not correctly adjusted.	Adjust the distributor correctly. See 9.4.4 Adjusting the distributor on page 140.

8.2.32 Retracting or extending the tables in relation to the machine

By retracting or extending the tables, you can change the location where the flax is deposited. You can retract or extend the tables in the Field mode or in the Stationary mode.

1. Perform one of the following actions:
   - Press button 1 on the joystick to retract the tables.
   - Press button 2 on the joystick to extend the tables.
2. Check that the flax is deposited at the desired location. If necessary, repeat step 1.

See also

- 3.2.3 The spreading tables on page 52
- 9.2.2 Adjusting the tables in relation to the machine on page 132

8.2.33 Adjusting the tables in relation to each other

The distance to be adjusted between the tables depends on the length of the flax. The shorter the flax, the closer together the tables must be in relation to each other. The longer the flax, the further away the tables must be from each other.

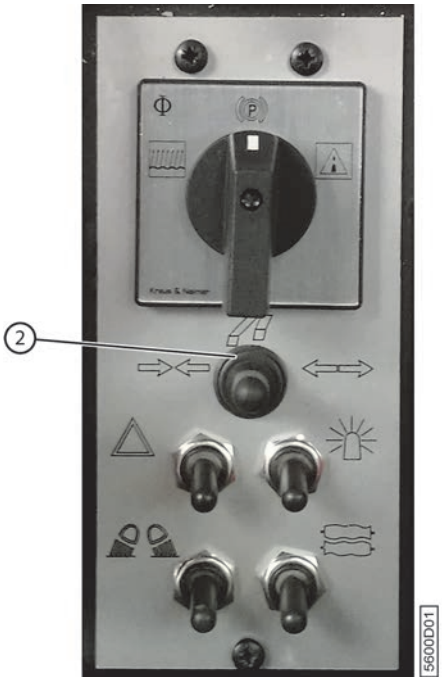


Fig. 74: Adjusting the tables in relation to each other

1. Perform one of the following actions on the lowermost control console:
   - Place the switch (2) to the left, to move the tables towards each other.
   - Place the switch (2) to the right, to move the tables further away from each other.
2. Check that the flax is deposited at the desired location. If necessary, repeat step 1.

See also

- 3.2.3 The spreading tables on page 52
- 9.2.1 Adjusting the tables in relation to each other on page 130

8.2.34 Decreasing or increasing the speed of the picking belts

You can decrease or increase the speed of the picking belts. This enables you to deposit the flax further away from or closer to the location where it was picked. You can also enable the boost function so that the speed of the picking belts is increased by a certain value.

The picking belts rotate synchronously with the conveyor belts and the flax-laying belts. So this speed is also decreased or increased.

This action can only take place in the Field mode.

1. Place the machine in the Field mode.
2. Perform one of the following actions:
   - Press button 4 on the joystick to increase the speed of the picking belts.
   - Press button 6 on the joystick to decrease the speed of the picking belts.
   - Press and hold button 4 to enable the boost function. Release this button to disable the boost function.

8.2.35 Slowly raising or lowering the picking element

You can raise or lower the picking height of the picking element. The picking element is raised or lowered slowly.

This action can only take place in the Field mode or in the Stationary mode.

Perform one of the following actions:

- Press and hold button 3 on the joystick to slowly raise the picking element.
- Press and hold button 5 on the joystick to slowly lower the picking element.

8.2.36 Moving the picking belts forwards or backwards

In the event of a blockage, you can move the conveyor belts backwards slightly in order to try to remove the blockage. This action can only take place in the Stationary mode.

1. Placing the machine in the Stationary mode.
2. Perform one of the following actions:
   - Press button 6 to move the conveyor belts backwards. The conveyor belts and the flax-laying belts do not move.
   - Press button 4 to move the picking belts forwards in the normal direction. The conveyor belts and the flax-laying belts also rotate.

8.2.37 Placing the picking element in the next picking position

The picking element moves from the HIGH picking position to the WORK picking position. In the case of fallen flax, you can still move the the picking element to a lower picking position. Conversely, you can also move the picking element to a higher picking position.

*) Only when exiting, does the picking element move from the lowest picking position to the highest picking position.

Fig. 75: Positions of the picking element

This action can only take place in the Field mode and in the Stationary mode.

Perform one of the following actions:

- Press button 8 on the joystick to move the picking element to a lower picking position.
- Press button 9 on the joystick to move the picking element to a higher picking position.

8.2.38 Raising the picking element

In the Road mode, the picking element can be raised.

This action can only take place in the Road mode.

Press and hold button 8 on the joystick to raise the picking element.

8.2.39 Changing the working mode

Changing the working mode of the machine:

- From entering (E) to working (N)
- From working (N) to exiting (S)
- From exiting (S) back to working (N)

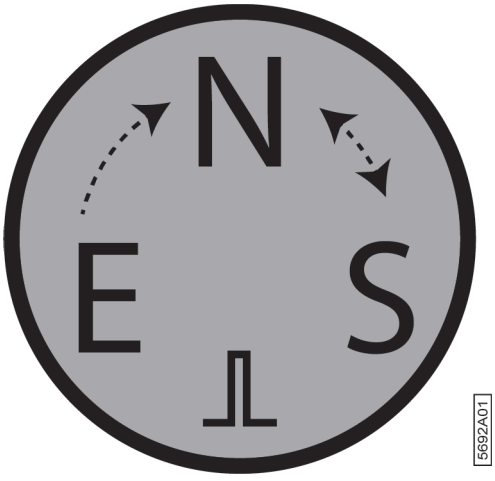


Fig. 76: Changing the working mode

Briefly press button 7 on the joystick to change the working mode.

8.2.40 Switching ON or switching OFF the rotation of the belts

Example 1: if the picking element is in the UP position, this action enables the belts to rotate.

Example 2: if the picking element is in the WORK position, this action enables the belts to stop. You can use this action if there is no flax, or to deposit the flax at a different location.

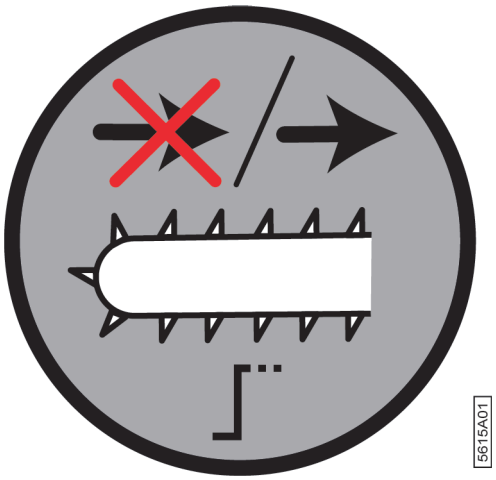


Fig. 77: Switching ON or switching OFF the rotation of the belts

Press and hold button 7 on the joystick to switch ON or switch OFF the rotation of the belts.

8.2.41 Allowing all belts to rotate forwards

This action can only take place in the Stationary mode. This action enables you to remove all of the flax from the machine.

Press and hold button 4 on the joystick.

8.2.42 Reading the counters

In the Field mode, you can read the number of field hours, hectares and kilometres on the left-hand side of the screen. In the Road mode, you can read the number of hours and the number of kilometres between the rev counter and the kilometres counter. To read all counters, do the following:

1. Go to the menu via  .
2. Select  .
   All counters are displayed. On the left, you can see the value of the non-resettable counter, and on the right, you can see the value of the counter that you can reset.

8.2.43 Resetting a counter

The counter can be reset. The total counter CANNOT be reset.

1. Go to the menu via  .

2. Select  .
   All counters are displayed. On the left, you can see the value of the non-resettable counter, and on the right, you can see the value of the counter that you can reset.
3. Press **Reset** beside the counter that you wish to reset.
4. Confirm in the dialog box.

8.2.44 Entering the secret code

Certain data is locked. The data is only displayed after you have entered a code. After entering the correct code, the data remains unlocked as long as the machine is active. After switching OFF the machine via the ignition key, you must re-enter the code so that you can see the locked data. The code is a 4-digit numerical code.

See also
- 8.2.58 Deleting the history of the fault messages on page 118

8.2.45 Reading the engine hours

1. Go to the menu via  .
2. Select  .
3. Read the number of engine hours on **ENGINE**.

8.2.46 Deleting a fault message

A pop-up window is displayed for a fault message.

1. Carefully read the fault message and solve the problem.
2. Press **Close** to delete the fault message.
   The fault message is logged and can later be retrieved. If several fault messages exist, each fault message is displayed in turn after you press **NEXT**.

See also
- 8.2.57 Viewing the history of the fault messages on page 118

8.2.47 Checking whether the parking brake is activated

In the Field mode and the Road mode, the parking brake is displayed on the control screen.

Pictogram	Status
	Parking brake released.
	Parking brake activated.

8.2.48 Checking the operation of the joystick

Check the optimal movement and operation of the joystick and all buttons on the joystick.

1. Go to the menu via  .
2. Select  .
3. Select the **ANALOG INPUTS** page.
4. Place the joystick in the neutral position and check that the value beside **Joystick** in the **Scaled** column is 0%.
5. Slowly move the joystick forwards.
6. Check that the value beside **Joystick** in the **Scaled** column gradually increases to 100% when the joystick is moved fully forwards.
7. Select the **JOYSTICK BUTTONS** page.
8. Press buttons 1 to 9 in turn, and check that the value in the **Status** column changes to 1 each time a button is pressed.

8.2.49 Viewing the analogue inputs

You can view the input and output values in order to solve problems.

1. Go to the menu via  .
2. Select  .
3. Select the **ANALOG INPUTS** page.
   View the values in the **Gross** and **Scaled** columns.

8.2.50 Viewing the software version

When contacting your distributor, it is recommended to state the software version of the various programs.

1. Go to the menu via  .
2. Select  .
   The overview of the various modules, the codes for the equipment and for the software are displayed. For example: the software version of the control screen is displayed below CEC90.

8.2.51 Viewing the operation of the hydraulic pumps

In the event of problems during driving, or problems with the conveyor belts, you can check certain data on the control screen.

1. Select a suitable mode.
   For example, select Field mode or Road mode to view the operation of the hydraulic pump for driving.
2. Perform one of the following actions:
   - Go to the menu via  and select  .
   - Select  at the bottom left.
3. Select the **PWM OUTPUTS** page.
4. Evaluate the data and contact your distributor if you detect deviations.

If a value is displayed at **Setting v.**, then a comparable value must be displayed at **Current v.**. In the event of a deviation between the values, there is a bad connection. In the event of a value equal to zero, there is a open-circuit in the cabling to the pump.

8.2.52 Viewing the engine data

In the event of problems with the engine, you can view data such as revs./minute, oil pressure, water temperature, etc.

1. Go to the menu via  .
2. Select  .
3. Select the **ENGINE INFO** page.
   The overview of the engine data is displayed.

8.2.53 Viewing the digital inputs and outputs

You can view the operation of sensors, pushbuttons and level meters.

1. Go to the menu via  .
2. Select  .
3. Select the **DIGITAL INPUTS** page.
   Check that the value in the **Status** column corresponds with the actual status of the sensor, pushbutton or level measurement.
4. Select the **DIGITAL OUTPUTS** page.
   Check that the value in the **Status** column corresponds with the actual status of the sensor, pushbutton or level measurement.

8.2.54 Checking the operation of the signalisation

You can check the operation of: the horn, the flashing light, the indicators, the sidelights, the dipped beam headlights, the main beam headlights, the brake lights.

1. Go to the menu via  .
2. Select  .
3. Select the **SIGNALISATION OUTPUT** page.
   Check that the value in the **Status** column corresponds with the actual status of the signalisation.

8.2.55 Viewing the power supply to the controllers

You can check whether all controllers receive the correct power supply.

1. Go to the menu via  .
2. Select  .

3. Select the **POWER SUPPLY CONTROLLERS** page.

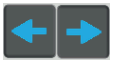
See also
- 11.3 Check the voltage on the controllers on page 219

8.2.56 Viewing the data for the soot filter

1. Go to the menu via  .
2. Select  .
3. Select the **DPF INFO** page.
   The overview for the soot filter is displayed.
4. Select the next page to view the rest of the data.
   An overview of the fault messages that inhibit the regeneration is displayed. In the **Status** column, check whether a fault message is active.

8.2.57 Viewing the history of the fault messages

There are 10 fault message groups. In the first group ALL FAULTS, all faults are displayed. In other groups, the faults are displayed per type. For example: engine faults.

1. Go to the menu via  .
2. Select  .
   The date, the time and the description are displayed for the previous 10 faults. By default, the overview of all faults is displayed.
3. Use the  arrows to display the faults per fault message group:
   - **CAN NETWORK**
   - **POWER SUPPLY**
   - **CRITICAL**
   - **SENSORS**
   - **ENGINE**
   - **SCREEN**
   - **MAINTENANCE**
   - **ALARMS**
   - **DIESEL**

See also
- 8.2.46 Deleting a fault message on page 115

8.2.58 Deleting the history of the fault messages

There are 10 fault message groups. In the first group **ALL FAULTS**, all of the fault messages are displayed. In other groups, the faults are displayed per type. For example: engine faults.

You can delete the entire history of the fault messages. For this, you need a secret code.

1. Go to the menu via  .

2. Select  .
3. Press **Reset**
4. Enter the secret code.
   All fault messages are deleted.

See also
- 8.2.44 Entering the secret code on page 115

8.2.59 Viewing the planned maintenance

1. Go to the menu via  .
2. Select  .
   An overview of the planned maintenance is displayed. For example, in 34 hours time, the hydraulic oil must be replaced.

8.2.60 Entering performed maintenance

After the maintenance has been performed, you have to enter this via the control screen. The maintenance counter is reset.

1. Go to the menu via  .
2. Select  .
3. Select the maintenance task via  and  .
4. Tap  .
5. Confirm that the maintenance has been performed in the dialog box.
   The maintenance counter is reset.

8.2.61 Setting the DPA

The DPA (Débit Proportionnel à l'Avancement) is the ratio of the speed of the belts in relation to the driving speed. You can set a different DPA per work mode.

When entering, you can set a lower DPA so that the transport is delayed in order to make room for the headlands. When exiting, you can set a higher DPA so that the transport is speeded up in order to make room for the headlands. Do not set the DPA too low, otherwise bundles may be created.

1. Go to the menu via  .
2. Select  .
3. Select **ADJUSTMENT DPA / HEIGHT PICKING ELEMENT**.
4. Tap  or  to set the DPA for:
   - **DPA entering field (%)**

- **DPA work (%)**
- **DPA Fallen Flax (%)**, in the event of fallen flax.
- **DPA exiting field (%)**

See also
- 3.3.2 The alignment of the swath on page 55

8.2.62 Locking the DPA

The DPA (Débit Proportionnel à l'Avancement) is the ratio of the speed of the belts in relation to the driving speed. You can lock the DPA. Then, you can no longer adjust the DPA via the joystick.

1. Go to the menu via .
2. Select .
3. Select **ADJUSTMENT DPA / HEIGHT PICKING ELEMENT**.
4. Tap DPA to lock the DPA.
   The **DPA work (%)** is set to 100% or the value that has been set by the service technician, represented by Depoortere NV. When entering or exiting, the DPA also remains at 100%, and can no longer be adjusted via the joystick.

8.2.63 Adjusting the picking height

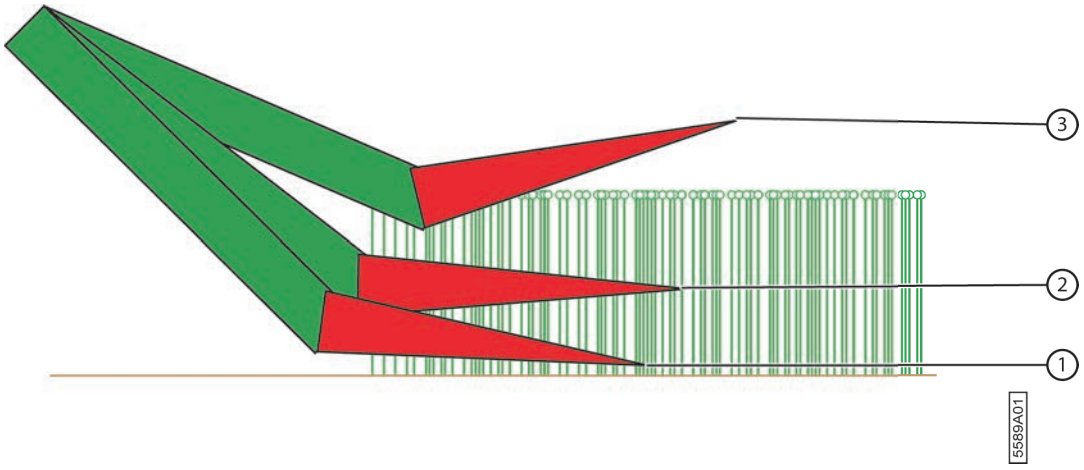


Fig. 78: Positions of the picking element

1. Go to the menu via .
2. Select .
3. Select **ADJUSTMENT DPA / HEIGHT PICKING ELEMENT**.
4. Tap or to set the picking height in the various picking modes:
   - **Picking height High (cm)**, height of the picking element if picking is not required.
   - **Picking height Work (cm)**, height of the picking element if picking takes place normally.
   - **Picking height Fallen Flax (cm)**, height of the picking element if fallen flax has to be picked.

8.2.64 Adjusting the speed limitation

In the Field mode, you can limit the speed at which the machine is driven. You can adjust the maximum speed. As soon as the speed limitation is activated, this becomes the maximum speed.

1. Go to the menu via  .
2. Select  .
3. Select **Adjustment Engine**.
4. Tap  or  to set the speed.
   If the speed limitation is activated, this becomes the maximum speed.

8.2.65 Activating the speed limitation

In the Field mode, you can limit the speed by activating the speed limitation. The set maximum speed is displayed beside the limitation pictogram.

1. Select the Field mode.
2. Tap  .

   The speed limitation is active. The  pictogram beside the clock becomes orange. The number indicates the set maximum speed.

8.2.66 Activating the automatic power control

The automatic power control optimises the power of the machine by, at all times, using a speed for the engine that is as low as possible.

1. Go to the menu via  .
2. Select  .
3. Select **Adjustment Engine**.
4. Tap **Engine load check**.
   The button becomes green, the automatic power control is active.

8.2.67 Adjusting the speed of the tables

The speed at which the tables retract, extend, move towards each other, or move away from each other, can be separately adjusted.

1. Go to the menu via  .
2. Select  .
3. Select **ADJUSTMENT SPEED TABLES**.
4. Tap  or  to set the different speeds:

- **Retract tables (%)**
- **Extend tables (%)**
- **Slide tables away from each other (%)**
- **Slide tables together (%)**

8.2.68 Adjusting the speed of the movements of the picking element

The picking element can move upwards or downwards at low or high speed.

1. Go to the menu via  .
2. Select  .
3. Select **ADJUSTMENT SPEED PICKING ELEMENT**.
4. Tap  or  to set the different speeds:
   - **Increased high speed (%)**
   - **Increased low speed (%)**
   - **Decreased high speed (%)**
   - **Decreased low speed (%)**

8.2.69 Adjusting the cleaning of the radiators

The radiators are cooled by a fan. Dust that has accumulated between the cooling ribs of the radiators can also be blown away. Via the control screen, you can briefly reverse the direction of rotation of the fan (using a variable engine speed), in order to dedust the radiators. This blows the dust out of the machine.

1. Go to the menu via  .
2. Select  .
3. Select **ADJUSTMENT CLEANING**.
4. Tap  or  in order to adjust the engine speed that is used to clean the cooler.
5. Tap **Activate cleaning cooler**.
   The button becomes green and the cleaning takes place.

See also

- 10.2.10 Dedusting the radiators (via control screen) on page 156

8.2.70 Placing the machine in the Loading mode

The Loading mode is used to load the machine onto a lorry.

1. Select the Field mode or the Road mode.
2. Tap the driving mode icon at the bottom. For example  .
3. Select  .

The button becomes green and the Loading mode is activated.

8.2.71 Calibrating the picking element

The calibration of the picking element only has to be performed when the sensor of the picking element is replaced.

The calibration of the picking element is only accessible for a service technician delegated by Depoortere NV.

1. Go to the menu via  .
2. Select  .

8.2.72 Switching ON or switching OFF the crushing rollers

The crushing rollers provide the required force on the stems of the flax. If the retting of the flax is already at an advanced stage, or the flax starts to block the crushing rollers, then you can disable the crushing roillers. When disabling the crushing rollers, you set the pressure to zero. This depressurises the bellows that presses the uppermost crushing roller downwards. Due to its own weight, the uppermost crushing roller continues to exert pressure on the flax.

Move the switch (5) on the bottom control console as follows:

- UPWARDS to switch OFF the crushing rollers.
- DOWNWARDS to switch ON the crushing rollers.

Fig. 79: Bottom control console

On the screen, the 

button becomes green, and **ON** is displayed.

See also

- 9.2.4 Adjusting the pressure of the crushing rollers on page 134
- 9.2.6 Enabling the crushing rollers on page 137

8.2.73 Setting aside the machine after use

1. Lift your foot off the pedal if the machine is used in Pedal driving mode with pedal.
2. Place the joystick in NEUTRAL.
3. Check that the parking brake via the 3-position switch is in the automatic position.
4. Stop the engine by turning the ignition switch key to the left, and remove it from the ignition.
5. Leave the cabin.
6. Wait at least 3 minutes and then switch OFF the battery by turning the battery key.
7. Place wheel chocks so that the machine cannot roll away.

8.3 Driving on public roads

8.3.1 Before you drive on public roads

CAUTION
Ensure that you have fulfilled the administrative requirements for driving the machine on public roads. Adhere to the current local regulations.

1. Empty the machine.
   The machine must not contain any flax!
2. Clean the machine.
3. Remove the red flax-splitting bar (3) and store it in the tool cabinet.

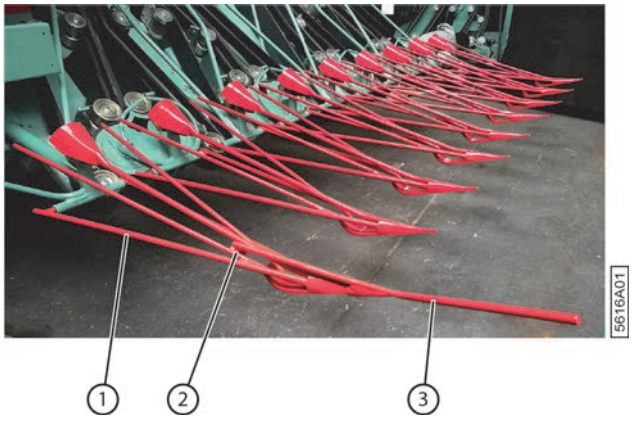


Fig. 80: The red flax-splitting bar

The red flax-splitting bar is an extension of the distributor (1) on the extreme right that ensures that all of the flax on the right-hand side is collected. Undo the bolt connection (2).

4. Install the guard for the distributors.
5. Fully retract the spreading tables.
6. Check the visibility from the cabin.
7. If necessary, switch ON the road lighting and check that it works.
8. Check the operation of the flashing light and the indicators.
9. Place the machine in the Road mode.
   In the Road mode, the flashing light is automatically switched ON.

8.3.2 Driving on public roads

Ensure that all safety precautions have been taken. See 8.3.1 Before you drive on public roads on page 124.

1. Close the cabin door.
2. Place the machine in the Road mode.
3. Depending on the selected driving mode, you use only the joystick, or the joystick in combination with the pedal.

   It is recommended to drive on public roads using the pedal, so that you can steer the machine with both hands.

CAUTION

- Maintain a safe speed when making journeys on public roads. Be vigilant when passing through built-up areas, encountering poor visibility on bends, poor visibility in bad weather, wet or muddy roads, etc.
- Summon assistance when your field of vision is restricted, especially when reversing.

See also

- 8.2.26 Driving the machine (in driving mode with pedal) on page 106

9 Adjustment

9.1 Configuring the workplace

9.1.1 Adjusting the driver's seat

See the user manual for the driver's seat. When the machine is supplied, this user manual can be found in the storage compartment underneath the driver's seat.

9.1.2 Adjusting the height of the steering wheel

Fig. 81: Lever on steering column

1. Use your right hand to move the lever (1) on the steering column UPWARDS.
2. Use your left hand to grip a spoke of the steering wheel, as close as possible to the centre, and pull the steering wheel upwards or push the steering wheel downwards.
3. When the desired height has been reached, release the lever (1).

See also

- 2.3.15 The steering column on page 35

9.1.3 Tilting the steering column

You can tilt the steering column towards you or away from you so that you can easily steer, and easily alight from the machine.

Fig. 82: Lever on steering column

1. Use your right hand to move the lever (1) on the steering column DOWNWARDS.
2. Grip the edge of the steering wheel with your left hand, and move the steering column forwards or backwards.
3. When the desired tilt angle has been reached, release the lever (1).

See also

- 2.3.15 The steering column on page 35

9.1.4 Switching ON the air conditioning system (manual version)

The air conditioning system has 6 different positions.

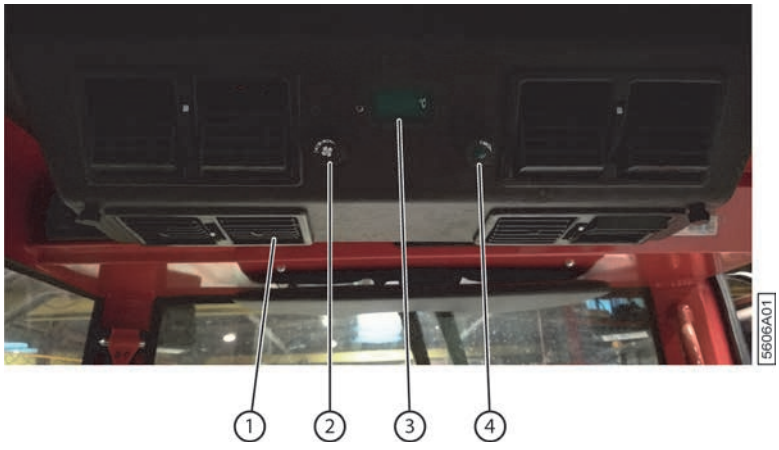


Fig. 83: Switching ON the air conditioning system

1. Turn knob (2) and knob (4) to position 1.

   When starting the machine, you must allow the air conditioning system sufficient time to gradually become operational. Allow the air conditioning system to operate for several minutes in position 1, before moving the control knob (2) to position 2. Then wait for several more minutes before moving the control knob (2) to poisition 3.

   NOTE
   When using the air conditioning system for the first time, the smell of new material can be apparent. This is normal and the smell will quickly disappear.

2. Use the control knob (2) to adjust the air flow.
3. Adjust the opening and the direction of the ventilation grills (1).

4. If air conditioning is not required, move the control knob (2) to position 0.
   You can read the temperature in the cabin on the screen (3).

9.1.5 Switching ON the air conditioning system (bluetooth version)

The air conditioning system is completely controlled by an app on the smartphone. You can also install the app on your own smartphone. The smartphone is linked to the air conditioning system via bluetooth. The supplied cable (3) is used to charge the smartphone. The smartphone is secured to the cabin by a magnet.

Fig. 84: The air conditioning system (bluetooth version)

Nr.	Explanation
1	Ventilation grill
2	Control knob for ventilation grill
3	Cable for charging the smartphone

See also

- 9.1.6 Downloading and installing the app for the air conditioning system (bluetooth version) on page 129

9.1.6 Downloading and installing the app for the air conditioning system (bluetooth version)

You can use the app to configure the air conditioning system. The relevant app is already pre-installed on a smartphone that is supplied. You can also install the app on your own smartphone.

1. Surf with your smartphone to https://apkcombo.com/climctrl/com.ex.anthony.climctrl2/
2. Select the most recent version of the software.
3. Download and install the software,

See also

- 9.1.5 Switching ON the air conditioning system (bluetooth version) on page 129

9.1.7 Switching ON the air conditioning system (airco version)

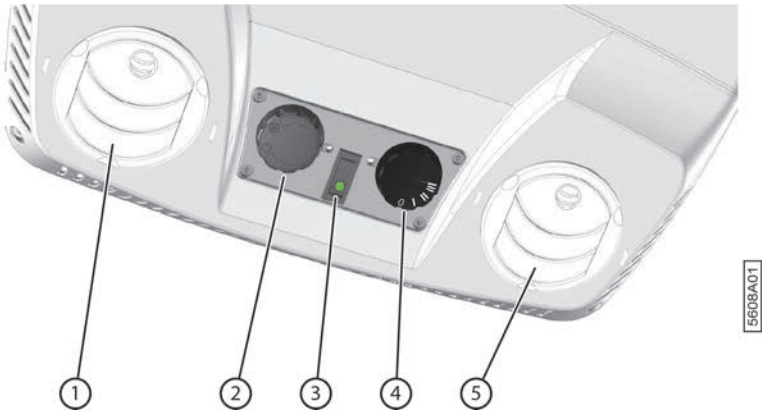


Fig. 85: Switching ON the air conditioning system

1. Press the switch (3) to switch ON the air conditioning system.
   The green lamp on the switch is lit.
2. Use the control knob (2) to adjust the temperature.
3. Use the control knob (4) to adjust the speed of the air flow.
4. Adjust the opening and the direction of the ventilation grills (1) and (5).

NOTE
When using the air conditioning system for the first time, the smell of new material can be apparent. This is normal and the smell will quickly disappear.

9.2 Adjusting the spreading tables

9.2.1 Adjusting the tables in relation to each other

The distance to be adjusted between the tables depends on the length of the flax. The shorter the flax, the closer together the tables must be in relation to each other (B). The longer the flax, the further away the tables must be from each other (C).

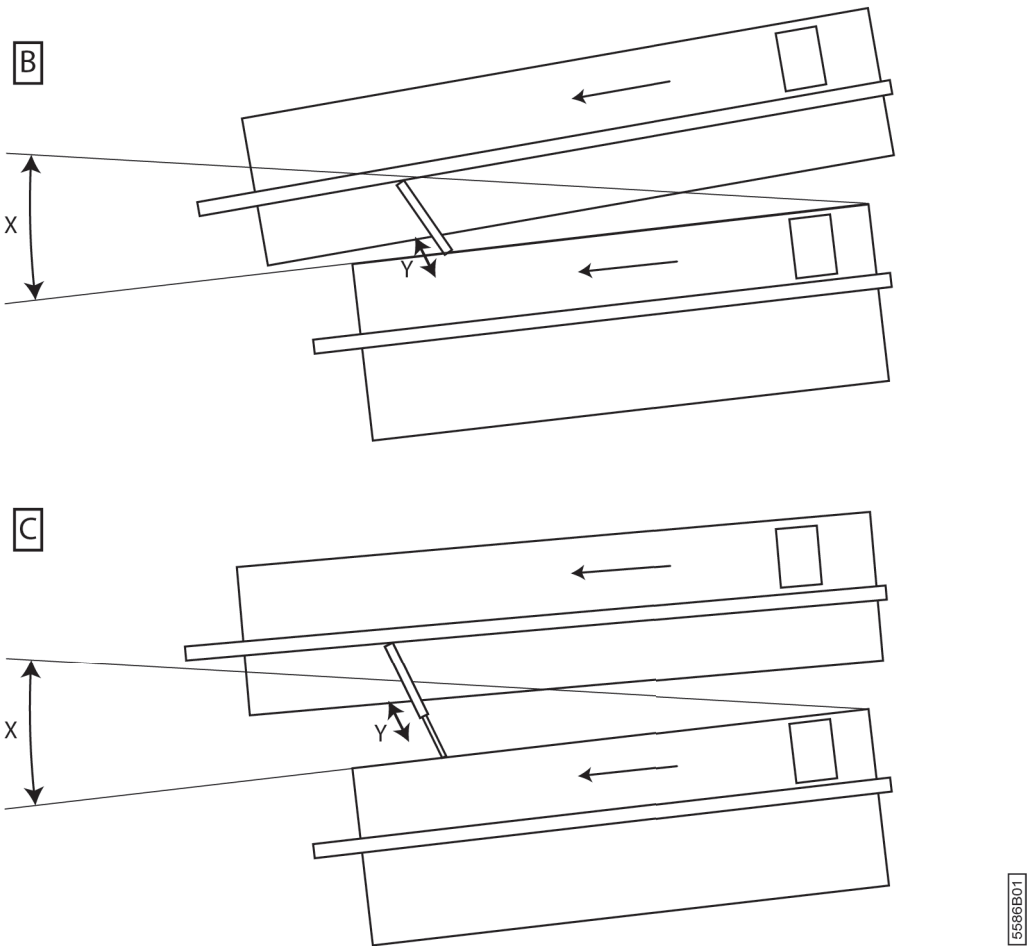


Fig. 86: Displacing the tables in relation to each other.

Adjust the distance between the tables so that the gap between them is sufficient:

- Between the 2 rows of flax
- Between the 2 rows of flax, and the next 2 rows of flax

If the adjusted distance is too small, an overlap can occur between the 2 rows (P2). If the adjusted distance is too large, an overlap can occur between the last row of flax and the next row of flax (P3).

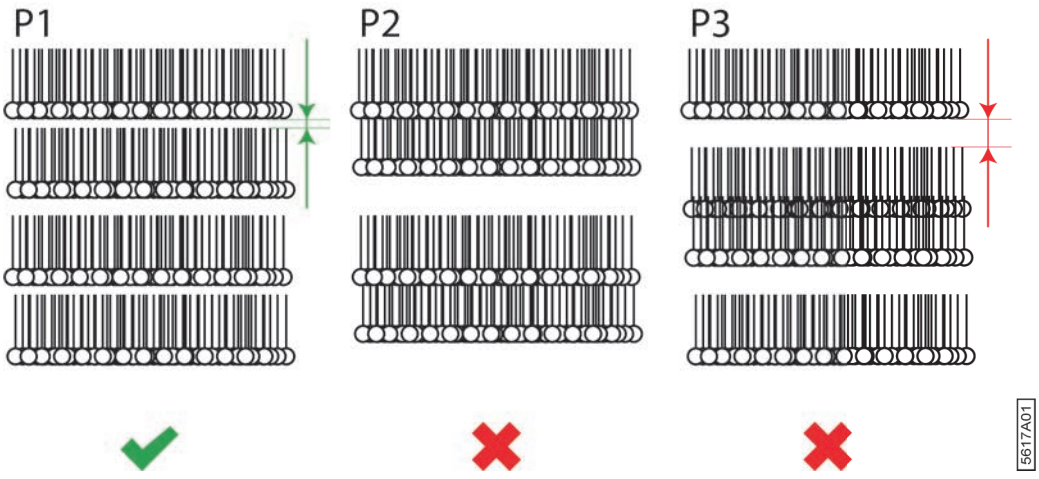


Fig. 87: Displacing the tables in relation to each other.

See also

- 2.3.29 The spreading tables on page 43
- 3.3.2 The alignment of the swath on page 55
- 3.2.3 The spreading tables on page 52
- 8.2.33 Adjusting the tables in relation to each other on page 111

9.2.2 Adjusting the tables in relation to the machine

The tables can be moved in relation to the machine. When the picking starts, the tables are in position (A), and at the end of the field block, the tables are moved to position (B). When the tables move in relation to the machine, the distance between the tables remains the same.

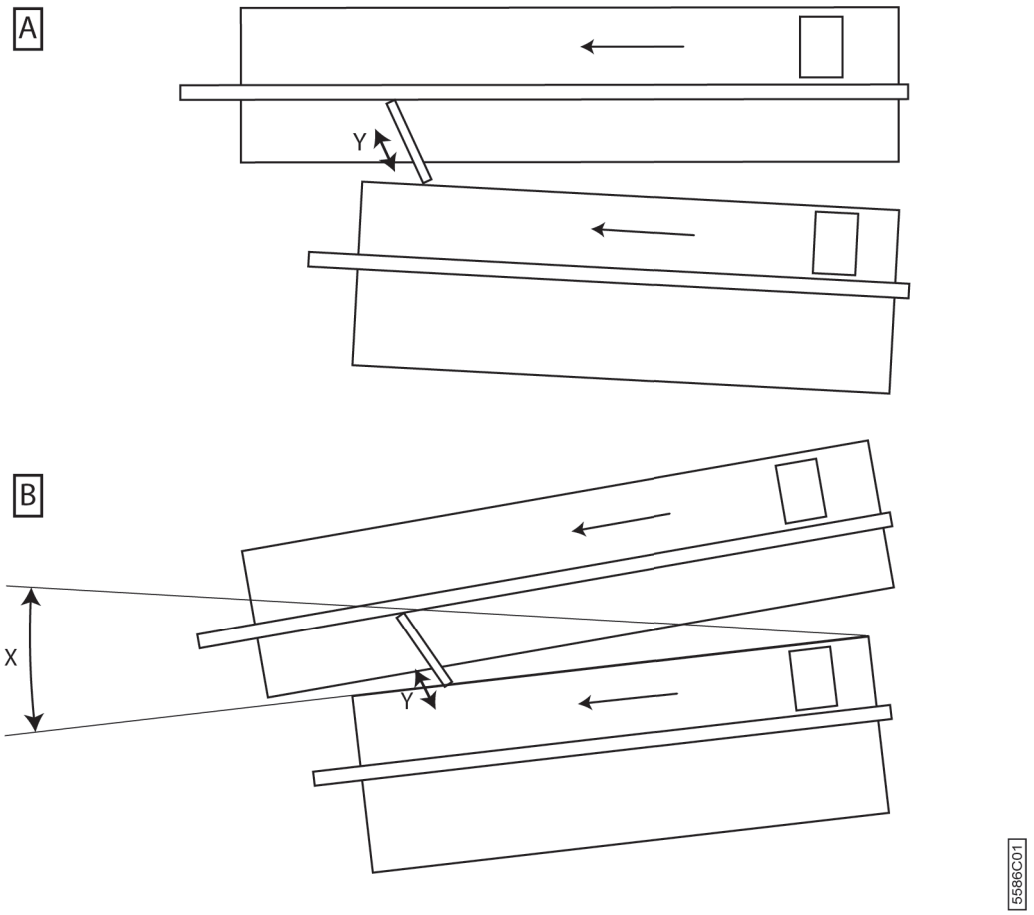


Fig. 88: Displacing the tables in relation to the machine

In order to obtain a sufficient gap (P1) at the end of the field block, the tables must be deflected row by row. If the tables are not displaced or are insufficiently displaced, then the gap between the field blocks (P2) will not be large enough.

Fig. 89: Displacing the tables in relation to the machine

See also

- 3.3.2 The alignment of the swath on page 55
- 3.2.3 The spreading tables on page 52
- 8.2.32 Retracting or extending the tables in relation to the machine on page 111

9.2.3 Shortening a belt

Executor: qualified technician

If increasing the tension does not stop the slipping, the belts must be shortened.

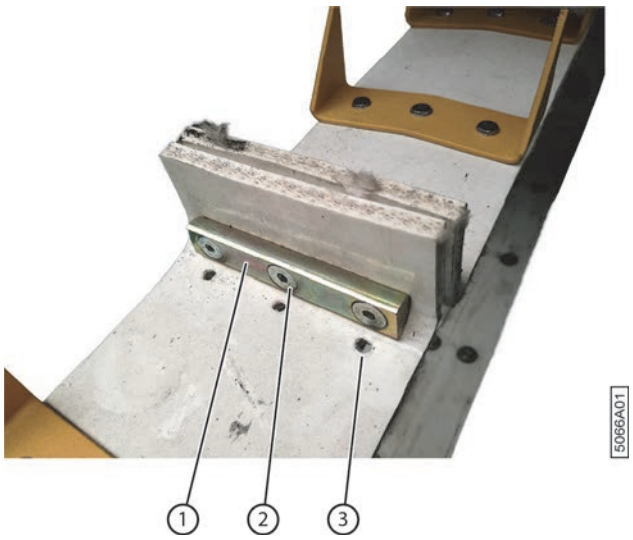


Fig. 90: Shortening a belt

1. Read the safety instructions and observe them.
2. Loosen the belts.
3. Loosen the connection (1) for the belts by unscrewing the 3 socket-screws (2).
4. Move the connection for the belts to the 3 adjacent holes (3).
   You do not have to make holes yourself. The holes already exist in the belt.
5. Secure the connection.

See also

- 10.2.30 Checking the tension of the conveyor belts on page 169
- 10.2.45 Checking the condition and the alignment of the conveyor belts on page 176
- 10.2.46 Checking the condition of the picking belts on page 176

9.2.4 Adjusting the pressure of the crushing rollers

The uppermost crushing roller is heavier so that a certain pressure is always exerted on the flax. The crushing roller is equipped with a bellows that is pressurised by compressed air. You can adjust this pressure.

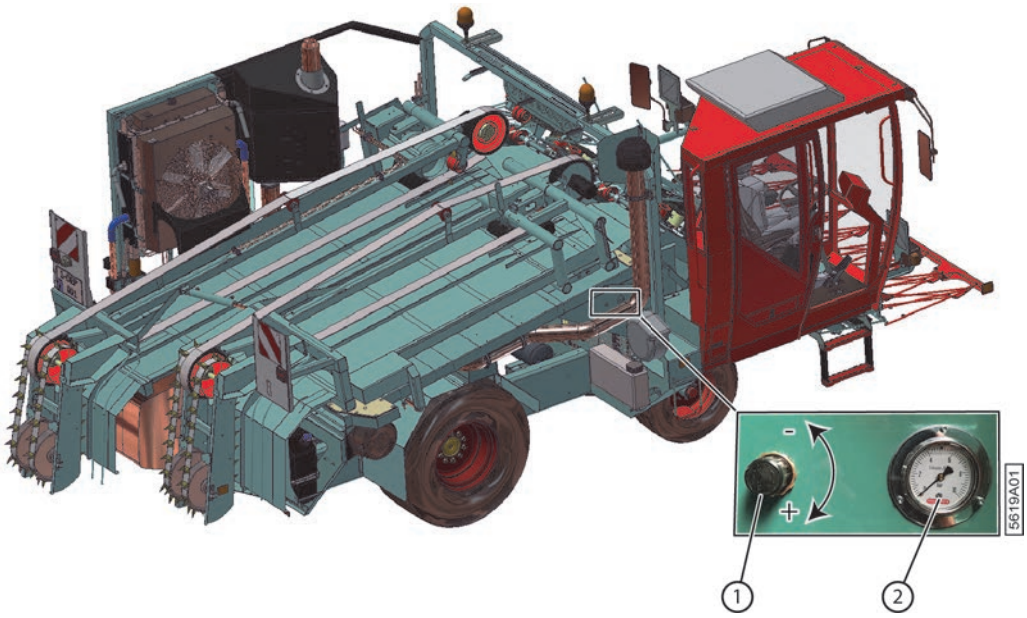


Fig. 91: Adjusting the pressure of the crushing rollers

1. Use the control knob (1) to adjust the pressure to between 2 and 2.5 bar.
2. Read the set pressure on the manometer (2).

See also

- 9.2.6 Enabling the crushing rollers on page 137
- 9.2.5 Disabling the crushing rollers on page 135
- 8.2.72 Switching ON or switching OFF the crushing rollers on page 123

9.2.5 Disabling the crushing rollers

If the retting of the flax is already at an advanced stage, it is possible that the use of the crushing rollers must be disabled by raising the uppermost crushing rollers. Thus, the flax no longer passes between the crushing rollers.

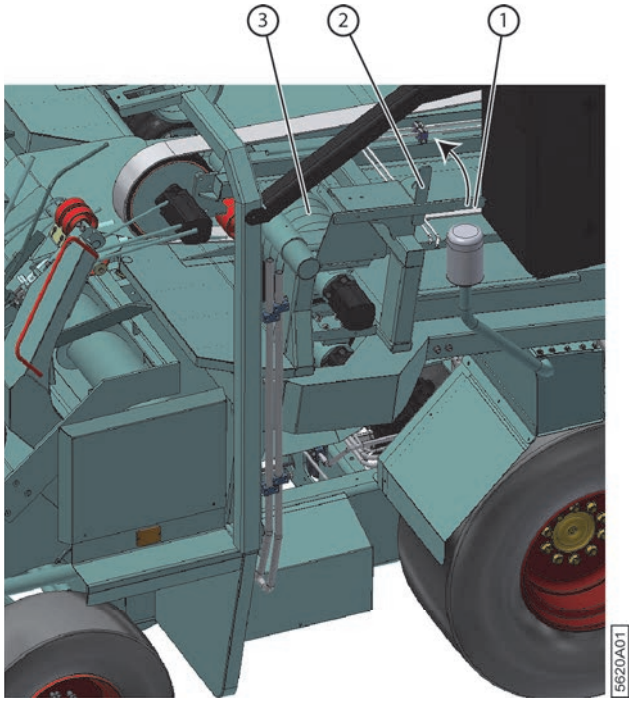


Fig. 92: Disabling the crushing rollers

1. Switch OFF the machine safely.
2. Disable the crushing rollers via the switch on the control console.
3. Access to the spreading tables is via the steps behind the cabin.

WARNING

You can injure yourself on the metal pins of the conveyor belts.

Be careful when accessing the spreading tables. You can slip!

4. Lift the lever (1) of the crushing roller (3).
5. Place the lever over the bolt (2).

See also

- 9.2.4 Adjusting the pressure of the crushing rollers on page 134

9.2.6 Enabling the crushing rollers

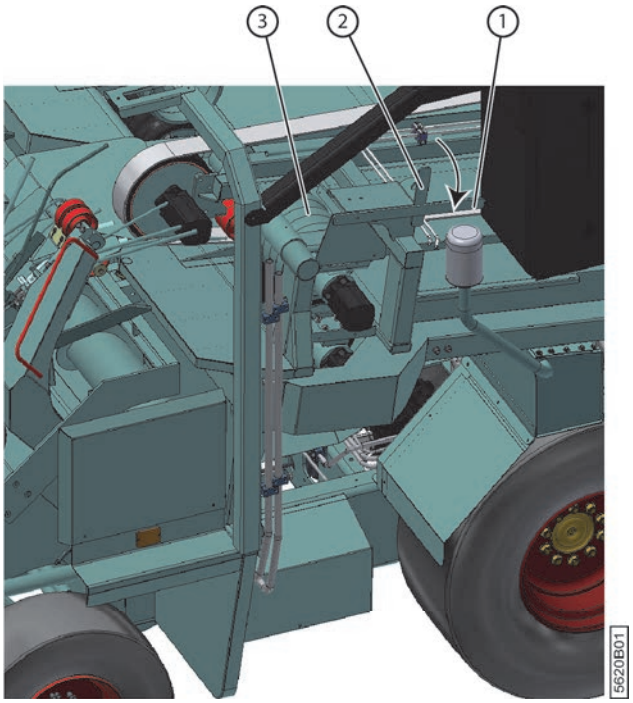


Fig. 93: Enabling the crushing rollers

1. Switch OFF the machine safely.
2. Access to the spreading tables is via the steps behind the cabin.

WARNING

You can injure yourself on the metal pins of the conveyor belts.

Be careful when accessing the spreading tables. You can slip!

3. Lift the lever (1) of the crushing roller (3) over the bolt (2).
4. Allow the lever to carefully drop downwards until the uppermost crushing roller is supported by the lowermost crushing roller.

See also

- 9.2.4 Adjusting the pressure of the crushing rollers on page 134
- 8.2.72 Switching ON or switching OFF the crushing rollers on page 123

9.3 Adjusting the flax-laying section

9.3.1 Adjusting the tension of the flax-laying belts

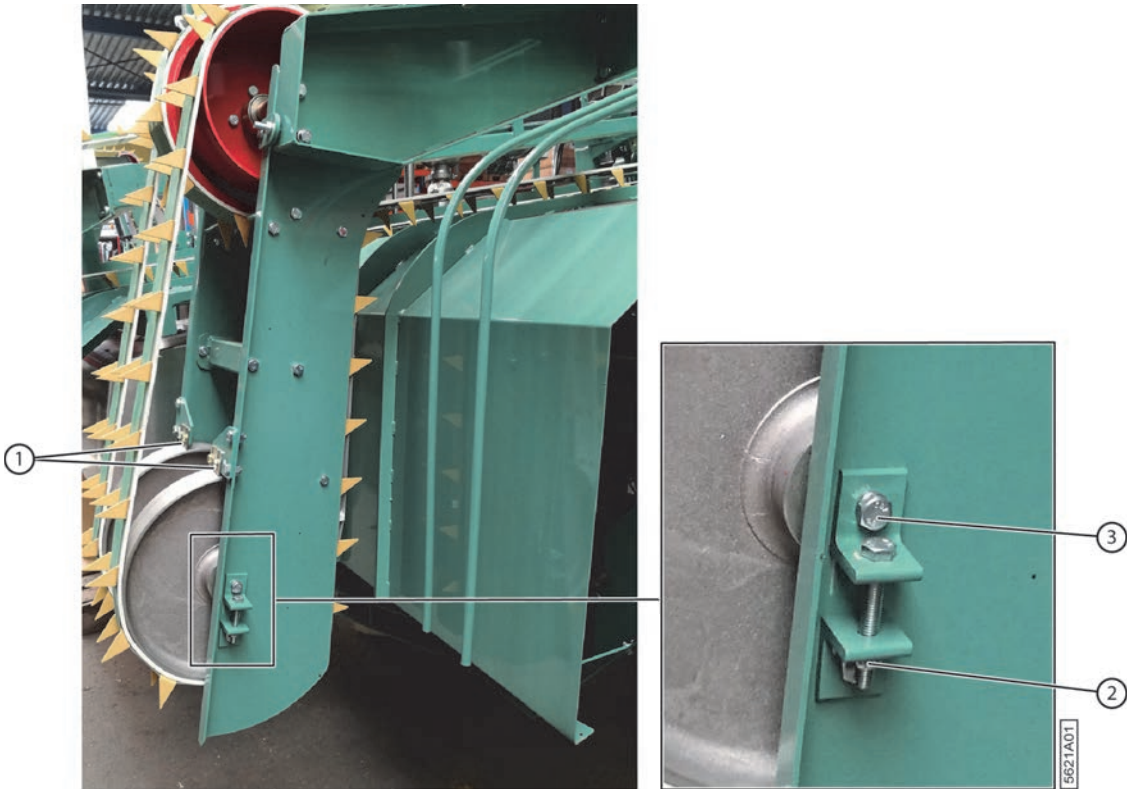


Fig. 94: Adjusting tension of the flax-laying belts

1. Switch OFF the machine safely.
2. Loosen the scrapers (1) if you wish to decrease the tension on the flax-laying belts.
3. Loosen the bolt (3):

   Do not fully unscrew this bolt! You only have to loosen this bolt.
4. Turn the lock nut (2) anti-clockwise to decrease the tension, or clockwise to increase the tension, on the flax-laying belts.
5. Tighten the bolt.
6. Repeat this for the other side, and repeat this for the other set of flax-laying belts.
7. Adjust the scrapers (1) so that they touch the flax-laying pulley.

9.3.2 Adjusting the opening of the flax-laying section

You can increase or decrease the opening of the flax-laying section. If blockages regularly occur in the flax-laying section, it is recommended to increase the opening.

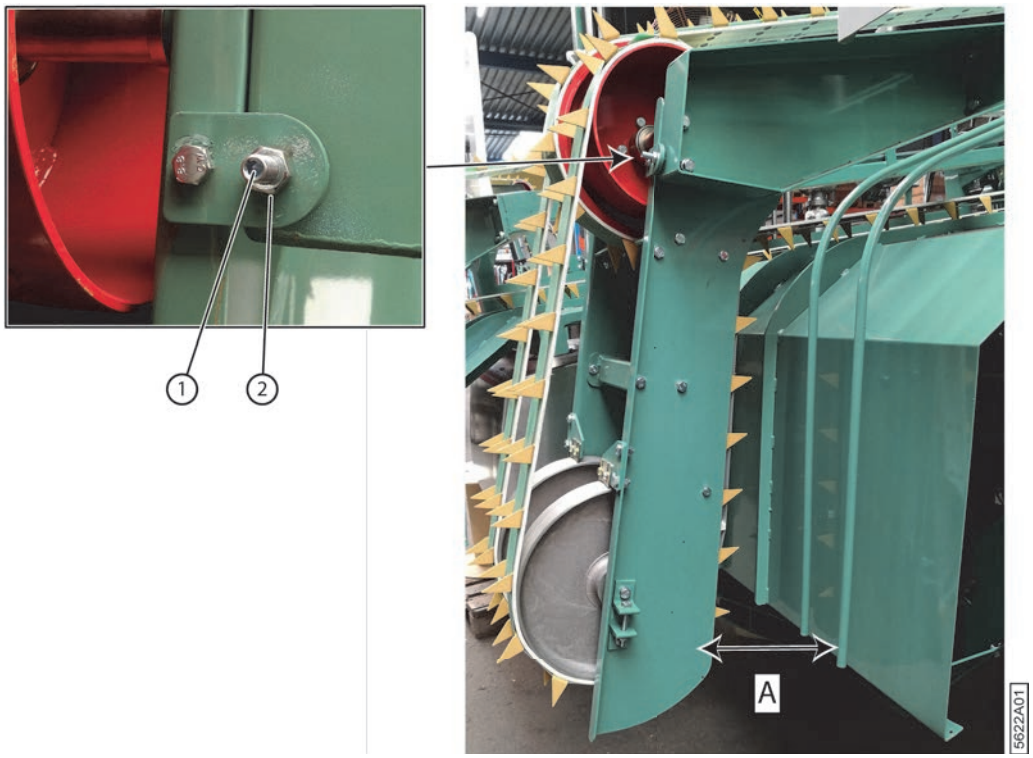


Fig. 95: Adjusting the opening of the flax-laying belts.

1. Switch OFF the machine safely.
2. Remove the nut (2).
3. Perform one of the following actions:
   - Turn the socket-screw (1) more IN, to increase the distance A.
   - Turn the socket-screw (1) more OUT, to decrease the distance A.
4. Retighten the nut.

9.4 Adjusting the picking element

9.4.1 Adjusting the tension of the picking belts

The tension of the various picking belts can be adjusted:

- 9.4.6 Adjusting the tension of the innermost picking belt on page 142
- 9.4.7 Adjusting the tension of the uppermost outermost picking belt on page 143
- 9.4.8 Adjusting the tension of the lowermost outermost picking belt on page 144

9.4.2 Adjusting the alignment of the picking belts

The alignment of the picking belts can be adjusted in different ways:

- 9.4.9 Adjusting the alignment of the uppermost outermost picking belt on page 145
- 9.4.10 Adjusting the alignment of the lowermost outermost picking belt on page 146

To adjust the distance between the picking belt and the rubber-coated wheel, see 9.4.5 Adjusting the picking opening on page 141

9.4.3 Adjusting the alignment of the picking belts (at the picking opening)

Executor: operator

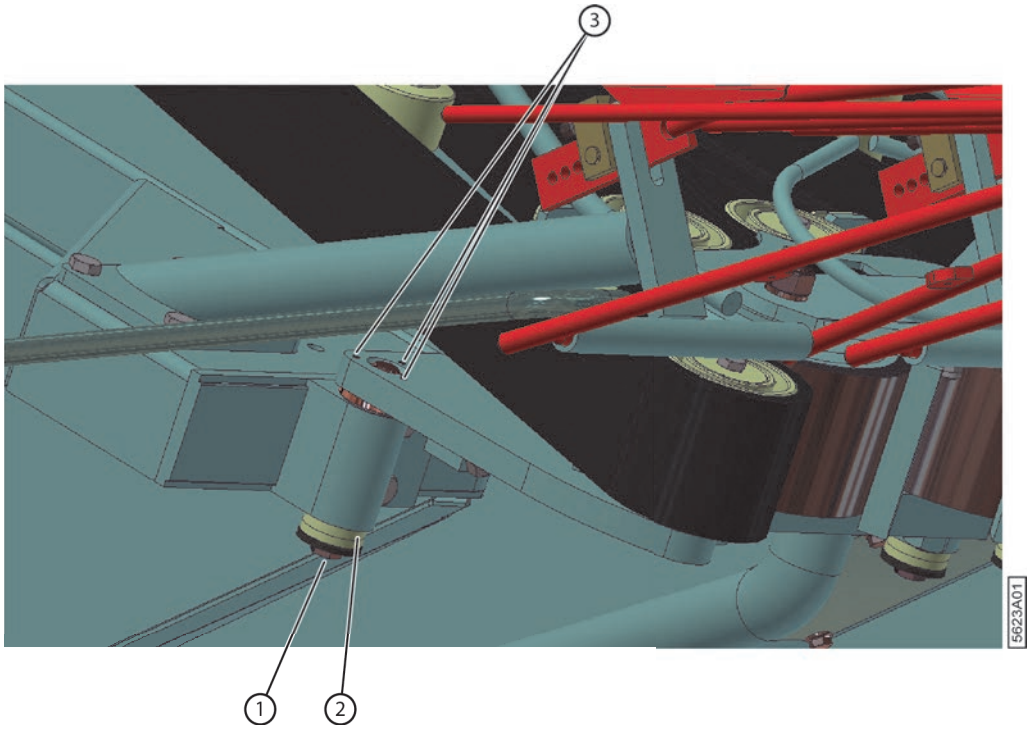


Fig. 96: The alignment of the picking belts

1. Switch OFF the machine safely.
2. Loosen the bolt underneath the shaft (1) and remove the washers (2).
3. Screw the 3 socket screws more in or out to adjust the alignment of the belts.
4. Install a suitable number of washers and tighten the bolt.

9.4.4 Adjusting the distributor

The distributors must be aligned at the same hieight.

Executor: operator

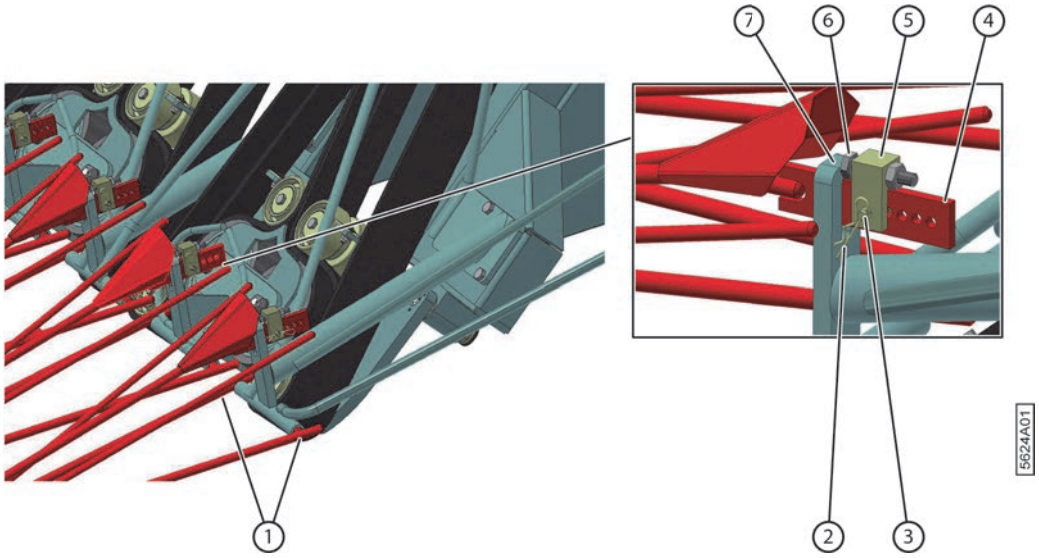


Fig. 97: Adjusting the distributor

1. Switch OFF the machine safely.
2. Mounting the protective guard for the distributors
3. Remove the locking pin (2) and the shaft (3) of the block (5).
4. Slide the block to the desired position and install the shaft and the locking pin.
5. If necessary, use the bolt (6) to adjust.

9.4.5 Adjusting the picking opening

You can make the opening where the flax enters the picking element larger or smaller. If the opening is too large, not all of the flax is picked. If the opening is too small, blockages often occur.

1. Switch OFF the machine safely.
2. Use the bolts (2) to position the centre (4) symmetrically in relation to the 2 rubber-coated pulleys (1) (3).

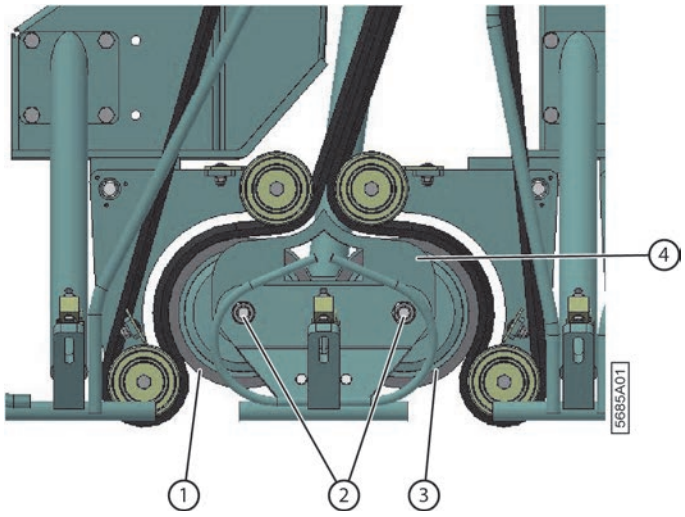


Fig. 98: Adjusting the picking opening

3. Remove the bolts (7) (8) from the underside of the tilting elements.
4. Slide the tilting elements as close as possible to each other and position the tilting elements symmetrically in relation to the centre.
5. Refit and tighten the bolts.

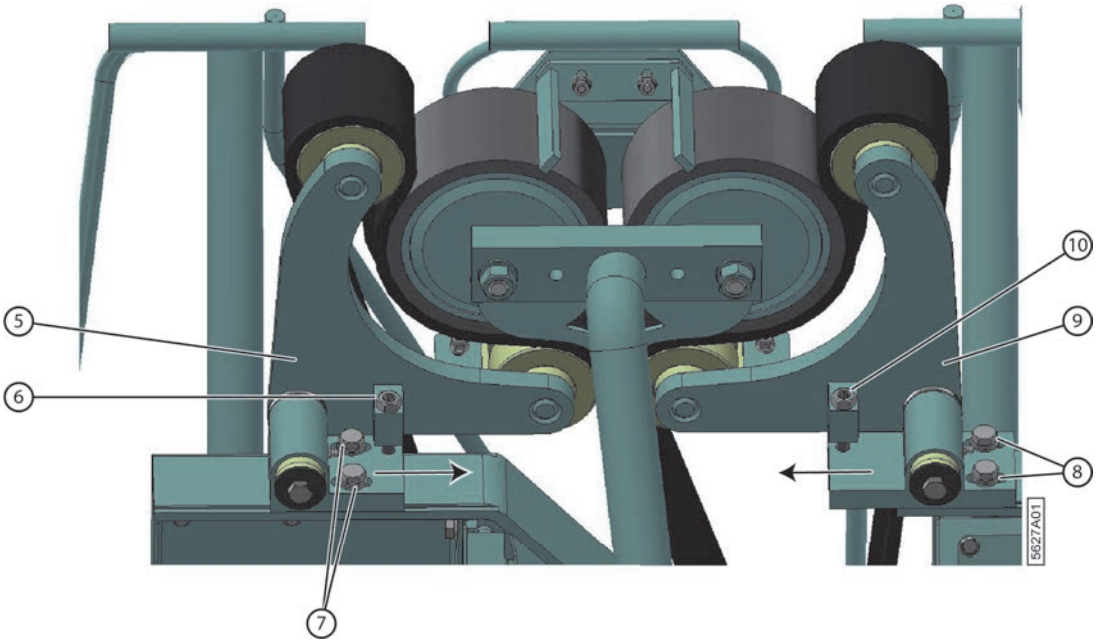


Fig. 99: Adjusting the picking opening

6. Perform one of the following actions on the underside of the tilting element::

- Screw the adjusting bolt (6) (10) out to decrease the picking opening.
- Screw the adjusting bolt (6) (10) in to increase the picking opening.

TIP
Place a ruler between the 2 centrepoints. Check whether the belt starts to touch the rubber-coated pulley on this line. This is the ideal setting for the picking opening.

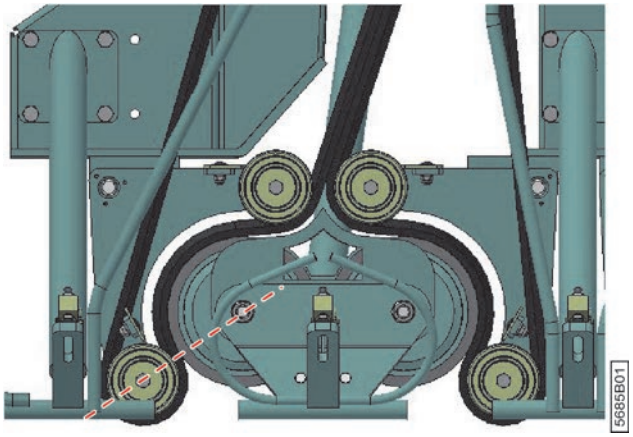


Fig. 100: Using a ruler to check picking opening

See also

- 3.3.5 The clamping pressure on page 55

9.4.6 Adjusting the tension of the innermost picking belt

Executor: Operator

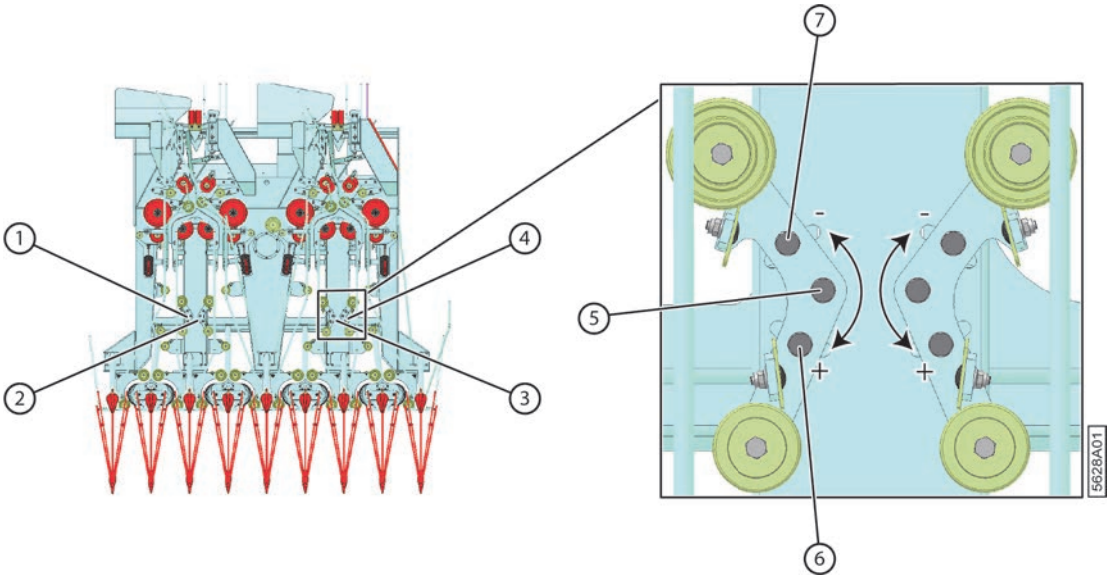


Fig. 101: Loosening the innermost picking belt

1. Switch OFF the machine safely.
2. Loosen the bolts (5), (6) and (7).
3. Perform one of the following actions:
   - Move the arm in the direction of the minus sign (-) to loosen the belt.
   - Move the arm in the direction of the plus sign (+) to tighten the belt.
4. Tighten the bolts (5), (6) and (7).

9.4.7 Adjusting the tension of the uppermost outermost picking belt

Executor: Operator

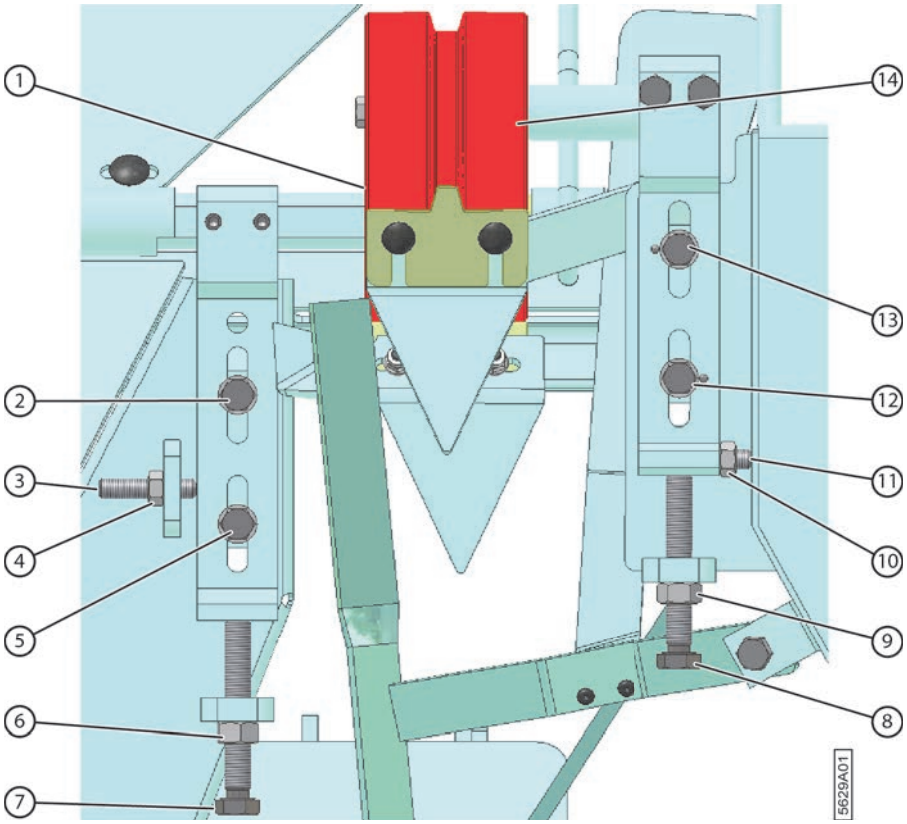


Fig. 102: Adjusting tension of the uppermost outermost picking belt

1. Switch OFF the machine safely.
2. Undo the bolts (12) and (13).
3. Remove the nut (9).
4. Use bolt (8) to adjust the tension of the belt.
5. Retighten the nut (9).
6. Tighten the bolts (12) and (13).

9.4.8 Adjusting the tension of the lowermost outermost picking belt

Executor: Operator

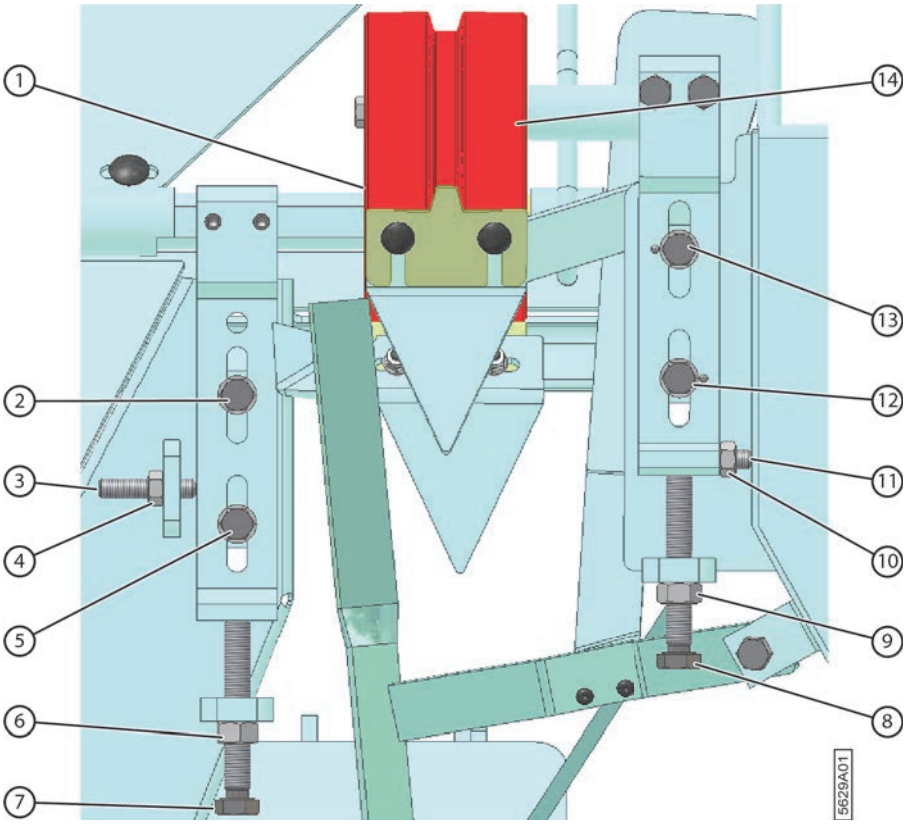


Fig. 103: Adjusting the tension of the lowermost outermost picking belt

1. Switch OFF the machine safely.
2. Loosen the bolts (2) and (5).
3. Loosen the nut (6).
4. Use bolt (7) to adjust the tension of the belt.
5. Tighten the nut (6).
6. Tighten the bolts (2) and (5).

9.4.9 Adjusting the alignment of the uppermost outermost picking belt

Executor: Operator

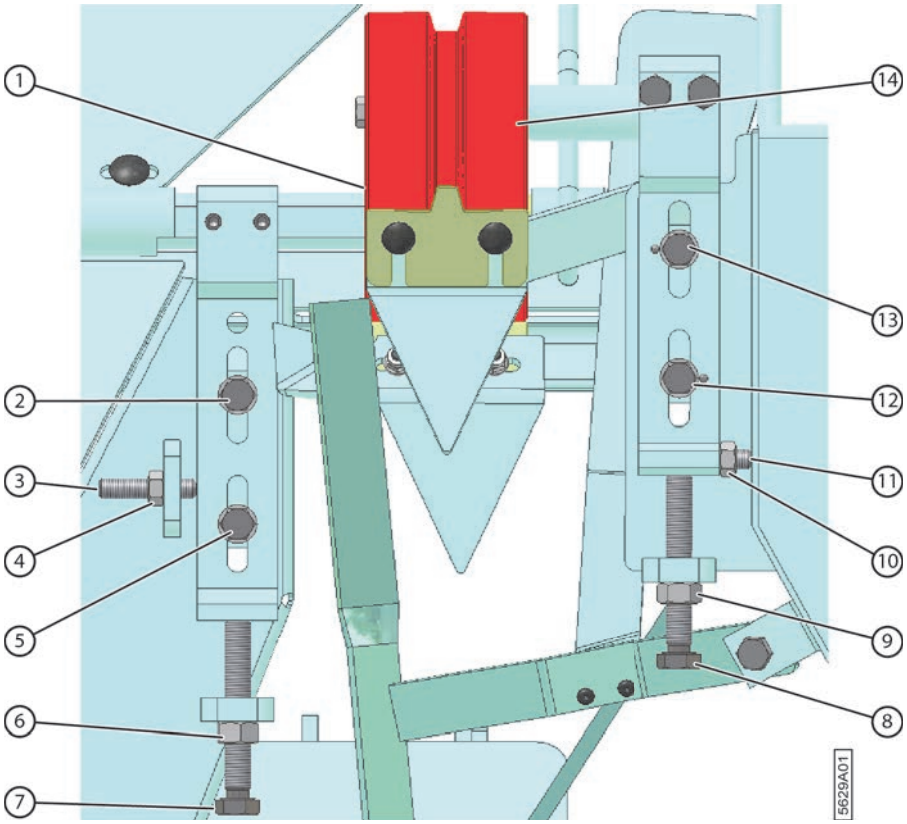


Fig. 104: Adjusting tension of the uppermost outermost picking belt

1. Switch OFF the machine safely.
2. Loosen the nut (10).
3. Use the socket screw (11) to adjust the alignment of the belt.
4. Tighten the nut (10).

9.4.10 Adjusting the alignment of the lowermost outermost picking belt

Executor: Operator

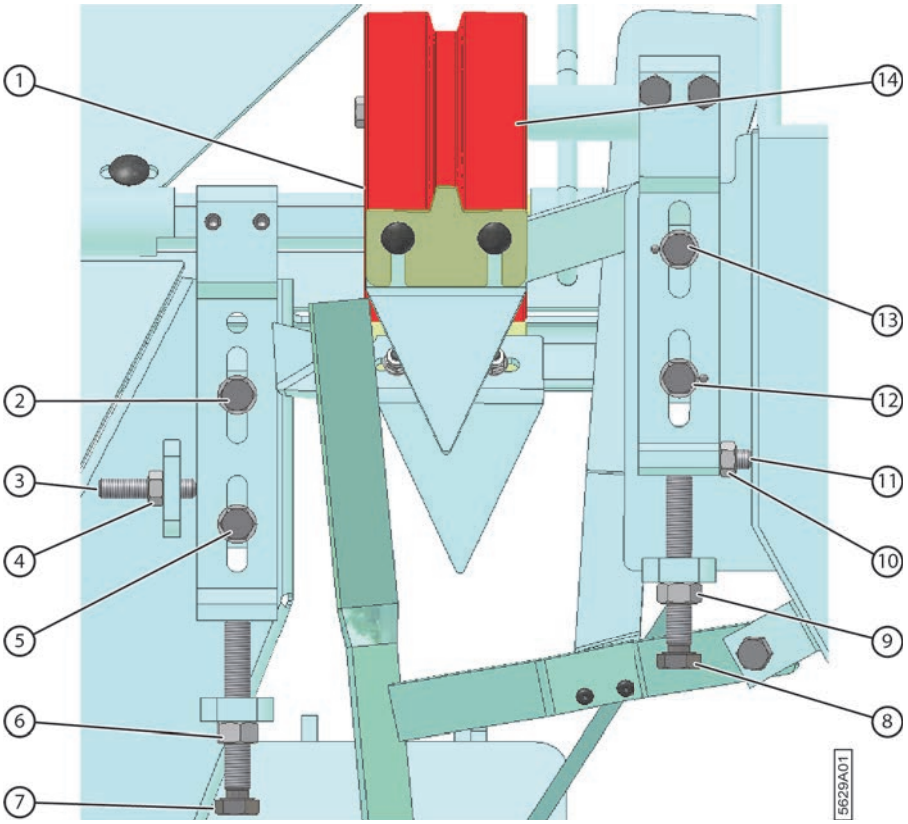


Fig. 105: Adjusting the tension of the lowermost outermost picking belt

1. Switch OFF the machine safely.
2. Loosen the nut (4).
3. Use the socket screw (3) to adjust the alignment of the belt.
4. Tighten the nut (4).

10 Maintenance

10.1 Safety regulations before starting the maintenance

The design of the machine enables maintenance to be kept to a minimum.

WARNING
Clean the machine.

WARNING
Switch OFF the machine safely.

WARNING
After performing maintenance, ensure that all protective panels are correctly fitted.

WARNING
Use wheel chocks to prevent the machine from rolling away.

WARNING
Ensure that the surface is clean, safe and solid.

WARNING
Post a warning sign and inform the personnel that the machine may NOT be started.

WARNING
Work underneath a hoisted machine or a hoisted part may only take place when the machine or part is safely supported.

WARNING
Wear suitable personal protective equipment (safety shoes, safety gloves, hearing protection, safety goggles, ...) and wear work clothing that fits well.

WARNING

Wait until the engine has cooled down before performing maintenance in the engine compartment.

WARNING
Never open a reservoir before it has cooled down. Hot pressurised liquid can be released when a reservoir is opened.

WARNING
NEVER use your hands to try to seal a hydraulic leak! High-pressure liquid can cause damage to your skin and clothing. Immediately summon a doctor if an accident occurs. You can use paper or cardboard to easily detect leaks in a hydraulic system!

WARNING
Ensure that all cylinders are fully extended or retracted so that they cannot move in an uncontrolled manner.

WARNING
Only use original spare parts.

WARNING
The maintenance may only be performed by qualified personnel.

WARNING
Use suitable appliances to perform work above head height. Climbing onto the machine is prohibited.

10.1.1 Switching OFF the machine safely

Depending on the nature and the duration of the stop, position the machine so that it is preferably level.

1. Stop and lock all movements.
   For example:
   - Driving and the parking brake
   - The moving parts of the machine and the parts that drop due to gravity.
2. Turn the ignition key completely counter-clockwise.
   The engine stops and the control unit stops. Since the diesel engine is switched OFF, the engine shaft stops turning. The hydraulic pumps that are directly connected, stop building up pressure.
3. Remove the ignition key.
   This prevents the machine from being switched ON inadvertently.
4. Wait at least 3 minutes.
   The diesel engine shuts down correctly, so that fault messages are are not generated.
5. Turn the battery key fully anti-clockwise.
   The battery does not lose its charge due to leakage losses.
6. Remove the battery key.
   The machine can then no longer be switched ON by unauthorised persons.

10.2 Preventive maintenance

See also
- 3.3.3 The condition of the machine on page 55

10.2.1 Maintenance schedule for the operator

In the event of 2 intervals being displayed, the instruction must only be performed for the interval that is mentioned first.

Part	Action	Interval	Unit	Instruction
Flax-laying section	Check the condition and the alignment of the conveyor belts	1	day	
Flax-laying section	Check the alignment and wear of the scrapers	1	day	
Flax-laying section	Check the tension of the conveyor belts	1	day	10.2.30 on page 169
Cabin	Clean the cabin	1	day	10.2.36 on page 172

Part	Action	Interval	Unit	Instruction
Hydraulic system	Check the oil level of the hydraulic tank	1	day	10.2.48 on page 177
Air conditioning system (manual operation type)	Replace the water in the reservoir	1	day	10.2.71 on page 194
Air conditioning system (manual operation type)	Clean the air filter	1	day	10.2.74 on page 197
Machine	Fill the fuel tank	1	day	10.3.11 on page 211
Machine	Check the AdBlue level	1	day	10.2.42 on page 174
Machine	Clean the radiators	1	day	10.2.35 on page 171
Machine	Use compressed air to clean the machine	1	day	10.2.7 on page 155
Machine	Clean the spray-suppression devices	1	day	10.2.8 on page 156
Engine	Check and clean the air filter	1	day	See the user manual for the DEUTZ engine.
Engine	Check the engine pipes	1	day	
Picking element	Check the condition and the alignment of the scraper	1	day	10.2.47 on page 177
Picking element	Check the tension of the picking belts	1	day	10.2.30 on page 169
Picking element	Check the condition of the picking belts	1	day	10.2.46 on page 176
Picking element	Check the rubber on the drive rollers	1	day	10.2.40 on page 173
Picking element	Check guides and guiding arcs for wear	1	day	
Picking element	Check the oil level in the gearbox	1	day	10.2.15 on page 160
Picking element	Grease all lubrication points	1	day	10.2.62 on page 187 10.2.63 on page 189
Spreading table	Check the condition and the alignment of the conveyor belts	1	day	10.2.45 on page 176
Spreading table	Check the alignment and wear of the scrapers	1	day	10.2.47 on page 177
Spreading table	Check the tension of the conveyor belts	1	day	10.2.30 on page 169
Spreading table	Check the rubber on the lowermost crushing rollers	1	day	
Spreading table	Lubricate the cylinders	1	day	10.2.65 on page 190
Spreading table	Lubricate the pivot shafts of the crushing rollers	1	day	10.2.66 on page 191
Wheels	Check the operation of the brakes	1	day	10.2.39 on page 173
The air conditioning system (airco version)	Clean the condenser	1	day	10.2.77 on page 199
Air conditioning system (airco version)	Clean the air filter	1	day	10.2.13 on page 158
Machine	Check all bolted connections	After 1st 50	hours	10.2.12 on page 157

Part	Action	Interval	Unit	Instruction
Engine	Visually check the seals and the condition of the engine	10	hours	See the user manual for the DEUTZ engine.
Engine	Check the seals of the exhaust gas system	10	hours	See the user manual for the DEUTZ engine.
Engine	Check the coolant level and, if necessary, top it up.	10	hours	See the user manual for the DEUTZ engine.
Engine	Check the oil level and, if necessary, top it up.	10	hours	See the user manual for the DEUTZ engine.
Engine	Drain the water in the fuel pre-filter with water separator	10	hours	See the user manual for the DEUTZ engine.
Cabin	Check the level of windscreen washer liquid	1	week	10.2.44 on page 175
Hydraulic system	Check the hydraulic connections for leaks	1	week	10.2.44 on page 175
Machine	Check the battery	1	week	10.2.52 on page 180
Wheels	Check the tyre pressure	1	week	10.2.37 on page 172
Wheels	Tighten the wheel nuts	1	week	10.2.38 on page 173
Air conditioning system (manual operation type)	Check the operation of the nozzles	1	year	10.2.72 on page 194
Air conditioning system (manual operation type)	Replace the air filter	1	year	10.2.75 on page 198
Picking element	Check the play in the picking element	1	year	10.2.64 on page 189
Screw conveyor	Check the condition of the rubber flap on the screw conveyor	1	year	10.2.59 on page 186

(*): Only for the air conditioning system with manual operation.

10.2.2 Maintenance schedule for the maintenance technician

In the event of 2 intervals being displayed, the instruction must only be performed for the interval that is mentioned first.

Part	Action	Interval	Unit	Instruction
Hydraulic system	Replace the hydraulic feed pressure filter	After 1st 50	hours	10.2.31 on page 169
Hydraulic system	Replace the hydraulic feed pressure filter	200 1	hours year	10.2.31 on page 169
Hydraulic system	Analyse the hydraulic oil	500	hours	10.2.49 Analysing the hydraulic oil on page 178
Hydraulic system	Replace the hydraulic suction filter (Arlon filter 10µ)	1	year	10.2.57 on page 182
Engine	Maintain the battery	1	year	10.2.53 on page 180
Brakes	Check the level of the brake fluid	1	year	10.2.18 on page 162

Part	Action	Interval	Unit	Instruction
Engine	Check the concentration of additives added to the coolant (before the winter!)	500 1	hours year	See the user manual for the DEUTZ engine.
Engine	Replace the filter of the AdBlue feed pump	500	hours	See the user manual for the DEUTZ engine.
Engine	Replace the oil	500	hours	See the user manual for the DEUTZ engine.
Engine	Replace the lubricating oil filter (every time that the oil is replaced)	500	hours	See the user manual for the DEUTZ engine.
Engine	Check the belts	500	hours	See the user manual for the DEUTZ engine.
Engine	Replace the air filter	500 2	hours years	See the user manual for the DEUTZ engine.
Engine	Check fasteners, pipes / flanges and, if damaged, replace them.	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Check the battery connections	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Replace the fuel filter	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Replace the fuel pre-filter with water separator	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Check the engine support (tighten it or, if damaged, replace it)	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Check the V-belt and tensioning pulley	1,000	hours	See the user manual for the DEUTZ engine.
Engine	Check the surface of the radiator (drain oil or condensed water)	1,000	hours	See the user manual for the DEUTZ engine.
Picking element	Replace the oil of the gearbox	1,000 5	hours years	See 10.2.17 on page 161. See 10.2.15 on page 160
Brakes	Replace the brake fluid	2	years	10.2.18 on page 162
Hydraulic system	Replace the hydraulic breather filter	3	years	10.2.21 on page 164
Parking brake	Replace the breather filter of the parking brake	3	years	10.2.22 on page 165
Hydraulic system	Replace the hydraulic oil	1,000 4	hours years	10.2.50 on page 179
Engine	Clean the exhaust of the turbo compressor	6,000	hours	See the user manual for the DEUTZ engine.
Crushing roller	Check the play in the crushing rollers	1	year	10.2.55 on page 181
Electrical system	Check the electrical system	1	year	10.2.54 on page 181
Engine	Replace the fuel filter	1	year	See the user manual for the DEUTZ engine.

Part	Action	Interval	Unit	Instruction
Engine	Replace the fuel pre-filter with water separator	1	year	See the user manual for the DEUTZ engine.
Engine	Replace the lubricating oil	1	year	See the user manual for the DEUTZ engine.
Engine	Replace the lubricating oil filter	1	year	See the user manual for the DEUTZ engine.
Engine	Replace the timing belt	2	years	See the user manual for the DEUTZ engine.
Engine	Replace the filter of the AdBlue feed pump	2	years	See the user manual for the DEUTZ engine.
Engine	Replace the coolant	2	years	See the user manual for the DEUTZ engine.
Hydraulic system	Replace the hydraulic hoses	6	years	10.3.7 on page 208

10.2.3 Maintenance schedule for specialised maintenance technician

Part	Action	Interval	Unit	Instruction
Engine	Adjust the valves	2,000	hours	See the user manual for the DEUTZ engine.
Engine	Replace the de-aerator for the sump of the crankshaft	6,000	hours	See the user manual for the DEUTZ engine.
Engine	Replace the V-belt and tensioning pulley	4,000	hours	See the user manual for the DEUTZ engine.

10.2.4 Maintenance schedule for the authorised service partner

This maintenance may only be performed by an authorised service partner of DEUTZ. Contact DEUTZ to find your local authorised service partner.

Part	Action	Interval	Unit	Instruction
Engine	Overhaul the engine	1	year	See the user manual for the DEUTZ engine.

10.2.5 Permitted additives

Additive	Quantity	Brand	Type	For more information
AdBlue	32 l	TOTAL	In accordance with DIN 70070 In accordance with DIN 22241	See the user manual for the DEUTZ engine.
Hydraulic oil	180 l	TOTAL	EQUIVIS ZS 68	
Engine coolant	40 l	TOTAL	Glacelf auto supra	See the user manual for the DEUTZ engine.

Additive	Quantity	Brand	Type	For more information
Fuel	450 l	TOTAL	Diesel extra machines	See the user manual for the DEUTZ engine.
Windscreen washer liquid	1 l	TOTAL	ELF Glass Clean	
Engine oil	17.5 l	TOTAL	Rubia Works 3000 10W40	See the user manual for the DEUTZ engine.
Transmission oil	7 l	TOTAL	TM 80W90	
Lubricant		TOTAL	Grease Marson EPL (Multis EP, LICAL EP2)	
Airco coolant	1 kg		Classification EC 67/548 or EC 1999/45 R134A	
Airco oil	270 ml		SP10	
Brake fluid	0.5 l	TOTAL	HBF4	

10.2.6 Warnings when cleaning the machine

WARNING
Always consult the Safety Information Sheet from the manufacturer or other product information before you use a cleaning product.

WARNING
Never clean an aluminium part using solvents that react with aluminium. For example: methylene chloride, 1,1,1-trichloroethane, perchloroethylene, ...

WARNING
Do not light a fire, generate sparks or use a naked flame. Observe all explosion prevention regulations.

WARNING
Never use a naked flame to clean the machine or parts thereof.

WARNING
Only use cleaning agents that have been developed for the intended use.

WARNING
Pay attention to the flashpoint of the solvent.

WARNING
Ensure adequate ventilation of the spaces in order to guarantee the removal of the vapours. Avoid prolonged inhalation of these vapours.

See also
- 10.2.7 Using compressed air to clean the machine on page 155

10.2.7 Using compressed air to clean the machine

Never use your hands or feet to remove dirt!

The machine is equipped with its own compressed air system.

Executor: Operator

1. Switch OFF the machine safely.
2. Use compressed air to remove all dirt.
   You can use the compressed air that is present on the machine.
3. After cleaning, check that all pictograms are still legible. Replace the pictograms if they are illegible.

See also
- 10.2.6 Warnings when cleaning the machine on page 155

10.2.8 Cleaning the spray-suppression devices

CAUTION
Never use your hands or feet to remove dirt!

Executor: operator

1. Read the safety instructions and observe them.
2. Remove all dirt from the spray-suppression devices and all dirt between the wheel and the chassis.
   Dirt accumulation between the wheel and the chassis can result in the wheel becoming hot and damage to the wheel.

10.2.9 Dedusting the radiators (using compressed air)

Never use your hands or feet to remove dirt!

The machine is equipped with its own compressed air system.

Executor: Operator

1. Switch OFF the machine safely.
2. Remove all dust from the radiators using compressed air.
   Via the control screen, you can reverse direction of rotation of the fan, in order to dedust the radiator. See 8.2.69 Adjusting the cleaning of the radiators on page 122.

10.2.10 Dedusting the radiators (via control screen)

Via the control screen, you can reverse the direction of rotation of the fan, in order to dedust the radiators. See 8.2.69 Adjusting the cleaning of the radiators on page 122.

1. Go to the menu via .
2. Select .
3. Select **ADJUSTMENT CLEANING**.
4. Tap **Activate cleaning cooler**.
   The button becomes green and the cleaning takes place.

   NOTE

   You can adjust the engine speed that is used during the cleaning of the cooler by tapping or beside **Engine speed (rpm) for cleaning cooler**.

See also
- 8.2.69 Adjusting the cleaning of the radiators on page 122

10.2.11 Cleaning the machine using a pressure washer

CAUTION
Never use your hands or feet to remove dirt!

TIP
Clean the machine using a pressure washer on a sunny day. This allows the machine to dry quickly after the cleaning.

Executor: operator

1. Read the safety instructions and observe them.
2. Use plastic to cover electronic valves, electrical cabinets, etc.
3. Clean the machine and pay attention to the following points:
   - Do not spray in the vicinity of bearings. If you spray onto bearings, the dirt is driven inwards and this can result in the bearings seizing or being subject to abnormal or excessive wear.
   - Do not spray in the vicinity of electrical cabinets, hydraulic components, etc. This can result in dirt being driven inwards and causing excessive wear.
   - Spray using a wide jet of water.
   - Maintain a minimum distance of 60 cm between the sprayhead and the machine.
   - Spray using a pressure of less than 100 bar.
   - Spray using water whose temperature does NOT exceed 70 °C.
   - Do NOT use any detergents or aggressive products to remove oils from the machine.
4. After cleaning, check that all pictograms are still legible.
5. Place the machine in the sun for several hours so that it can dry, and allow the machine to run for 15 minutes when it is stationary.

See also
- 5.2 Storing the machine on page 74

10.2.12 Checking the bolted connections

Executor: qualified technician

1. Switch OFF the machine safely by using the LoToTo procedure.
2. Use a torque wrench to check the tension of the bolted connections in accordance with the table.

A	SW	Ma (Nm)		
		Steel grade		
		8,8	10,9	12,9
M4	7	3.1	4.4	5.25
M5	8	6.15	8.65	10.4
M6	10	10.5	18	18
M7	11	17.5	25	29
M8	13	26	36	43
M10	15-16-17	51	72	87
M12	18-19	89	125	150
M14	22	141	198	240
M16	24	215	305	365
M18	27	295	420	500
M20	30	420	590	710

A	SW	Ma (Nm)		
M22	32	570	800	960
M24	36	725	1,020	1,220
M27	41	1,070	1,510	1,810
M30	46	1,450	2,050	2,450

The table includes target values

- A = diameter screw thread
- SW = spanner size
- Ma = tightening torque (Nm)

10.2.13 Cleaning the filter for the cabin (airco type)

Fresh air is sucked into the cabin to the airco via the inlets (4). A filter (3) is provided to filter the air. In dusty conditions, the filter will become dirty more quickly, so it must be cleaned more often.

1. Switch OFF the machine safely.
2. Undo the bolts (1) and remove the plate (2).
3. Remove the filter (3) from the cabin.
4. Use compressed air to clean the filter.
5. Clean the housing and the inlets (4).
6. Refit the filter.
   If the filter is still dirty after cleaning, you must replace the filter.
7. Refit the plate and the bolts.

10.2.14 Replacing all picking belts

See 10.3.8 Replacing a picking belt on page 209 and take the recommended order into account:

1. The uppermost outermost picking belt (4)
2. The lowermost outermost picking belt (1)
3. The innermost picking belts (2) and (3)

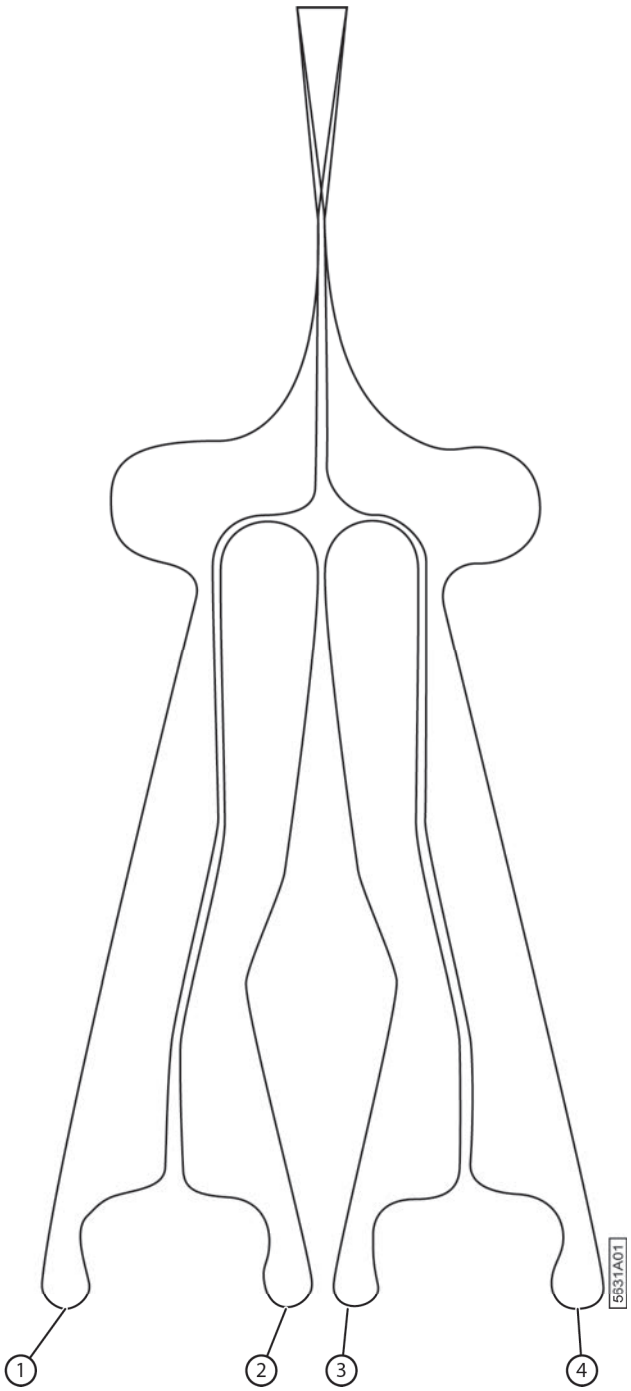


Fig. 106: Picking belts

10.2.15 Checking the oil level in the gearbox for the picking element

Fig. 107: Topping up the oil level in the gearbox for the picking element

Check that the level of oil is halfway up the viewing glass (1).

If necessary, top up the level.

See also

- 10.2.16 Toppng up the oil level in the gearbox for the picking element on page 161
- 10.2.17 Draining the oil from the gearbox for the picking element on page 161

10.2.16 Toppng up the oil level in the gearbox for the picking element

Fig. 108: Toppng up the oil level in the gearbox for the picking element

1. Remove the cap (2).
2. Top up the oil until you see that the oil level has reached half way up the viewing glass (1).
   The gearbox is supplied with approximately 7 litres of transmission oil TM 80W90 from Total.
3. Refit the cap.

See also

- 10.2.15 Checking the oil level in the gearbox for the picking element on page 160
- 10.2.17 Draining the oil from the gearbox for the picking element on page 161

10.2.17 Draining the oil from the gearbox for the picking element

Required equipment:

- Drain tray with minimum capacity of 20 litres.
- Drain hose
- Cleaning rags

Fig. 109: Draining oil gearbox picking element

1. Place the drain tray as close as possible to the gearbox.
2. Loosen the drain plug (1), push the hose over the drain plug and collect the hydraulic oil.

See also

- 10.2.15 Checking the oil level in the gearbox for the picking element on page 160
- 10.2.16 Toppng up the oil level in the gearbox for the picking element on page 161

10.2.18 Topping up the brake fluid

Required: TOTAL HBF4

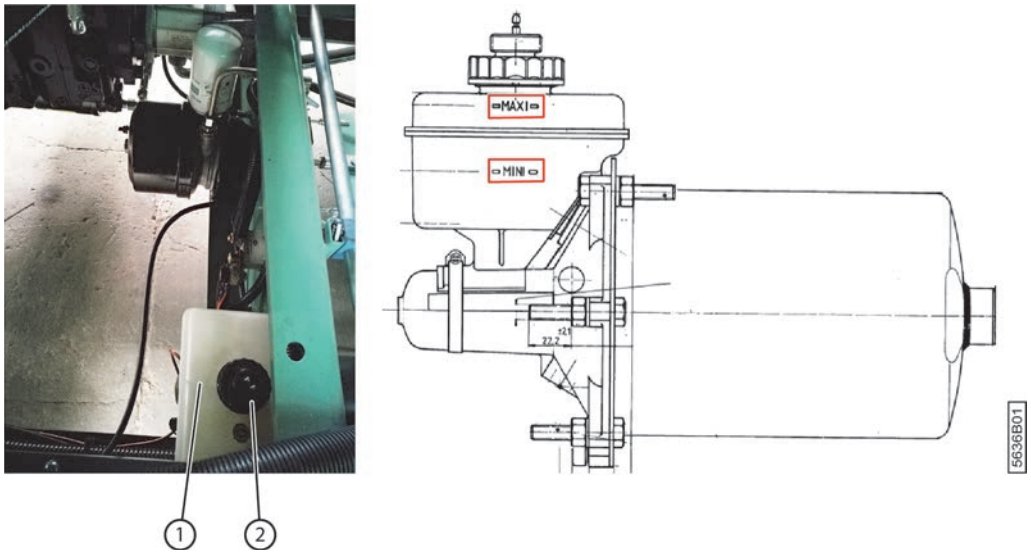


Fig. 110: Topping up brake fluid

1. Switch OFF the machine safely.
2. Unscrew the cap (2) from the reservoir (1).

3. Fill the reservoir with TOTAL HBF4 brake fluid (between the minimum and maximum level).

See also
- 10.2.19 Checking the level of the brake fluid on page 163
- 10.2.20 Replacing the brake fluid on page 163

10.2.19 Checking the level of the brake fluid

Required: TOTAL HBF4

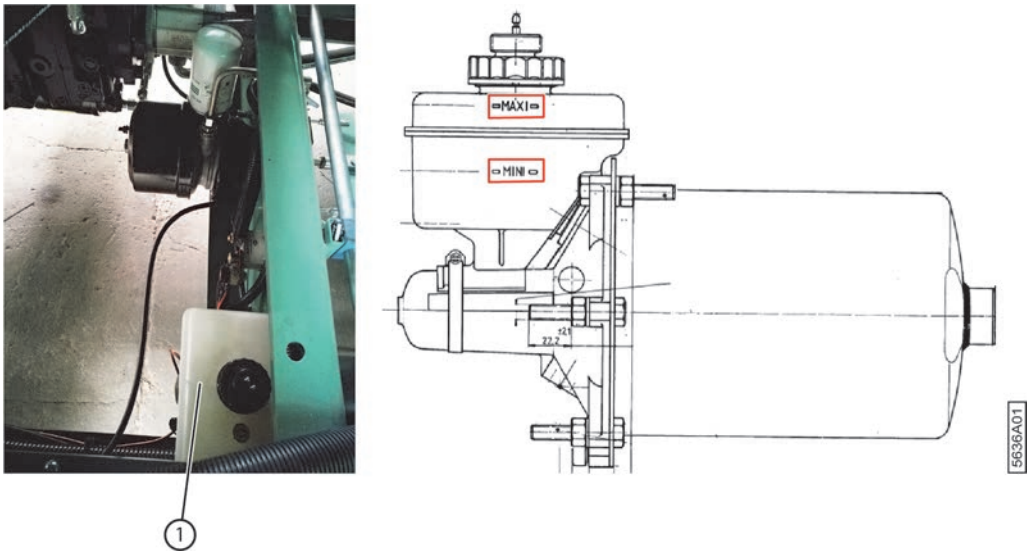


Fig. 111: Checking the level of the brake fluid

1. Switch OFF the machine safely.
2. Check that the level of the brake fluid in the reservoir (1) is between the minimum and maximum level.

See also
- 10.2.18 Topping up the brake fluid on page 162

10.2.20 Replacing the brake fluid

Required: TOTAL HBF4

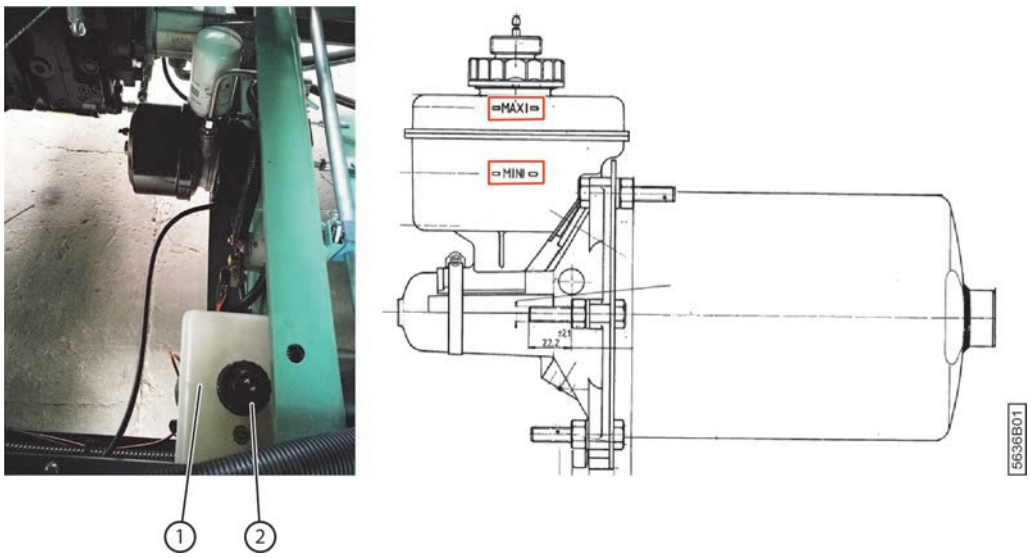


Fig. 112: Replacing brake fluid

1. Switch OFF the machine safely.
2. Unscrew the cap (2) from the reservoir (1).
3. Drain the reservoir.
4. Fill the reservoir with TOTAL HBF4 brake fluid (between the minimum and maximum level).

See also

- 10.2.18 Topping up the brake fluid on page 162

10.2.21 Replacing the aerator of the hydraulic tank

The locking piece (2) prevents the aerator (1) from inadvertently becoming detached from the air inlet (4).

Fig. 113: Aerator of the hydraulic tank

1. Remove the fasteners (3).
2. Remove the locking piece (2).
3. Unscrew the aerator (1) anti-clockwise.
4. Screw a new aerator clockwise onto the air inlet (4).
5. Refit the locking piece to lock the aerator.

10.2.22 Replacing the breather filter of the parking brake

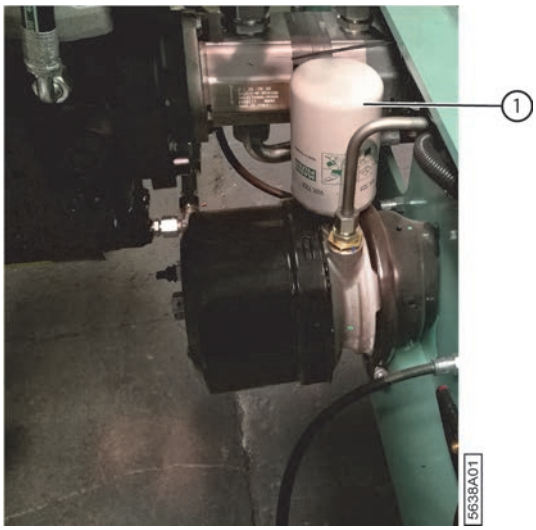


Fig. 114: Replacing the breather filter of the parking brake

1. Switch OFF the machine safely.
2. Clean the area around the breather filter.
3. Replace the breather filter (1).

10.2.23 Removing the distributor

Executor: Operator

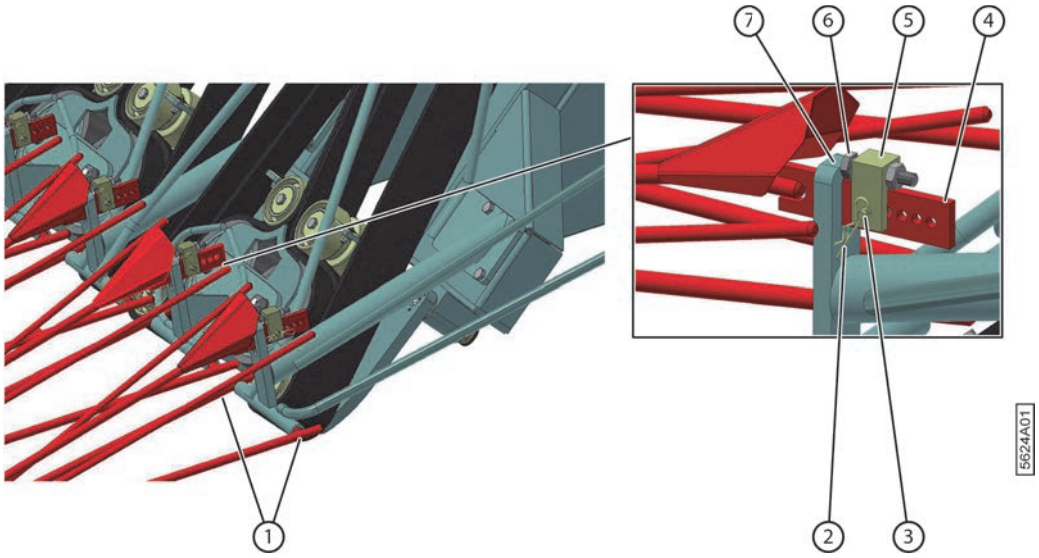


Fig. 115: Removing the distributor

1. Switch OFF the machine safely.
2. Pull the shafts (1) out of the guide.
3. Remove the locking pin (2) and the shaft (3), then remove the block (5).
4. Pull the distributor (4) out of the slot (7) of the machine.

10.2.24 Loosening / tightening an outermost picking belt

Executor: Operator

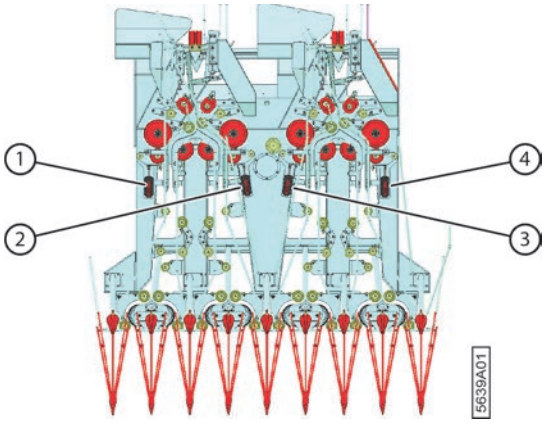


Fig. 116: Loosening an outermost picking belt

1. Switch OFF the machine safely.
2. Perform one of the following actions:
   - Release the lever of the detensioner (1), (2), (3) and/or (4) to loosen the picking belt.
   - Tighten the lever of the detensioner to tighten the picking belt.

10.2.25 Loosening / tightening the innermost picking belt

Executor: Operator

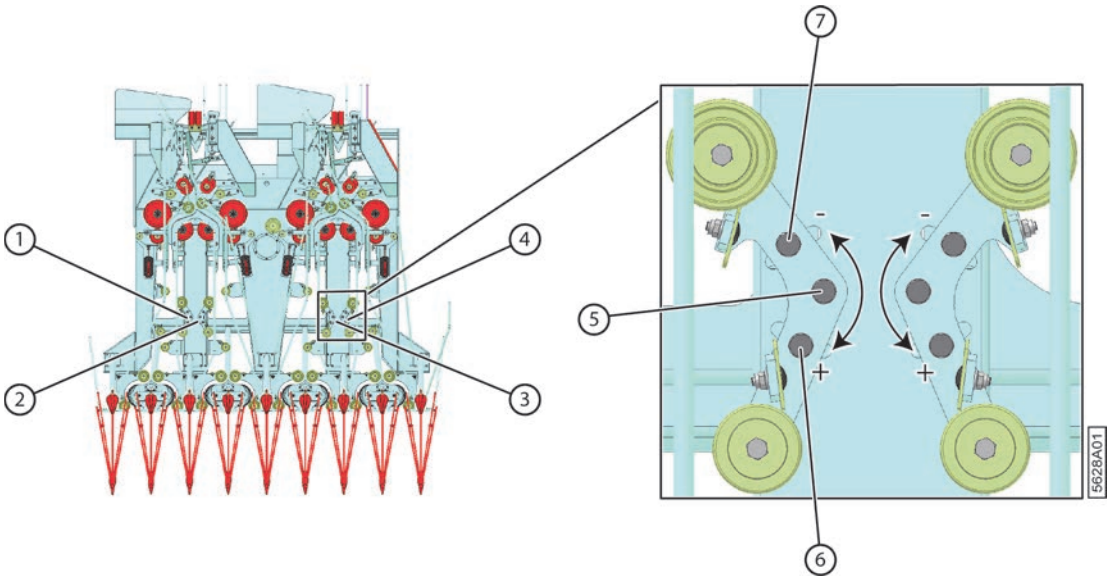


Fig. 117: Loosening innermost picking belt

1. Switch OFF the machine safely.
2. Loosen the bolts (5), (6) and (7).
3. Perform one of the following actions:
   - Move the arm in the direction of the minus sign (-) to loosen the picking belt.

- Move the arm in the direction of the plus sign (+) to tighten the picking belt.

4. Retighten the bolts.

10.2.26 Installing the distributor

Executor: Operator

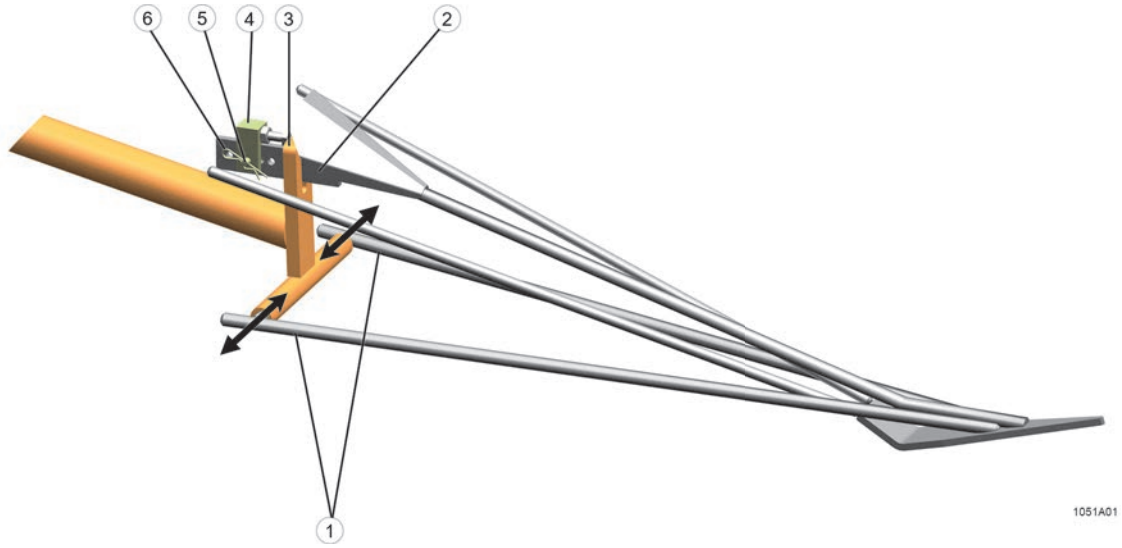


Fig. 118: Installing the distributor

1. Switch OFF the machine safely.
2. Insert the shafts (1) into the guides.
3. Pull the distributor (2) through the slot (3).
4. Place the block (4) over the distributor and lock it with the shaft (5) and locking pin (6).

10.2.27 Mounting the protective guard for the distributors

Before you drive on public roads, you MUST refit the protective guard on the distributors.

Executor: Operator

1. Switch OFF the machine safely.
2. Place the guard (4) over the pins of the distributors (1).
3. Lock the guard with the shaft (2) and locking pin (3).
4. Repeat the previous step on the other side of the distributor.

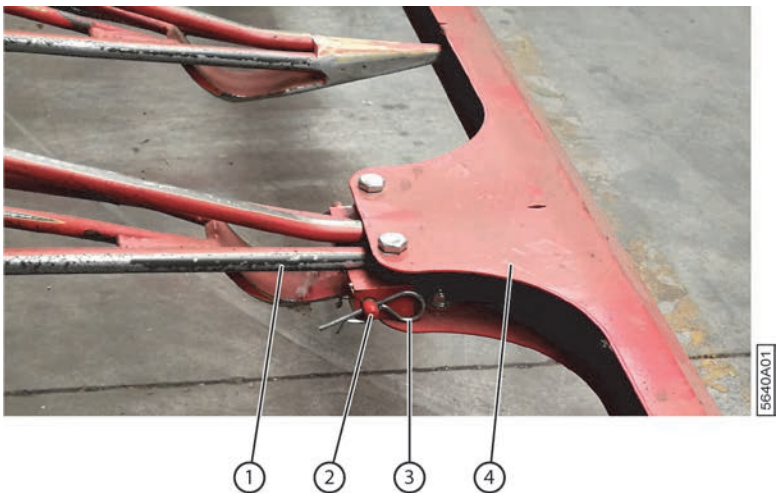


Fig. 119: Protective guard distributors

10.2.28 Removing the protective guard for the distributors

The protective guard may only be removed in the field just before the start of the harvesting. After the harvesting and before you drive on public roads, you MUST refit the protective guard.

Executor: Operator

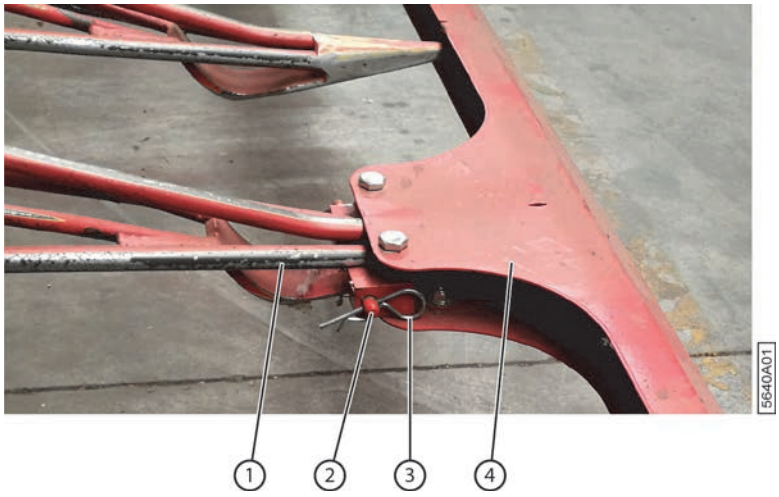


Fig. 120: Protective guard distributors

1. Switch OFF the machine safely.
2. Remove the locking pin (3) and the shaft (2).
3. Repeat the previous step on the other side of the distributor.
4. Remove the guard (4) from the distributors (1).

10.2.29 Checking the engine pipes

Executor: Operator

1. Switch OFF the machine safely.
2. Check the connections between the engine and other components (e.g. the radiator).

10.2.30 Checking the tension of the conveyor belts

Executor: operator

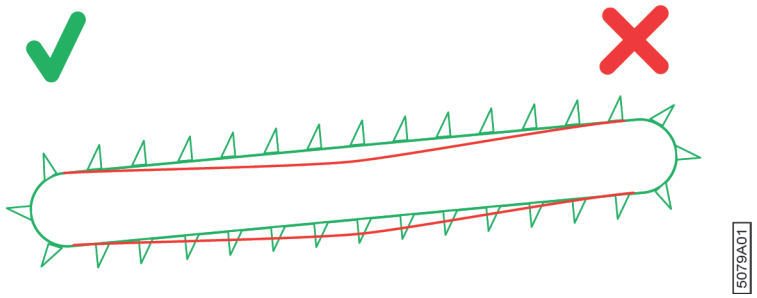


Fig. 121: Checking tension conveyor belt

1. Read the safety instructions and observe them.
2. Visually check the tension of the conveyor belts.

See also

- 9.2.3 Shortening a belt on page 133

10.2.31 Replacing the feed pressure filters

Every time the hydraulic oil is replaced, the feed pressure filters must also be replaced.

Executor: Operator

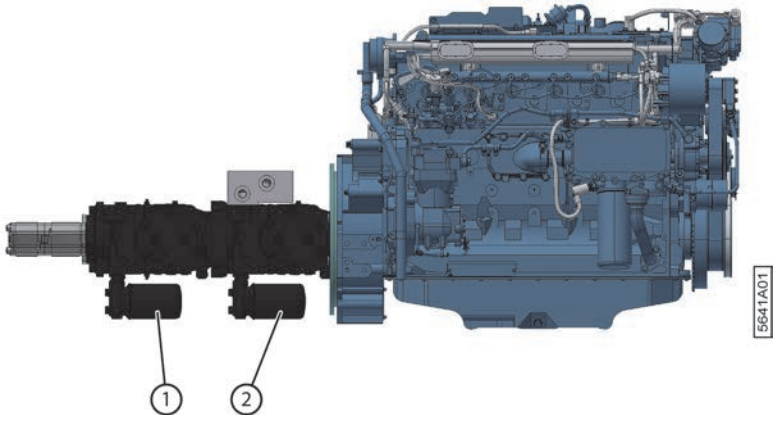


Fig. 122: Replacing the feed pressure filters

1. Switch OFF the machine safely.
2. Isolate the oil from the hydraulic tank by unscrewing the bolt of the suction filter approximately 3 cm until the end point can be felt. See 10.2.34 Isolating the hydraulic tank on page 171.
3. Clean the area around the connection to the feed pressure filters (1) and (2).
4. Place a drain tray underneath the filter.
5. Unscrew the filter by hand. If necessary, use a strap wrench.
6. Remove the filter and the seal.
7. Clean the area where the filter must be installed.
8. Use grease to lubricate the seal of the new filter.
9. Install the new filter by hand. Do NOT use a strap wrench!

10. Repeat from step 5 for the other filter.
11. Fully screw in the bolt of the suction filter to enable oil to be sucked from the hydraulic tank.
12. Bleed the hydraulic system and check for leaks.

10.2.32 Replacing the hydraulic high-pressure filter

Executor: maintenance technician

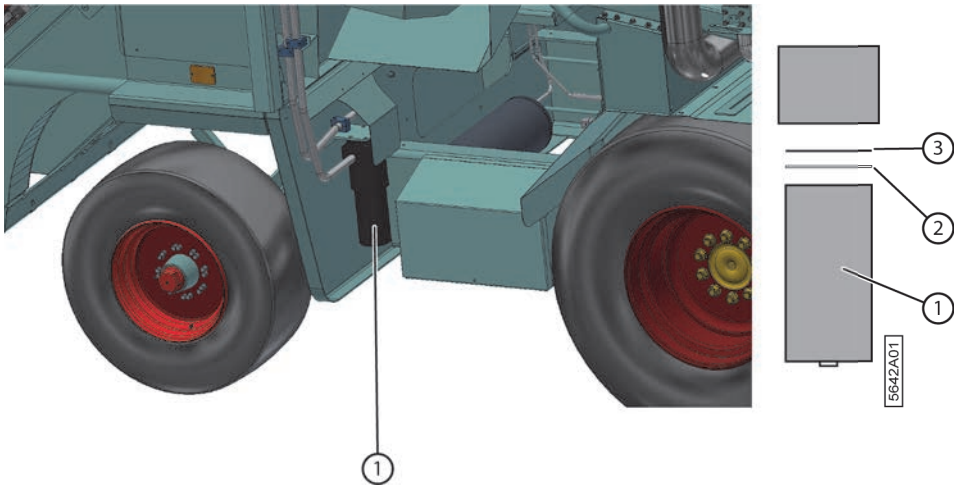


Fig. 123: Replacing the hydraulic high-pressure filter

1. Switch OFF the machine safely.
2. Place a drain tray underneath the filter.
3. Use a ring spanner to unscrew the housing of the filter (1).
   The housing has a nut underneath.
4. Replace the filter element. Fit a new seal (3) and grease the seal.
5. Refit the support washer (2) underneath the seal.
6. Refit the housing with new filter, and use a ring spanner to tighten the housing.

10.2.33 Replacing the fuel filters

Executor: maintenance technician

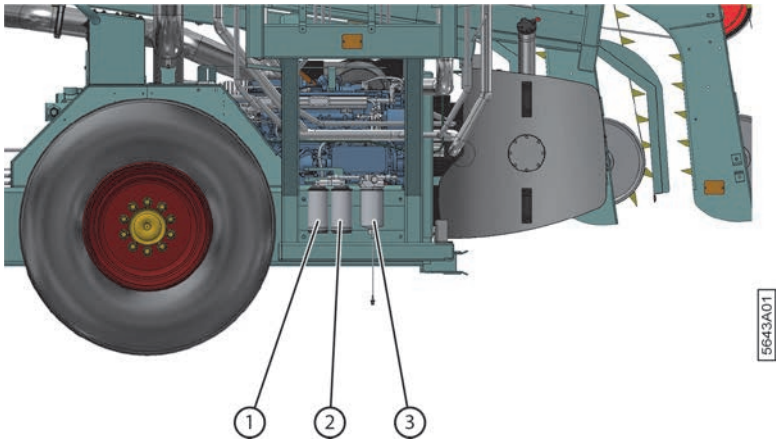


Fig. 124: Replacing fuel filters

1. Switch OFF the machine safely.
2. Replace the fuel filters (1) (2) and the fuel pre-filter (3).
   See the user manual for the DEUTZ engine.

10.2.34 Isolating the hydraulic tank

If the hydraulic component is lower than the hydraulic tank, you must isolate the hydraulic tank via the filter valve. Otherwise the entire contents of the tank will drain away!

In the case of hydraulic valves that are located higher than the hydraulic tank, you do not have to close the filter valve.

Executor: Operator

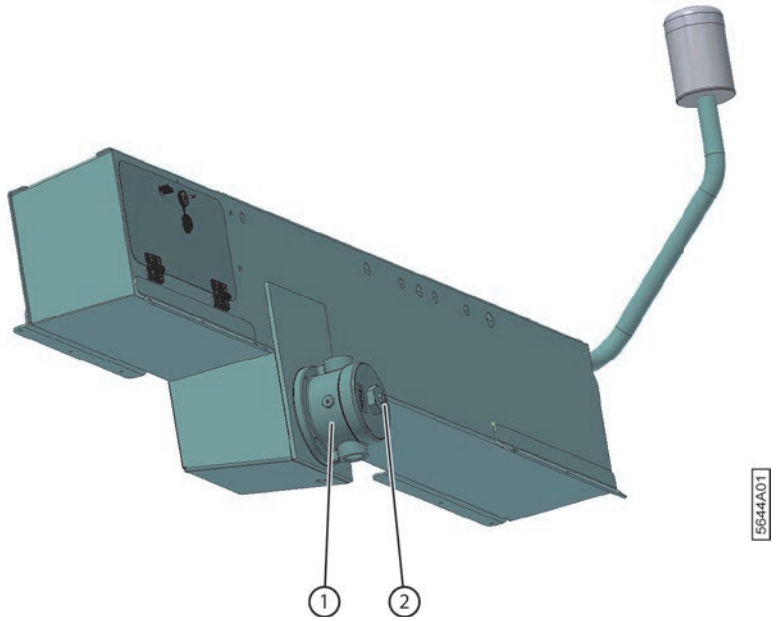


Fig. 125: Suction filter hydraulic tank

1. Switch OFF the machine safely.
2. Open the protective doors on the engine side.
3. Unscrew the bolt (2) of the suction filter (1) approximately 3 cm until the end point can be felt.

10.2.35 Cleaning the radiators

The fan for the radiators regularly runs in the reverse direction in order to remove as much dust as possible from the radiators. In addition, you must also clean the radiators every day. If you do not clean the radiator every day, then dust particles will stick to the radiator as a result of cooling down and condensation. This can adversely affect the efficiency of the radiator and can, for example, result in overheating of the hydraulic oil, or leaks.

As is the case for all liquid-cooled engines, the cooling capacity is determined by the cleanliness of the radiator. A dirty radiator has a lower cooling capacity

Executor: Operator

1. Switch OFF the machine safely.
2. Perform one of the following actions:
   - Version 2018: remove the protective grill.
   - Version from 2019: open the protective grill using the supplied key.

3. Remove all dust from the radiators using compressed air.
4. Refit or close the protective grill.

10.2.36 Cleaning the cabin

Executor: Operator

Fig. 126: The tool cabinet

1. Switch OFF the machine safely.
2. Remove all items (tools, chains, hooks, etc.) from the cabin.
3. Place the tool in the tool cabinet (1) provided for this purpose.
4. Clean the driver's seat.
5. Clean the steps of the ladder, the pedals, and the floor of the cabin.
6. Remove mud and dust.

10.2.37 Checking the tyre pressure

Executor: operator

1. Switch OFF the machine safely.
2. Check the tyre pressure when the machine is cold.

Location	Type	Specification	Weight (kg)	Pressure (bar)
At the front right	MICHELIN BIBSTEEL HARD SURFACE	300/70 R16.5 137A8/137B IND TL	1,672	3.00
At the front left			1,692	3.00
At the rear right	TRELLEBORGT421 Twin Implement	500/60-22.5TL 155A8	2,820	2.10
	MICHELIN CARGOXBIB HEAVY DUTY	500/60 R22.5 155D TL	2,470	1.10
At the rear left	TRELLEBORGT421 Twin Implement	500/60 R22.5 155D TL	2,820	2.10
	MICHELIN CARGOXBIB HEAVY DUTY	500/60 R22.5 155D TL	2,470	1.10

3. If the pressure is too low, pump up the tyre via the valve, to the pressure stated in the table.

WARNING
When pumping up the tyres, keep far enough away and keep bystanders at a safe distance. If the pressure is too high, the tyre can burst or explode.

NOTE
Keep oil and grease away from the tyres.

10.2.38 Tightening the wheel nuts

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Use wheel chocks to prevent the machine from rolling away.
3. Use a torque wrench to tighten the dry wheel nuts.

Location of tyres	Tightening torque (Nm)
At the front	460 Nm
At the rear	695 Nm

4. Retighten the wheel nuts after 1 hour or after 25 kilometres.
   Do this when first used and after replacement of a wheel.

10.2.39 Checking the operation of the brakes

Executor: Operator

1. Activate the parking brake.
2. Place the machine in the Road mode.
3. Perform one of the following actions:
   - Driving mode Joystick: Slowly move the joystick forwards.
   - Driving mode Pedal: Slowly press the pedal.
4. If the machine remains stationary, the brakes are OK. If the machine moves forwards, the brakes must be replaced. Contact your distributor.

10.2.40 Checking the rubber on the drive rollers

Damage to or the reduction of rubber on the drive rollers can cause the conveyor belts to slip.

Executor: Operator

1. Switch OFF the machine safely.
2. Check the rubber on the drive rollers.
3. If the rubber is no longer intact, request the maintenance technician to remove the drive roller and send it to Depoortere NV.

10.2.41 Checking the guides for wear

Damage to the guides can obstruct the flax and cause a blockage.

Executor: Operator

1. Switch OFF the machine safely.
2. Check that indentations are not present in the guides and that they are not damaged.

10.2.42 Checking the level of AdBlue

1. Select the Road mode window, Field mode window, or the Driving modes window.

Fig. 127: AdBlue level display on the Road mode window

2. Check the AdBlue level (1). It is graphically displayed on the screen.

See also

- 2.3.33 The AdBlue tank on page 47
- 10.2.43 Topping up the AdBlue tank on page 174

10.2.43 Topping up the AdBlue tank

CAUTION
Carefully read the Safety Information Sheet about AdBlue.

Every time that refuelling takes place, the AdBlue tank must also be topped up. The AdBlue tank does not have a level indicator. Therefore, be careful when filling the tank.

Executor: Operator

Required: AdBlue

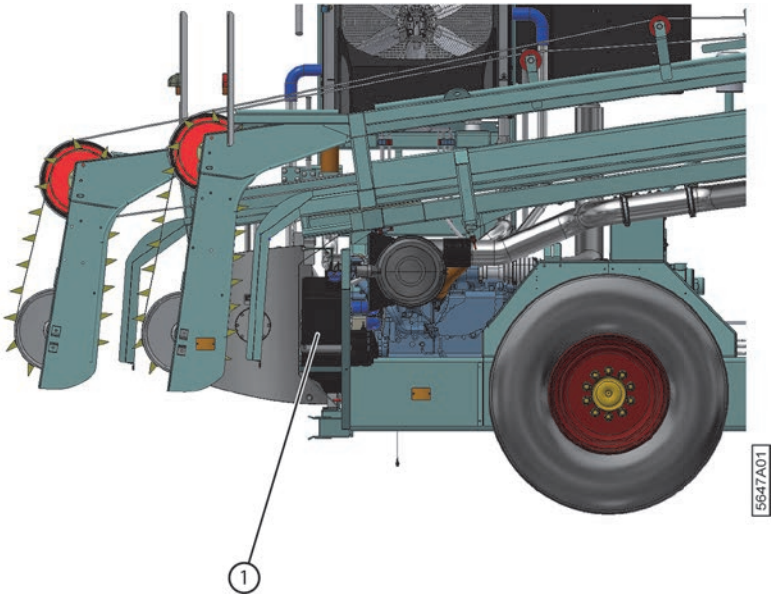


Fig. 128: The AdBlue tank

1. Switch OFF the machine safely.
2. Open the filler cap of the AdBlue tank (1).
3. Fill the tank, preferably using a filling pistol that stops automatically. If you use a manual filling pistol, constantly check the level audibly and visually.

ENVIRONMENT
Spilled liquid must be removed in accordance with the regulations for the liquid and in accordance with the current local statutory regulations.

See also
- 10.2.42 Checking the level of AdBlue on page 174

10.2.44 Checking level of the windscreen washer liquid

CAUTION
Carefully read the Safety Information Sheet about the windscreen washer liquid.

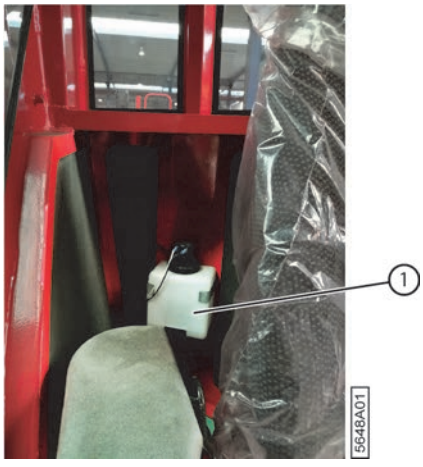


Fig. 129: The windscreen washer reservoir

Executor: Operator

1. Switch OFF the machine safely.
2. Check the level of the windscreen washer liquid in the reservoir (1).
   The windscreen washer reservoir (1) is located on the right behind the driver's seat.
3. If necessary, top up the level.

10.2.45 Checking the condition and the alignment of the conveyor belts

This task must be performed from the cabin by the driver, without other persons in the vicinity of the machine.

Executor: Operator

1. Allow the conveyor belts to rotate.
2. Check the alignment of the conveyor belts.
3. Check the pins on the conveyor belts.
4. If necessary, straighten the pins, replace the pins, or install new pins if pins are missing,

See also
- 9.2.3 Shortening a belt on page 133

10.2.46 Checking the condition of the picking belts

This task must be performed from the cabin by the driver, without other persons in the vicinity of the machine.

Executor: Operator

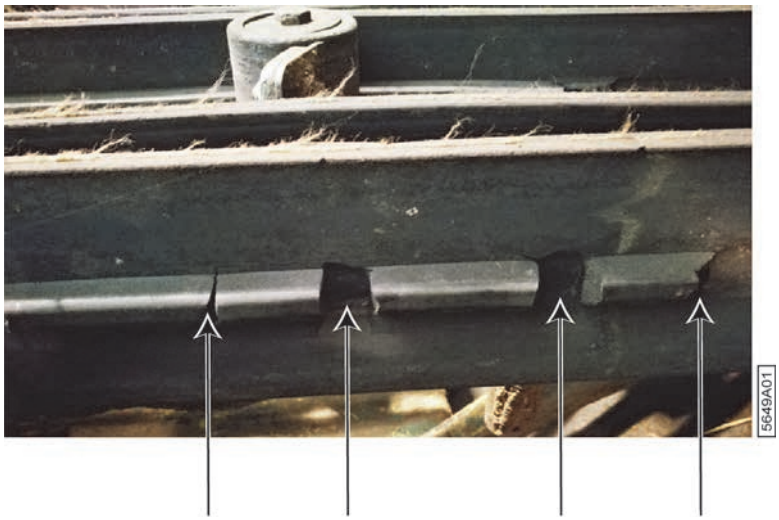


Fig. 130: Checking condition of the picking belts

1. Switch OFF the machine safely.
2. Check the condition of the picking belts.
   - Is there still enough guide profile in the centre of the picking belt?
   - Are there too many cracks in the rubber?
   - If the picking belt frayed too much at the sides?
3. If necessary, replace the picking belt.

See also
- 9.2.3 Shortening a belt on page 133

10.2.47 Checking the condition and the alignment of the scraper

Executor: Operator

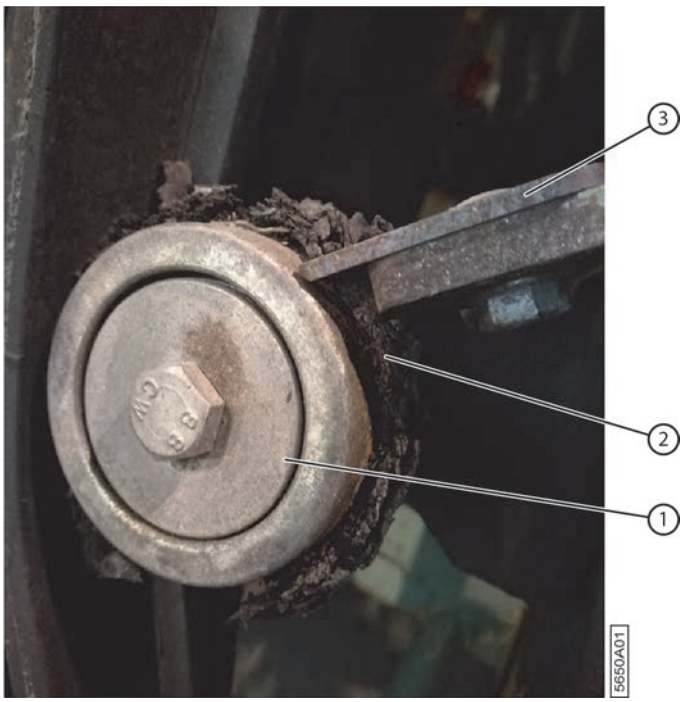


Fig. 131: Checking the condition and the alignment of the scraper

1. Switch OFF the machine safely.
2. Check all scrapers on the machine.

   Most of the scrapers are installed on the picking element. Scrapers are also installed on the crushing rollers, and on the pulleys of the conveyor belts and flax-laying belts.
3. If dirt (2) accumulates on the wheel (1), then this is indicative of the poor condition or incorrect alignment of the scraper (3), and you must realign, turn over (if symmetrical), or replace the scraper.

10.2.48 Checking the level of the hydraulic oil

Executor: Operator

1. Switch OFF the machine safely.
2. Check the level of the hydraulic oil via the level meter (1) mounted on the hydraulic tank.
3. The level must be between the lowermost red line and the uppermost blue line.

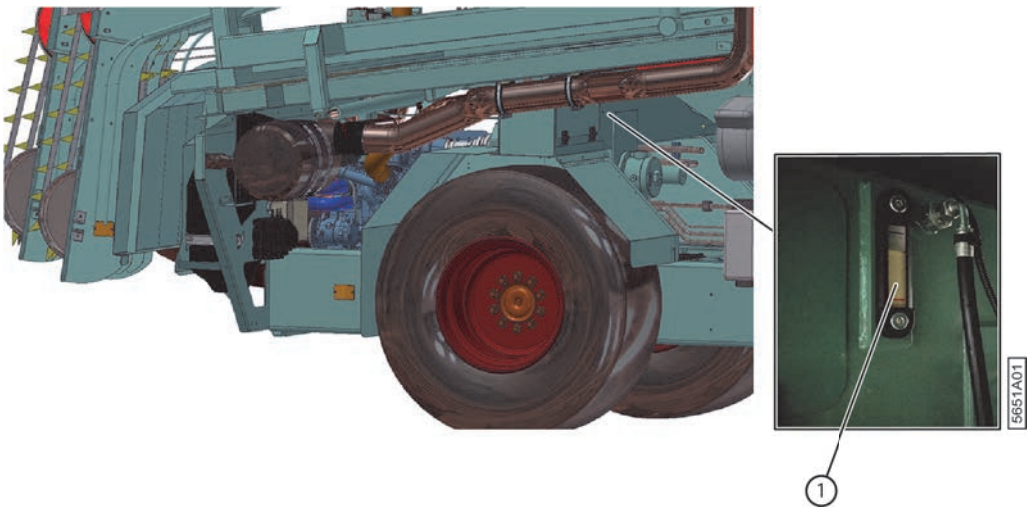


Fig. 132: Hydraulic oil level

10.2.49 Analysing the hydraulic oil

Instead of changing the oil, you can analyse the oil in order to guarantee the optimal operation of the hydraulic system.

Required equipment:

- 1 completely clean glass recipient or bottle with minimum capacity of 0.5 litre

Executor: qualified technician

1. Read the safety instructions and observe them.
2. Ensure that the hydraulic oil is still hot, so that it is more runny.

CAUTION
Risk of burns from hot oil. Ensure that the temperature is not too high, use appropriate personal protection equipment and perform work with care.

3. Clean the area around the coupling of the hydraulic pipe where you collect the oil.
4. Disconnect the hydraulic pipe.
5. Collect 0.5 litre in the recipient or bottle.
6. Reconnect the hydraulic pipe.
7. After several hours, check the condition of the oil.
   - Is the oil turbid?
   - Has the oil thickened?
   - Are there small copper particles and/or rubber particles at the bottom of the recipient?
   - Is the oil milky due to condensation in the tank?
   - As a result of heating, does the oil have a smell that is different from new oil?
8. If the answer is “yes" to 1 or more of the above questions, replace the oil.

TIP
In the case of doubt, allow the oil to be checked by a hydraulic systems specialist.

10.2.50 Replacing the hydraulic oil

If, due to a technical problem, the oil has overheated, then it is recommended to replace all of the hydraulic oil, because the quality of the oil is no longer optimal. If the hydraulic pumps have encountered problems, and copper particles are present in the oil, then the oil must be filtered.

When replacing the oil, all filters and the aerator must also be replaced.

- 10.2.31 Replacing the feed pressure filters on page 169
- 10.2.57 on page 182

Required:

- At least 145 litres of TOTAL EQUIVIS ZS 68
- Aerator

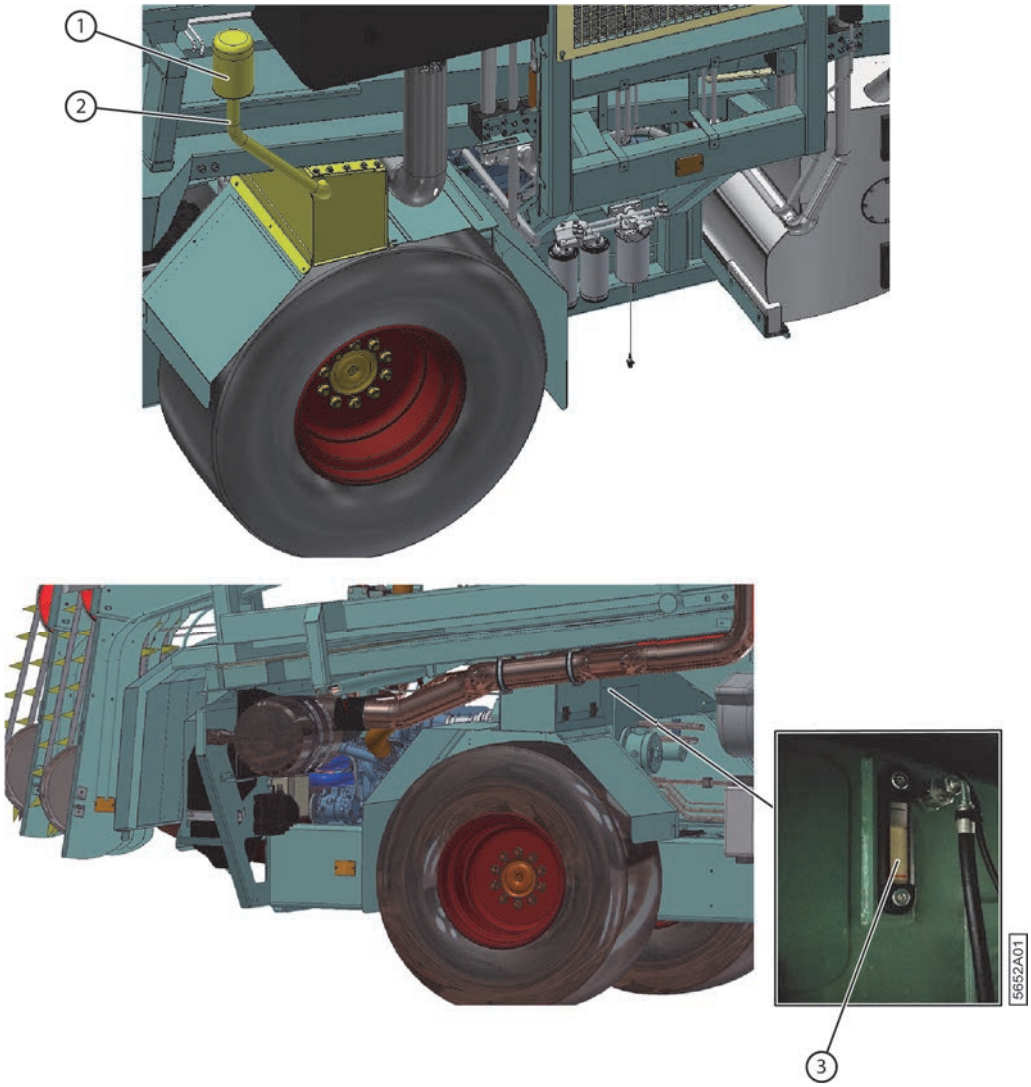


Fig. 133: Replacing the hydraulic oil

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Draining the hydraulic oil tank
3. Unscrew the aerator (1) from the tank in order to provide access to the filler hole (2).

4. Fill the tank with hydraulic oil up to the blue line on the level meter (3).

   It can take a while before the level meter indicates the actual level. Therefore, fill the last part of the tank gradually in stages, and allow enough time for the oil to adapt, via the level meter, to the level in the tank.

   CAUTION
   The level meter is located on the other side of the machine. During the filling, regularly check the level of oil by yourself or with the assistance of a second person.

5. Check the level of hydraulic oil again, and top up as required.
6. Screw a new aerator onto the filler opening.
7. Start the machine 5 times in quick succession, without the engine reaching its maximum speed.
   This action removes any air remaining in the pumps and the pipes.

10.2.51 Checking the hydraulic system for leaks

CAUTION
Carefully read the Safety Information Sheet about hydraulic oil.

Executor: maintenance technician

1. Switch OFF the machine safely.
2. If the machine is not used for a prolonged period, check whether oil is present underneath the machine.
3. Check all hydraulic components for leaks.

10.2.52 Checking the battery

1. Switch ON the battery switch.
2. Check the battery indicator on the dashboard:
   - If the battery indicator extinguishes after starting the engine, the battery will be charged when the engine is running.
   - If the battery indicator remains lit, is lit, there is a problem with the charging circuit for the battery. It is prohibited to work with the machine when the battery is not being correctly charged.
3. Check that the battery voltage exceeds 12 V. In the Field mode, or the Road mode, you can read the value of the battery voltage on the control screen.

10.2.53 Maintaining the battery

CAUTION

When opening the filler caps, hazardous vapours can escape. Provide a well-ventilated room.

If the liquid in the battery comes into contact with the skin and/or if it is swallowed, this can cause serious burns. If the acid comes into contact with clothing, it can burn through clothing.

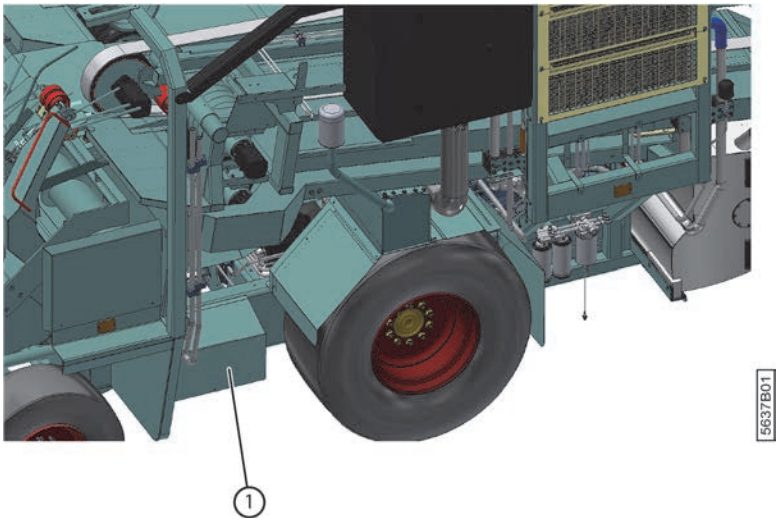


Fig. 134: The location of the battery

1. Undo the 3 bolts, and open the cover (1). 1 bolt at the front, and 2 bolts at the side.
2. Always disconnect the negative (black) cable first, and then the positive (red) cable.
3. Use a wire brush or sandpaper to clean the poles of the battery.
4. First reconnect the positive (red) cable, then the negative (black) cable.
5. Check that both cables are secure.
6. Open the filler caps of the battery.
7. Check that the liquid is 2 cm above the electrodes.
8. If necessary, top up with distilled water.
9. Close the filler caps of the battery.

10.2.54 Checking the electrical system

1. Check the operation of the emergency stop button.
2. Check that all functions work.

   In the event of a fault message, first look on the control screen for the cause, before using the machine in a field or driving on public roads.

10.2.55 Checking the play in the crushing rollers

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Turn the crushing roller forwards and backwards by hand to check the play.
   If play can be felt, then the plastic clutch and/or the spigot of the shaft must be replaced.

10.2.56 Replacing the clutch and/or spigot of the crushing rollers

Executor: maintenance technician

If you detect play in the crushing rollers, you must check the clutch and/or the spigot for wear and, if necessary, replace them.

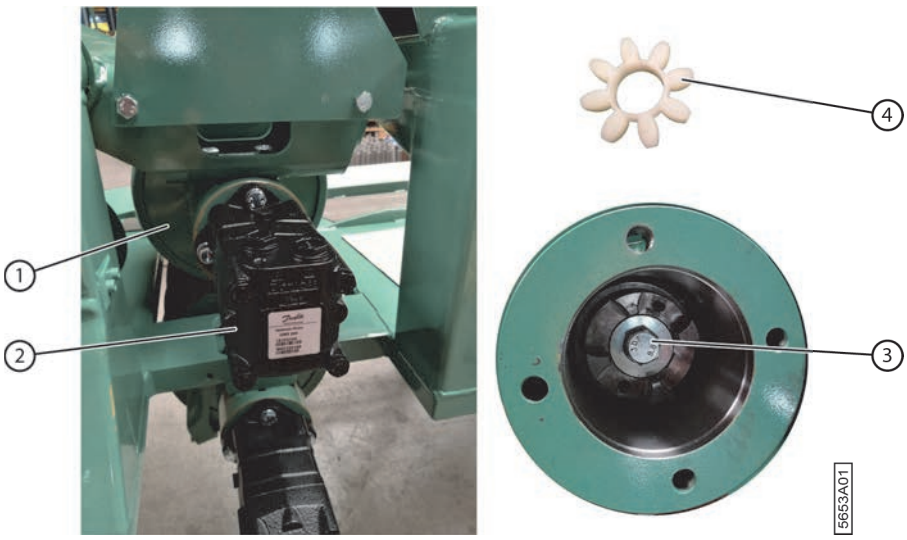


Fig. 135: Checking play in crushing rollers

1. Switch OFF the machine safely.
2. Undo the 4 bolts on the hydraulic motor (2) of the crushing roller (1) and remove the motor.
3. Check the plastic clutch (4) and, if necessary, replace it.
4. Undo the bolt (3) within the crushing roller.
5. Check the spigot and, if necessary, replace it.
6. Reassemble everything in reverse order.

10.2.57 Replacing the hydraulic suction filter

It is extremely important to regularly replace the hydraulic suction filter. Make sure that you replace the hydraulic suction filter before each flax season.

CAUTION
Dirt in the hydraulic circuit can damage the hydraulic components.

Only use the prescribed suction filter from Depoortere NV with a density of 10 µ.

Required spare parts:

- Arlon filter 10 µ. Reference Depoortere NV: 1210100000

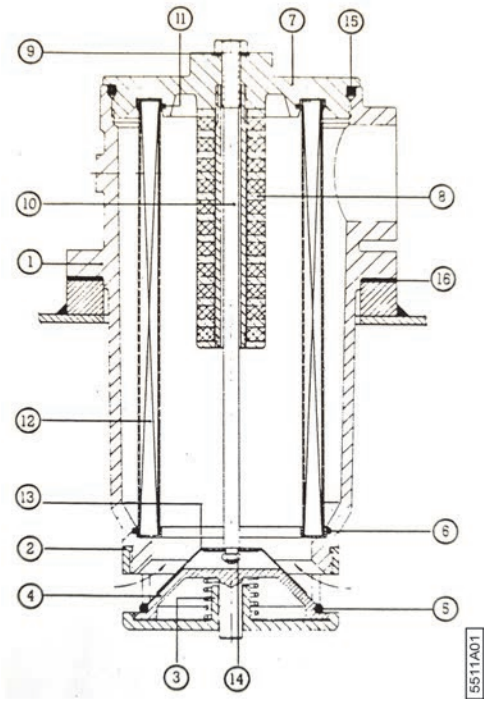


Fig. 136: Cross-section filter housing hydraulic tank

Nr.	Part	Reference Depoortere NV:
1	Filter housing	
2	Valve housing	
3	Spring	
4	Valve	
5	O-ring (99.1 x 5.7)	
6	O-ring (129.5 x 3)	
7	Cover	
8	Magnetic core	
9	Seal	
10	Bolt	
11	O-ring (84.5 x 3)	
12	Filter element 10 µ	1210100000
13	Valve	
14	Nut	
15	O-ring (154.3 x 5.7)	0234515460 This is the reference of the O-ring that is slightly thicker than the original, and that seals more optimally after the disassembly.
16	Flat seal	

CAUTION
Never start the engine when the bolt (10) is unscrewed or when the hydraulic oil filter is removed! This would damage the hydraulic pumps or even cause irretrievable damage to them.

Executor: maintenance technician

1. Read the safety instructions and observe them.
2. Switch OFF the machine safely.
3. Loosen the bolt (10) using spanner S=19.

4. Unscrew the bolt further by hand until the bolt is 5 cm out of the filter housing.

   The end point can be felt.
5. This ensures that the valve (4) seals the opening so that oil does not enter the filter housing.
6. Unscrew the cover (7) using spanner S=55 (supplied with the machine) and remove the cover.
7. Check that dirt is not present in the filter housing. Clean the filter housing.

   NOTE
   Carefully look for signs of dirt. Shreds of rubber indicate that a seal has been damaged, and metal particles indicate excessive wear.
8. Unscrew the nut (14).
9. Disassemble the valve (13).
10. Disassemble the filter element (12).

    NOTE
    Carefully look for signs of dirt on the filter element. Shreds of rubber indicate that a seal has been damaged, and metal particles indicate excessive wear.
11. Clean the magnetic core (8).
12. Assemble the new filter element.

    If necessary, install a new O-ring Ø 154.00 x 6.00 SHORE 70. Reference Depoortere NV: 0234515460 This O-ring is slightly thicker and seals better after the disassembly. You can also use the existing O-ring. If this is done, at the end of this procedure, check that the filter does not leak.
13. Install the valve (13).
14. Screw the cover (7) back on by hand and then tighten it using a spanner S=55.
15. Screw the bolt (10) back in and then tighten it.
16. Vent the suction filter by waiting at least 30 minutes.

    This allows air molecules in the oil to rise to the surface.

10.2.58 Checking the alignment of the picking belts

This task must be performed from the driver's seat by the operator, without other persons in the vicinity of the machine. This task can also be performed by remote control.

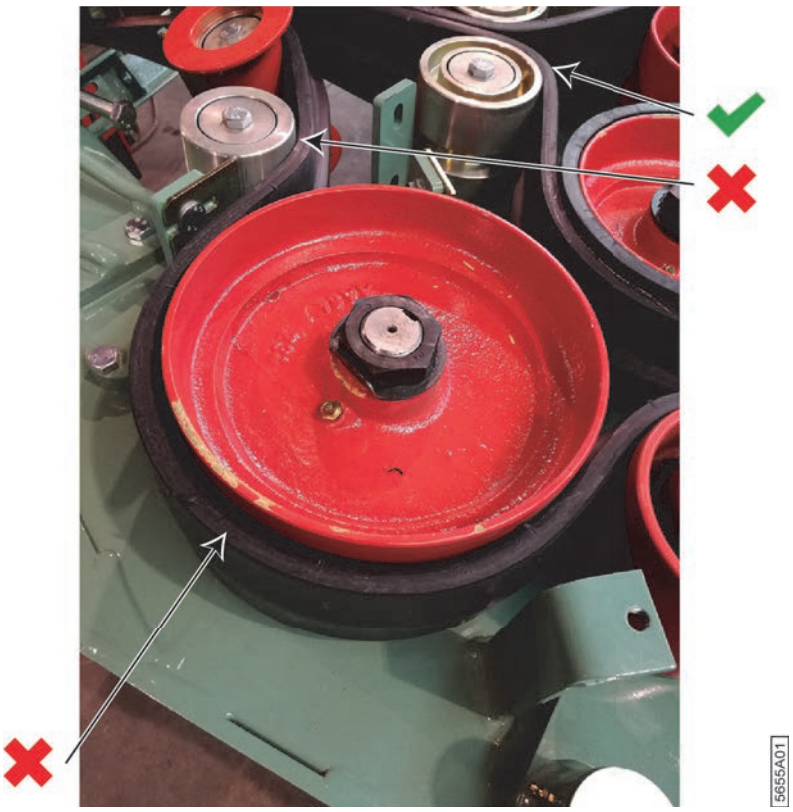


Fig. 137: Checking the alignment of the picking belts

1. Allow the picking belts to rotate slowly. See 8.2.34 Decreasing or increasing the speed of the picking belts on page 112.
2. Check the alignment of the picking belts.
   - The centre of the belts must fit snugly into the groove of the wheels.
   - The belts may not protrude above or underneath the wheels.
3. If necessary, adjust.

10.2.59 Checking the condition of the rubber flap on the screw conveyor

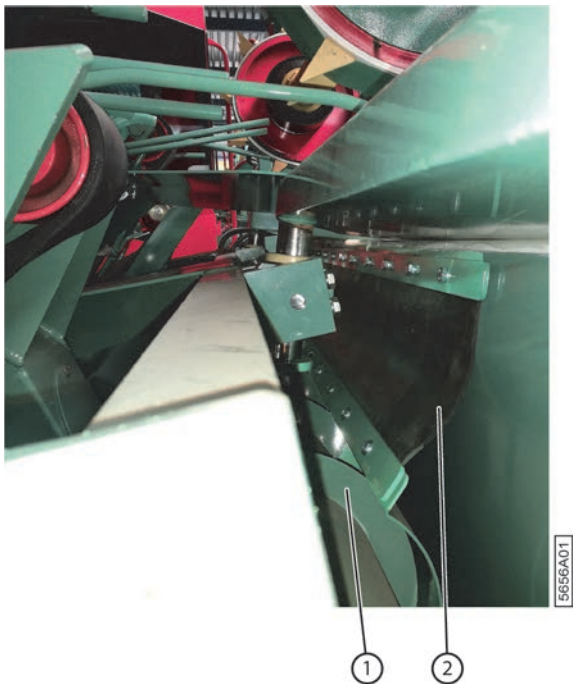


Fig. 138: Checking the condition of the rubber flap on the screw conveyor

1. Switch OFF the machine safely.
2. Check the condition of the rubber flap, via the left-hand side of the machine The rubber flap ensures that the half-open tube that the screw conveyor (1) screws into, is installed so that it is movable.

10.2.60 Important points to note when lubricating

Important points to note when lubricating grease points

- ONLY use the recommended lubricating greases. Less well-known lubricating greases are often inferior in quality, and can shorten the service life of parts.
- Remove dirt from the grease nipples before lubricating.
- Carefully lubricate all grease points in accordance with the lubrication plan.
- Remove excess grease after lubricating.

Important points to note when replacing oil

NOTE
Always use oil for topping up that is the same type as the oil that already exists in the part. The mixing of different types of oil usually has an adverse effect on the lubrication, and results in the service life of the part being shortened.

CAUTION
Replace the oil when the oil is lukewarm. It is important to note that the oil can reach high temperatures. You must therefore be careful not to sustain burns.

10.2.61 The lubricating schedule

h = work hours

Part	Frequency	Lubricant	Executor	Instruction
Picking element	8 h	Multis EP 2	Operator	See 10.2.62 on page 187.
Pivot shafts crushing rollers	8 h	Multis EP 2	Operator	See 10.2.66 on page 191.
Cylinders spreading tables	8 h	Multis EP 2	Operator	See 10.2.65 on page 190.
Picking element - pivot points	8 h	Multis EP 2	Operator	See 10.2.62 on page 187.
Drive shaft	100 h	Lithium grease NL-GI2	Operator	See 10.2.67 on page 192.
Picking element - gearbox Replace the oil	After 1st 100 h 5 years	TOTAL Transmission Axle 7	Maintenance technician	See 10.2.15 on page 160.
Picking element - pivot points	1 week	Multis EP 2	Operator	See 10.2.63 on page 189.
Front wheels	1 week	Multis EP 2	Operator	See 10.2.70 on page 193.
Front wheels - pivots	1 week	Multis EP 2	Operator	See 10.2.68 on page 192.
Front axle - pivot point	1 week	Multis EP 2	Operator	See 10.2.69 on page 193.

10.2.62 Lubricating the picking element

NOTE
Lubricate the picking element every morning before starting the work, and also lubricate the picking element in the evening at the end of the season, before putting the machine into storage.

Required: manual grease pump that supplies 0.86 grams of grease per stroke.

Executor: operator

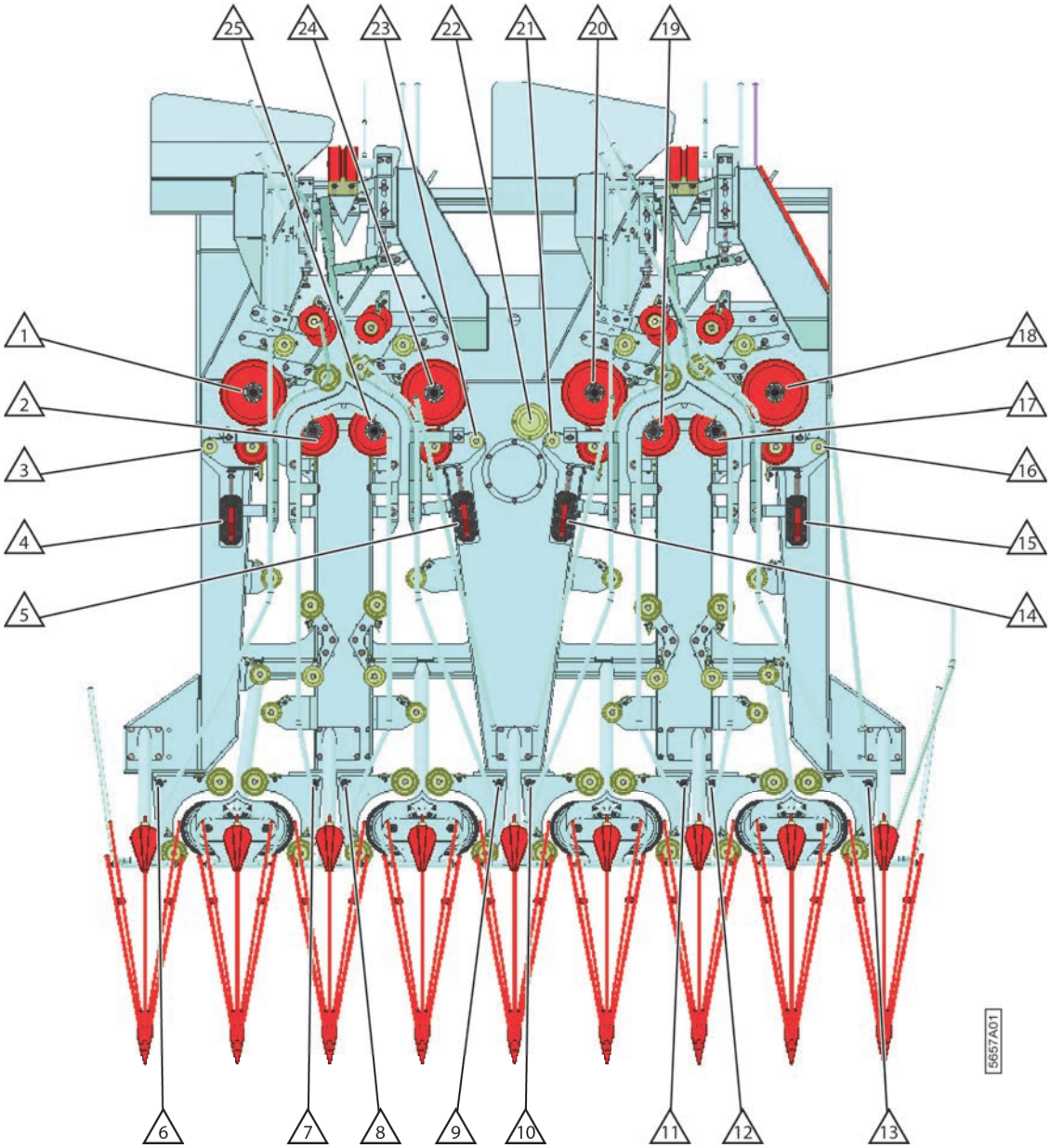


Fig. 139: Overview of the lubrication points on the picking element

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipples and pump until the lubricating grease comes out.

Nr.	Part
4, 5 and 14, 15	Detensioners
1, 2, 24, 25 and 17, 18, 19, 20	Guide wheels
3, 6, 7, 8, 9, 10, 11, 12, 13, 16, 21, 23	Pivot points
22	Intermediate shaft drive

See also

- 10.2.65 Lubricating the cylinders of the spreading tables on page 190
- 10.2.66 Lubricating the pivot shafts of the crushing rollers on page 191
- 10.2.67 Lubricating the drive shaft on page 192

10.2.63 Lubricating the pivot points of the picking element

Required: manual grease pump

Executor: operator

Fig. 140: Lubricating the pivot points of the picking element

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple of the left-hand pivot point (1) and pump until the lubricating grease comes out.
3. Remove the plate (2).
   This provides access to the grease nipple and the sensor for measuring the height of the picking element.
4. Place the manual pump on the grease nipple of the right-hand pivot point (3) and pump until the lubricating grease comes out.

10.2.64 Checking the play in the picking element

Executor: operator

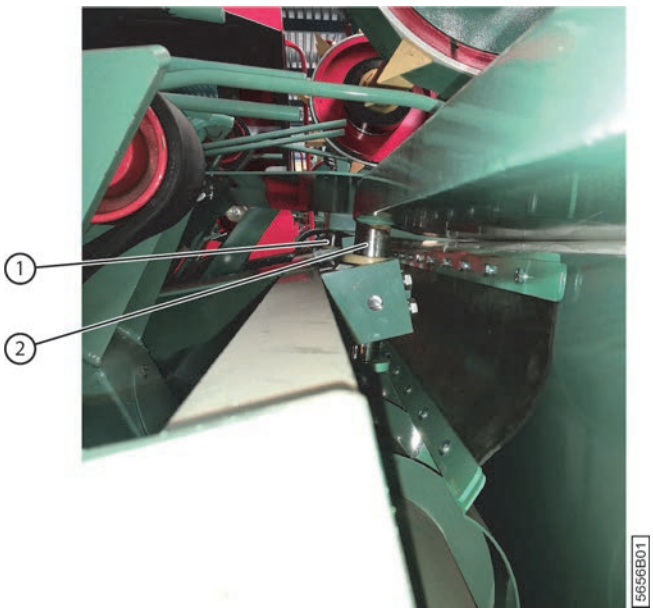


Fig. 141: Checking play picking element

1. Raise the picking element and allow it to lower, and check whether play is evident on the picking element.
2. Visually check whether the plastic guide bushes (1) (2) are not worn.

10.2.65 Lubricating the cylinders of the spreading tables

Required: manual grease pump

Executor: operator

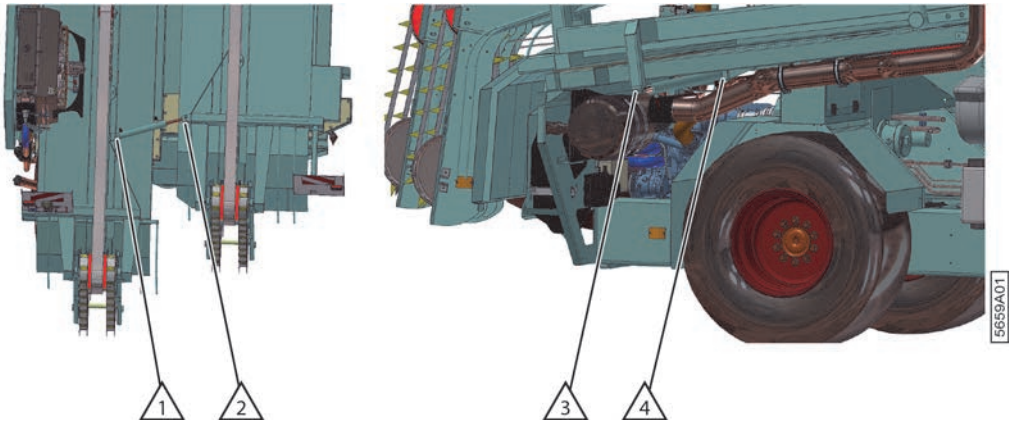


Fig. 142: Lubricating the cylinders of the spreading tables

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple and pump until the lubricating grease comes out.

Nr.	Part
1 and 2	Small cylinder
3 and 4	Large cylinder

See also
- 10.2.62 Lubricating the picking element on page 187
- 10.2.66 Lubricating the pivot shafts of the crushing rollers on page 191
- 10.2.67 Lubricating the drive shaft on page 192

10.2.66 Lubricating the pivot shafts of the crushing rollers

Required: manual grease pump that supplies 0.86 grams of grease per stroke.

Executor: operator

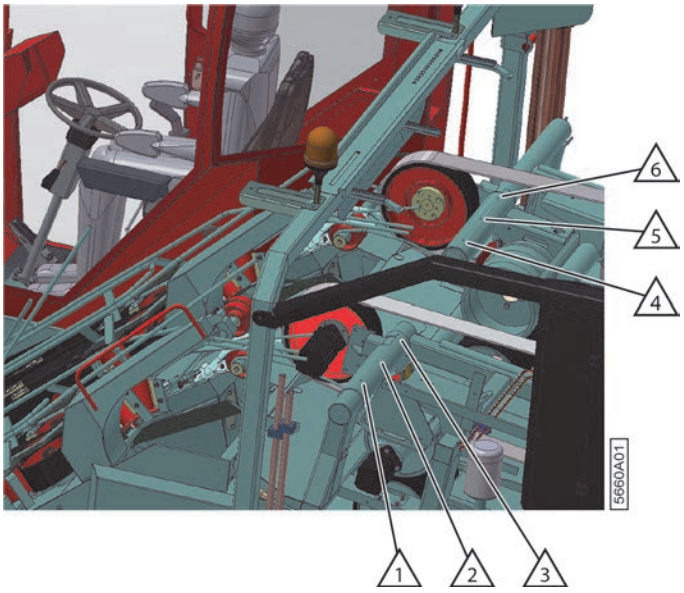


Fig. 143: Lubricating the pivot shafts of the crushing rollers

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple and pump until the lubricating grease comes out.

Nr.	Part
1, 2, 3	Left-hand crushing roller
4, 5, 6	Right-hand spreading table

See also
- 10.2.62 Lubricating the picking element on page 187
- 10.2.65 Lubricating the cylinders of the spreading tables on page 190
- 10.2.67 Lubricating the drive shaft on page 192

10.2.67 Lubricating the drive shaft

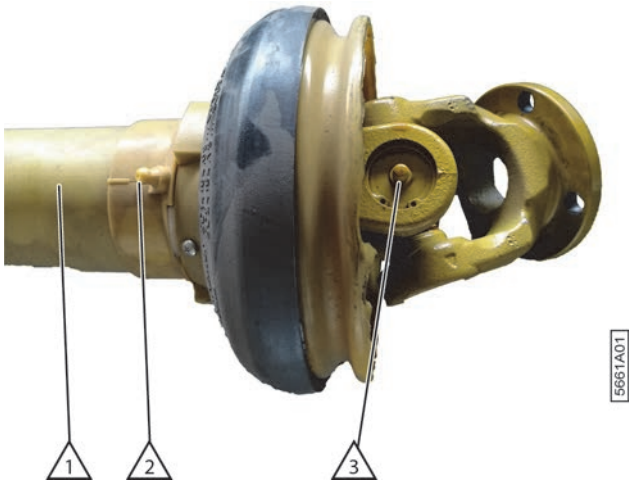


Fig. 144: Lubricating the drive shaft

Required: manual grease pump that supplies 3 grams of grease per stroke.

Executor: operator

1. Switch OFF the machine safely.
2. Remove the protective cover.
3. Lubricate the universal joint (3) and the protection (2). Pump 5 times per lubricating nipple.
4. Repeat for the other side of the machine.
5. Disconnect the drive shaft from the drive.
6. Pull the drive shaft apart.
7. Lubricate the innermost profile of the shaft (1).
8. Slide the profiles of the shaft back together.
9. Secure the drive shaft to the drive.
10. Install all protective covers.

See also

- 10.2.62 Lubricating the picking element on page 187
- 10.2.65 Lubricating the cylinders of the spreading tables on page 190
- 10.2.66 Lubricating the pivot shafts of the crushing rollers on page 191

10.2.68 Lubricating the pivots of the front wheels

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple (1) and pump until the lubricating grease comes out.
3. Repeat step 2 for the other grease nipples (2) (3) and (4).

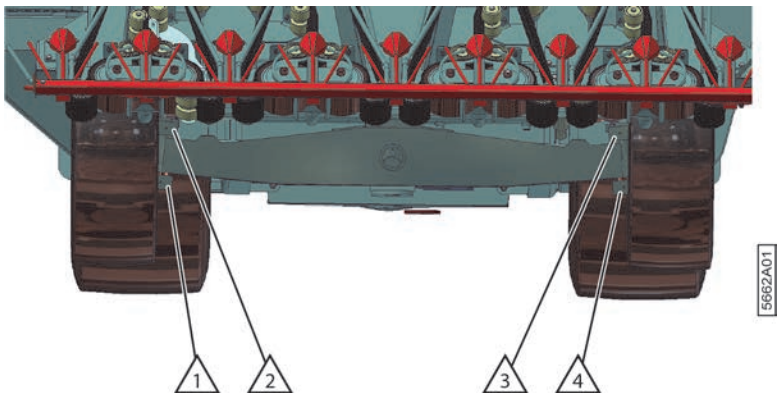


Fig. 145: Lubricating the pivots of the front wheels

10.2.69 Lubricating the pivot point of the front axle

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple (1) and pump until the lubricating grease comes out.

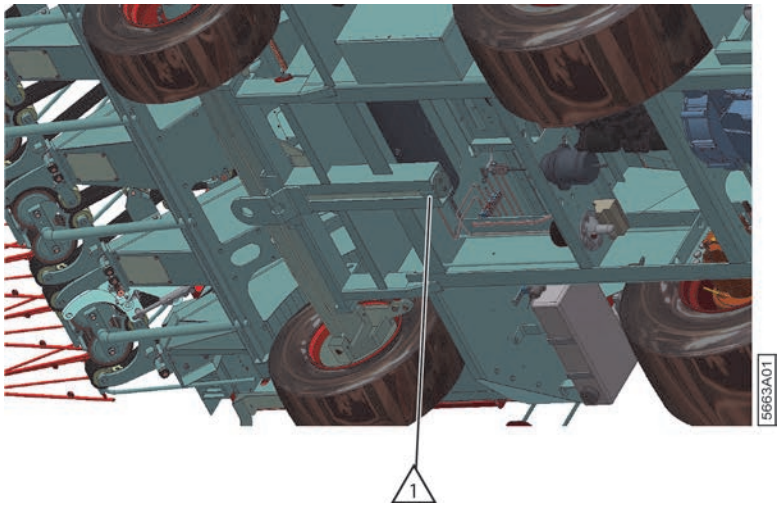


Fig. 146: Lubricating the pivot point of the front axle

10.2.70 Lubricating the front wheels

1. Switch OFF the machine safely.
2. Place the manual pump on the grease nipple (1) and pump until the lubricating grease comes out.
3. Repeat for the front wheel other side.

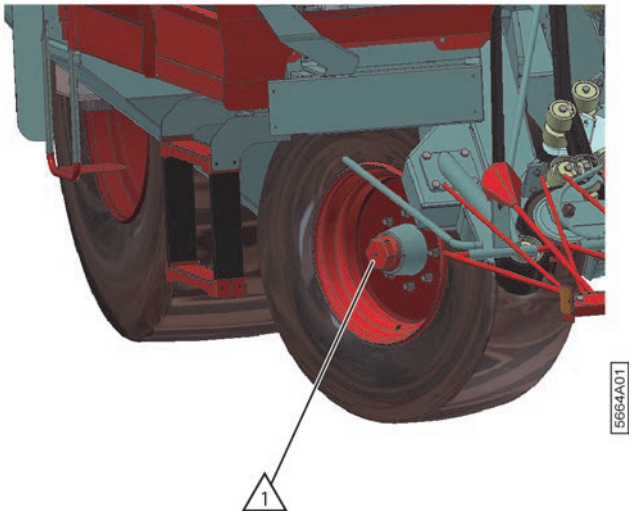


Fig. 147: Lubricating the front wheels

10.2.71 Replacing the water in the reservoir for the air conditioning system (manual version)

This procedure is only applicable if the machine has an air conditioning system with manual control.

Drain the reservoir at the end of the day, and fill the reservoir at the beginning of the day.

1. Switch OFF the machine safely.
2. Open the cap underneath the reservoir, and allow the reservoir to empty.
3. Close the cap underneath.
4. Open the cap above the reservoir.
5. Fill the reservoir with clean tap water.

CAUTION
Do not use river water or stagnant water. Do not add any product to the water.

10.2.72 Checking the nozzles of the air conditioning system (manual version)

This procedure is only applicable if the machine has an air conditioning system with manual control.

Perform this check as stated in the maintenance schedule. If this check is not performed, this can result in a defective injection pump.

To perform this check, the ignition of the machine must be switched ON.

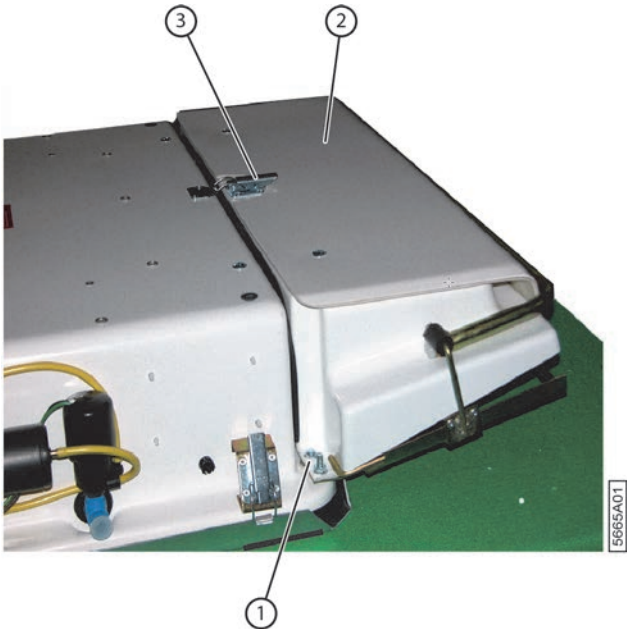


Fig. 148: Removing the cassette for the air conditioning system

1. Check that there is water in the reservoir.
2. Use compressed air to remove all dust on and around the air conditioning system op the roof of the machine.
3. Open the lock (3) of the cassette.
4. Lift the cassette (2) above the nuts (1) on both sides of the air conditioning system.

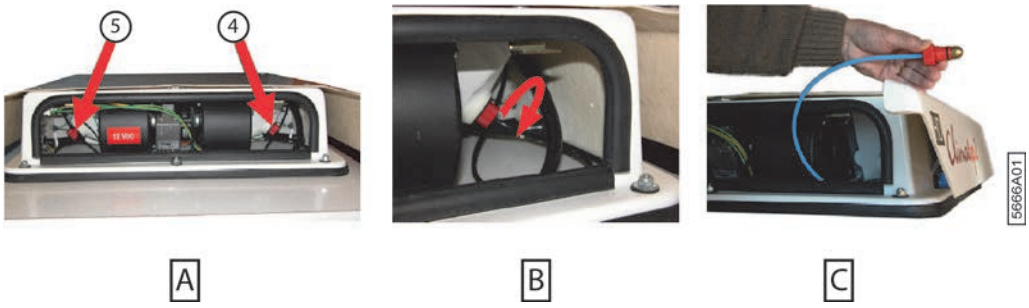


Fig. 149: Removing the nozzles

5. Remove the nozzles (4) and (5) by unscrewing them (8).
6. Remove the nozzles from the air conditioning system (C), so that during testing the spray does not enter the device.
7. Place the ventilation and the pump to the 1 position and allow the device to operate for 5 minutes.
8. Check that water is supplied to both nozzles.
9. Check that spray leaves both nozzles.

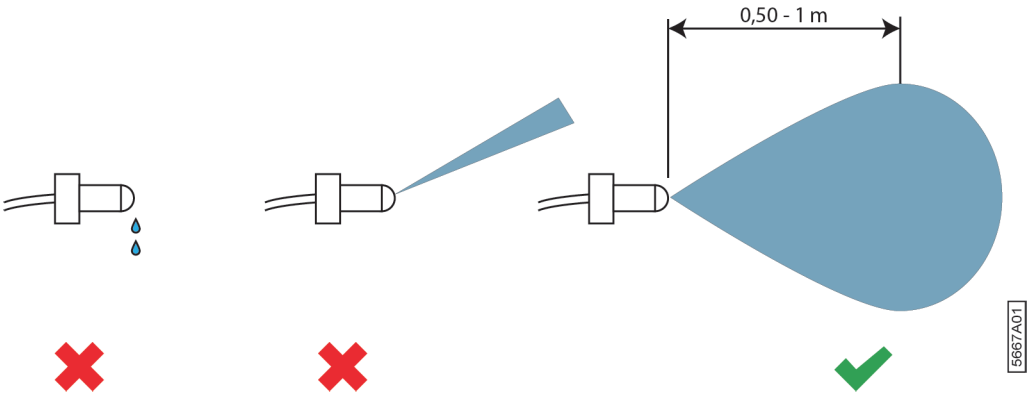


Fig. 150: Checking the nozzles

The spray must be fine and volatile, and must be cone-shaped when it leaves the nozzles. The spraying takes place for approximately 5 seconds. The next spraying takes place 10 seconds later.

10. If the nozzles do not spray optimally, then:

Cause	Solution
The microstop filters were not replaced at the beginning of the season.	Replace the microstop filters.
The nozzles are clogged.	Replace the nozzles (recommended). Remove the nozzles and disassemble the parts. Immerse everything in a bath containing a domestic anti-limescale product (for example, the product that is used to remove limescale from coffee machines). Rinse the parts and assemble them. Check the spray again. If the nozzles do not spray optimally, then replace the nozzles.
Problem with the injection pump.	Check the injection pump. This pump is located underneath the reservoir.

NOTE

- Use compressed air to remove any limescale deposits.
- Do NOT use sharp objects to remove the blockage!

11. Reinstall the nozzles into the air conditioning system.
12. Close the cassette by lifting the cassette over the nuts and closing the lock.

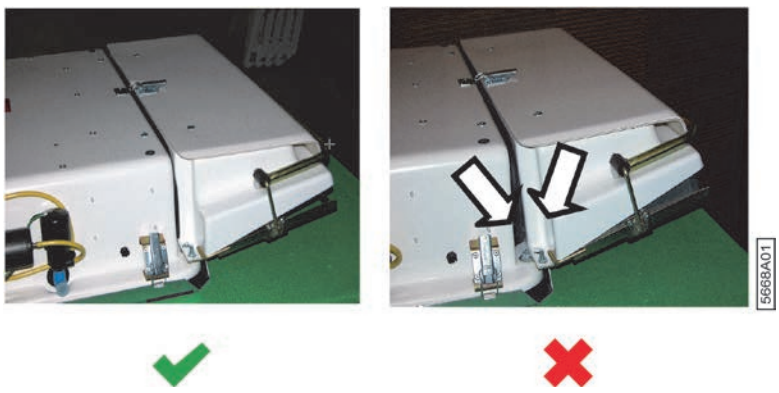


Fig. 151: Installing the cassette

10.2.73 Checking the installation of the cassette for the air conditioning system

This procedure is only applicable if the machine has an air conditioning system with manual or bluetooth control.

If the cassette has been installed incorrectly, this can prevent the air conditioning system from operating optimally, and can also allow rain to enter the cabin.

1. Check that the cassette is correctly mounted on both sides over the nuts.
2. If it is not correctly mounted: open the lock, lift the cassette at both sides over the nuts. and close the lock.

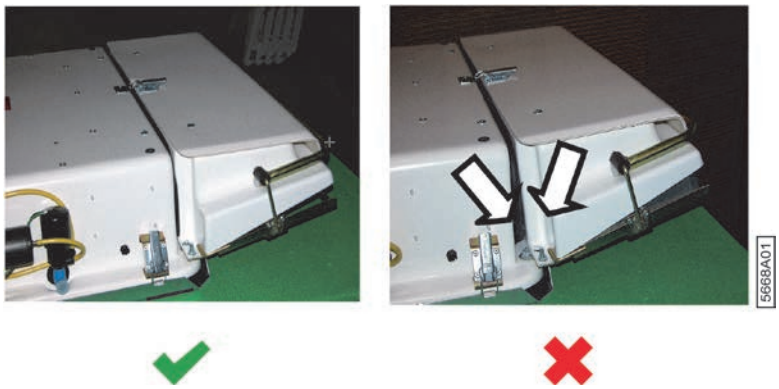


Fig. 152: Removing the cassette

10.2.74 Cleaning the air filter of the air conditioning system

This procedure is only applicable if the machine has an air conditioning system with manual or bluetooth control.

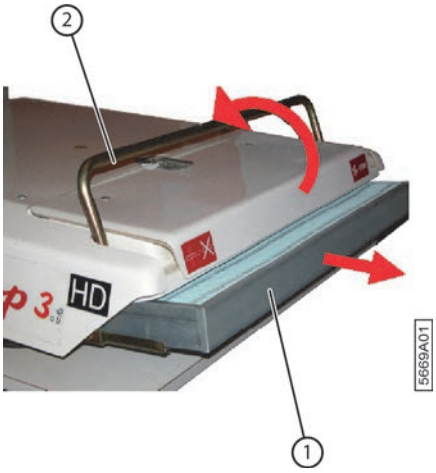


Fig. 153: Removing the air filter from the air conditioning system

1. Switch OFF the machine safely.
2. Move the lever (2) UPWARDS.
3. Remove the air filter from the air conditioning system.
4. Use dry compressed air to clean the air filter.
5. Place the air filter back into the air conditioning system.
6. Move the lever (2) UPWARDS.

TIP
If the red lamp is lit too often, replace the air filter.

10.2.75 Replacing the air filter of the air conditioning system

This procedure is only applicable if the machine has an air conditioning system with manual or bluetooth control.

WARNING
Only use original fuses. The use of non-approved filters can seriously harm your health, and can adversely affect the operation of the air conditioning system.

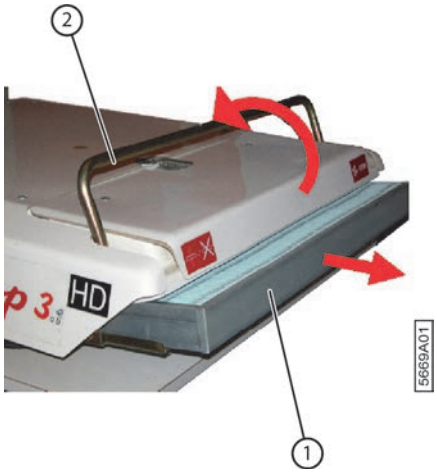


Fig. 154: Removing the air filter from the air conditioning system

1. Switch OFF the machine safely.
2. Move the lever UPWARDS.
3. Remove the air filter from the air conditioning system
4. Place the new air filter into the air conditioning system.
5. Move the lever DOWNWARDS.

10.2.76 Replacing the microstop filters of the air conditioning system

This procedure is only applicable if the machine has an air conditioning system with manual or bluetooth control.

De microstop filters must be replaced annually before the start of the season.

NOTE

In an air conditioning system with manual control, there are 3 microstop filters on the machine: two underneath the protective cover (1) (2), and one beside the reservoir (3).

In an air conditioning system with bluetooth control, there is only one microstop filter (3) beside the reservoir.

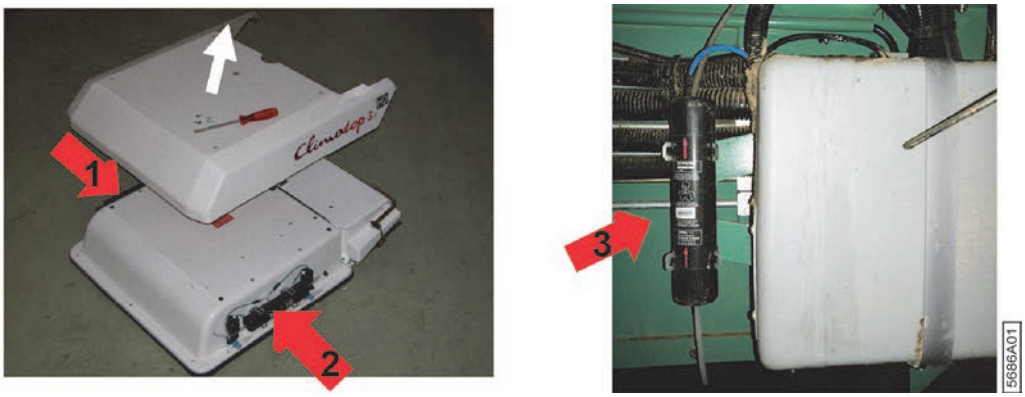


Fig. 155: The location of the microstop filters

1. Switch OFF the machine safely.
2. Undo the 4 screws and remove the protective cover of the air conditioning system.
3. Disconnect the pipe from the microstop filter and remove the microstop filter from its holder.

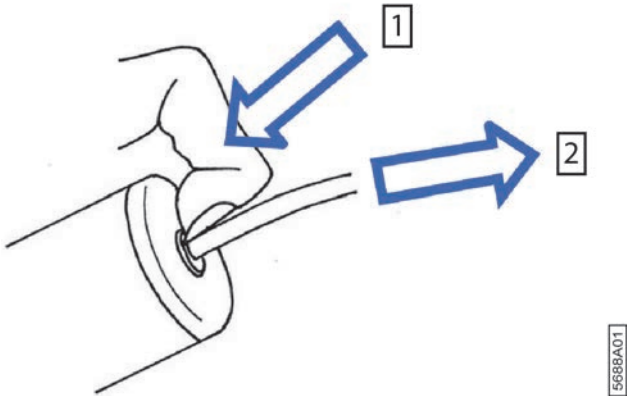


Fig. 156: Removal of the microstop filters

4. Repeat this for the other two microstop filters.
5. Place the new microstop filter in its holder.

NOTE

Microstop filters on the roof underneath the protective cover must be installed with the red arrows pointing towards the front of the machine.

The microstop filter beside the water reservoir must be installed with the red arrows pointing upwards.

6. Install the pipes by pressing them into the opening of the filter
7. Repeat from step 5 for the other microstop levels.

10.2.77 Cleaning the condenser of the airco

This procedure is only applicable if the machine has an air conditioning system.

The fan of the condenser regularly runs in the reverse direction in order to remove as much dust as possible from the condenser. In addition, you must clean the condenser every day. If you do not clean the radiator every day, then dust particles will stick to the condenser as a result of cooling down and condensation. This will decrease the efficiency of the condenser.

Executor: Operator

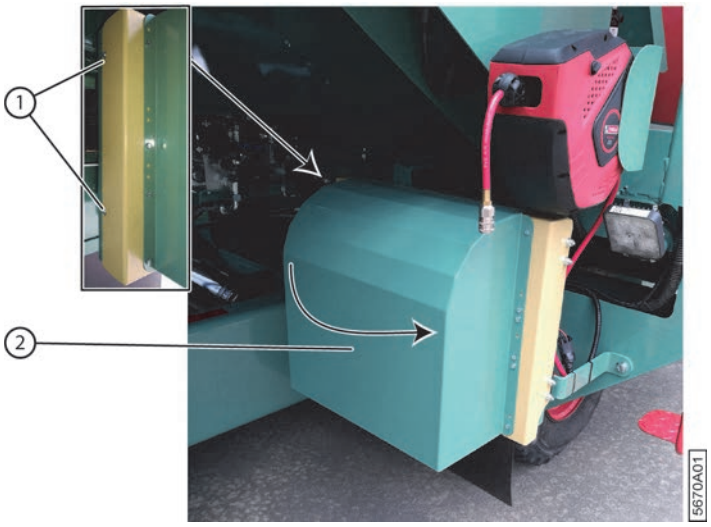


Fig. 157: The protective cover of the condenser

1. Switch OFF the machine safely.
2. Loosen the 2 bolts (2) or butterfly nuts (1) of the protective cover (2).
3. Swing the protective cover open.
4. Use compressed air to clean the condenser.
5. Swing the protective cover closed.
6. Tighten the 2 bolts to secure the protective cover.

10.2.78 Maintaining the airco

WARNING
Work on the air conditioning may only be performed by an approved company.

Fig. 158: The location of the airco parts

Nr.	Part
1	Information sticker
2	Dry filter
3	High-pressure connection point (red)
4	Low-pressure connection point (blue)
5	Switch

NOTE
For more information about the airco, consult the sticker that is affixed by the manufacturer.

Fig. 159: The sticker with information about the air conditioning

This information sticker states the quantity of oil, the quantity of gas, the type of gas, and the filling date.

You must replace the dry filter every 3 years. The dry filter consists of a membrane and granules for drying the gas. After 3 years, the granules are saturated and the dry filter must be replaced. After being exposed to repeated shocks, the membrane can become damaged, so that the dry filter has to be replaced prematurely.

When replacing the gas, you use the high-pressure connection point (red) and the low-pressure connection point (blue).

If the airco no longer operates, this can be due to the following:

- The switch is defective.
- The switch does not receive a signal.
- A leak has caused all of the gas in the circuit to escape.

10.2.79 Replacing the dry filter of the airco

WARNING
Work on the air conditioning may only be performed by an approved company.

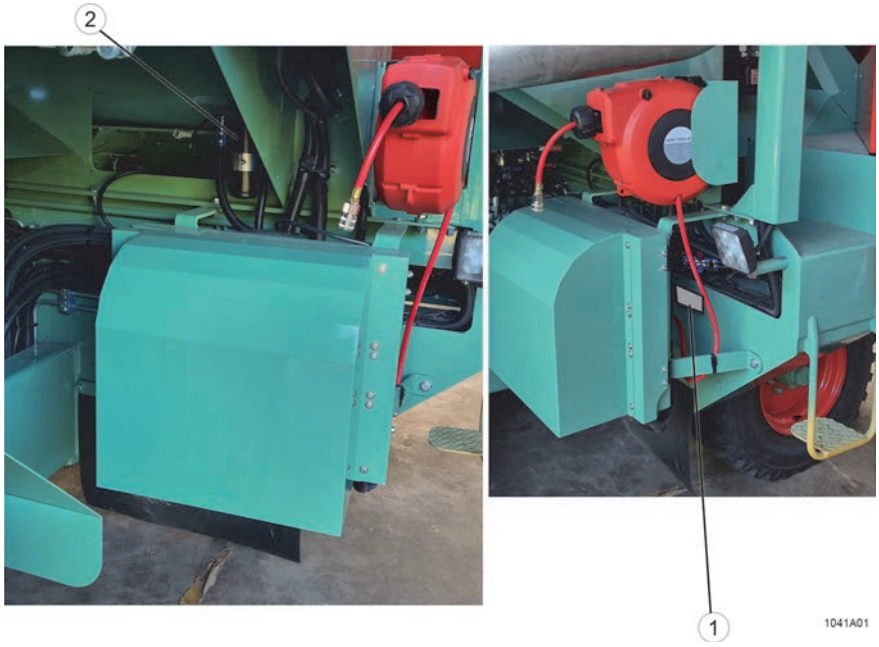


Fig. 160: The location of the dry filter for the airco

NOTE
After replacing the dry filter (2), you must again add a few millilitres of airco oil as stated on the sticker (1).

10.3 Corrective maintenance

10.3.1 Towing the machine (with operational engine)

Tow the machine as little as possible. When towing the machine, position a lorry as close as possible to the machine in order to minimise the distance between the machine and the lorry.

CAUTION
The machine may only be towed at a maximum speed of 1 km/hour, and for NO LONGER THAN 3 minutes!

1. Raise the picking element.
2. Unscrew the bolts (2) (3) of the Driving pump three turns anti-clockwise on both multifunctional valves.

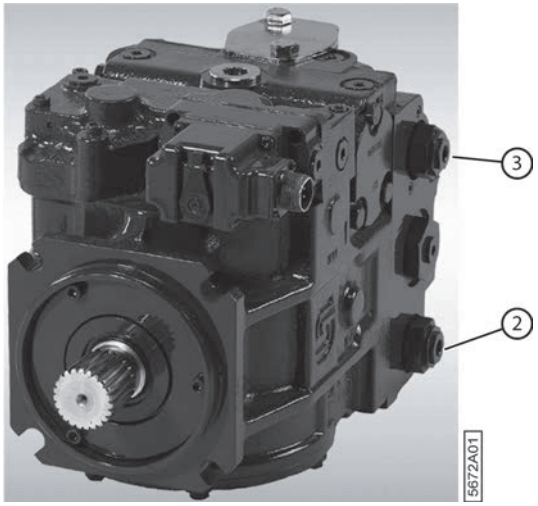


Fig. 161: Adjusting bypass

Do not unscrew more than 3 turns, otherwise you will encounter leaks! Ensure that the hydraulic circuit for the wheels is open during the towing of the machine.

3. Release the brakes for the rear wheels by releasing the parking brake.
4. Ensure that all protective panels are closed.
5. Connect a towing belt to the towing eye (8) at the front of the machine.

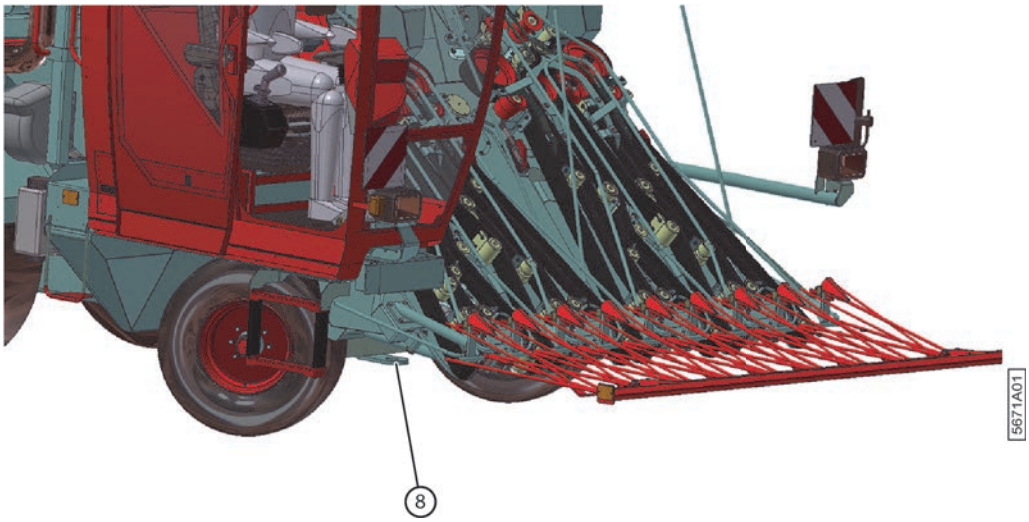


Fig. 162: Towing eye of the machine.

6. Connect the other end of the towing belt to the towing vehicle.
7. Tow the machine to the desired location. Move the front wheel of the machine in the towing direction.
8. After the towing, tighten the bolts.

10.3.2 Towing the machine (with defective engine)

If the machine has to be towed due to a defective engine, several preparations must be made. If these preparations are not performed, this can result in irreversible damage to the wheels and the hydraulic circuit.

Tow the machine as little as possible. When towing the machine, position a lorry as close as possible to the machine in order to minimise the distance between the machine and the lorry.

CAUTION
The machine may only be towed at a maximum speed of 1 km/hour, and for NO LONGER THAN 3 minutes!

1. Release the parking brake by completely removing the bolt (1).

Fig. 163: Releasing the parking brake

2. Unscrew the bolts (2) (3) of the Driving pump three turns anti-clockwise on both multifunctional valves.

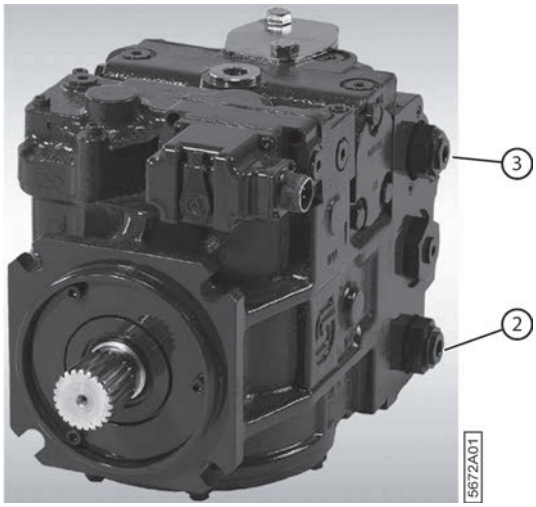


Fig. 164: Adjusting bypass

Do not unscrew more than 3 turns, otherwise you will encounter leaks! Ensure that the hydraulic circuit for the wheels is open during the towing of the machine.

3. Ensure that all protective panels are closed and secured.
4. Connect a towing belt to the towing eye (8) at the front of the machine.

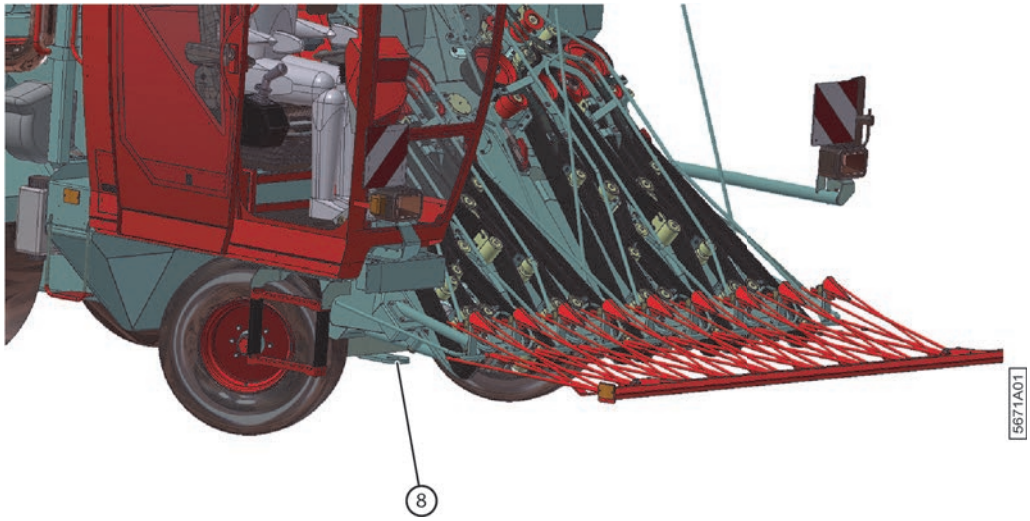


Fig. 165: Towing eye of the machine.

5. Connect the other end of the towing belt to the towing vehicle.
6. Tow the machine to the desired location. Move the front wheel of the machine in the towing direction,
7. After the towing, tighten the bolts,

10.3.3 Jacking up the machine

You can jack up the machine to replace a wheel or perform maintenance work. Use a serviceable jack that has a minimum load-bearing capacity of 5 tons.

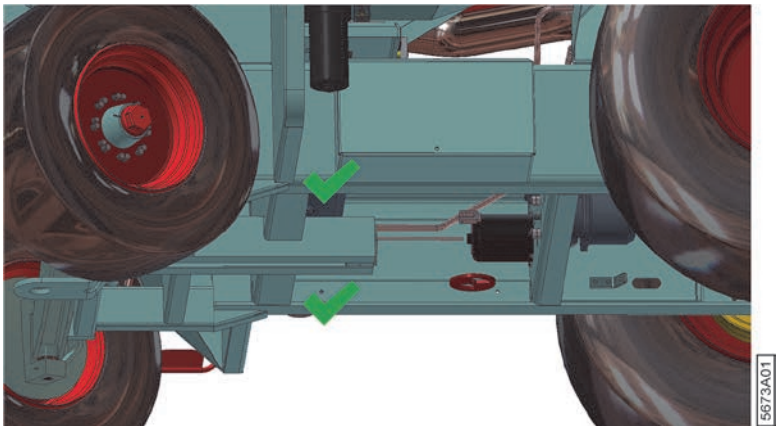


Fig. 166: Permitted support points at the front

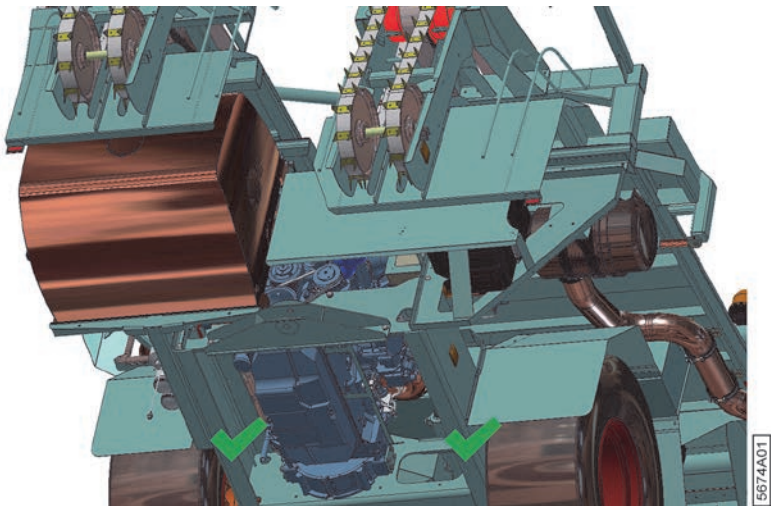


Fig. 167: Permitted support points at the rear

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Block the wheels by applying the parking brake.
3. Ensure that the surface underneath the support points is stable and flat.
4. Place a jack underneath one of the permitted support points.
5. Jack up the machine. Ensure that the machine will not tip over.
6. Install robust supports when working on top of, underneath, or on the machine.
7. Perform the required maintenance.
8. Remove the supports.
9. Slowly lower the machine.

10.3.4 Welding on the machine

WARNING
Never weld in the vicinity of materials that can catch fire or melt. For example: belts, hydraulic pipes, wheels, battery, etc. Welding spatter can penetrate a battery and cause an explosion.

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Remove the plate on the control screen.
3. Disconnect all plugs from the control screen (5).
4. Disconnect the rest of the controllers.
   - 1 controller (1) is located behind the pressure regulator and manometer of the crushing rollers.
   - 3 controllers (2) (3) (4) are located in the storage compartment in the cabin.

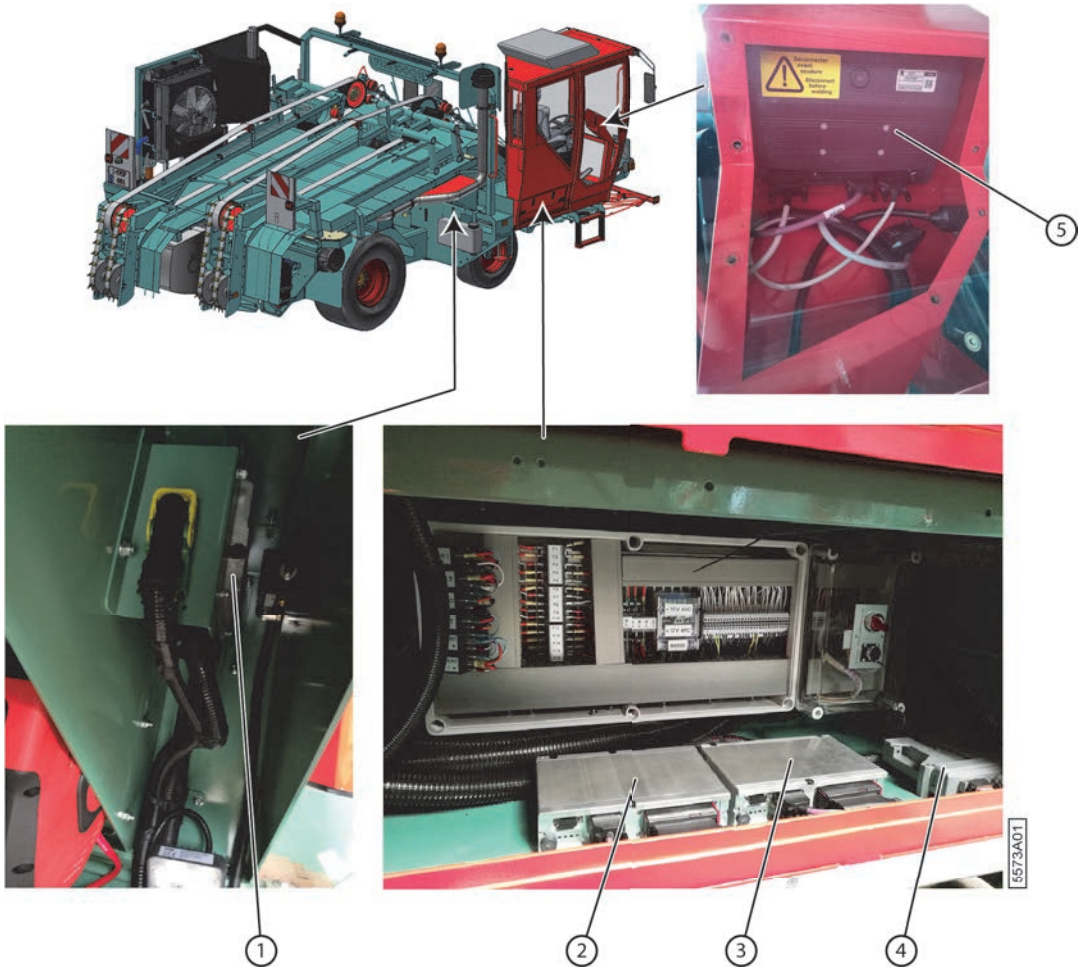


Fig. 168: The location of the controllers

5. Remove all flammable products from the vicinity of the machine.
6. Remove all flax residues from the machine.
7. Remove the clamps from the battery terminals.
8. Place the negative clamp of the welding device as close as possible to the welding location in order to prevent damage to the electrical system.
9. Keep the fire extinguisher within easy reach.

10.3.5 Replacing a scraper

All drive wheels and non-driven wheels and drums are equipped with scrapers to keep their surfaces clean. Check that the scraper is in optimal condition before adjusting the scraper. The following scrapers can be present on the machine:

- Metal scraper
- Plastic scraper

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Undo the bolts of the scraper.
3. Remove the worn scraper.

   In the case of a rectangular scraper, you can use the other side of the scraper.
4. Perform one of the following actions:

- In the case of a plastic scraper, you install the scraper so that it touches the wheel.
- In the case of a metal scraper, you install the scraper approximately 2 millimetres from the wheel.

5. Retighten the bolts.

10.3.6 Replacing a conveyor belt

Executor: qualified technician

1. Switch OFF the machine safely.
2. Loosen the conveyor belts.
3. Loosen the connection (1) for the belts by unscrewing the 3 socket-screws (2).

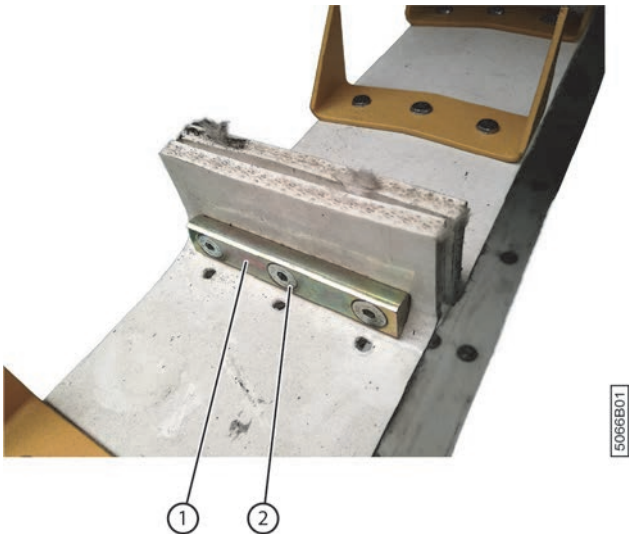


Fig. 169: Replacing a conveyor belt

4. Remove the conveyor belt.
5. Install the new conveyor belt. Pay attention to the mounting direction.
6. Retighten the connection.
7. Tighten the conveyor belts.

10.3.7 Replacing a hydraulic component

NOTE
Hydraulic hoses are subject to a natural aging process and must be regularly replaced, even when no defects are visible externally. The maximum period of use for hydraulic hoses must usually not exceed 6 years, including a possible storage period of 2 years.

Executor: maintenance technician

1. Switch off the machine safely.
2. If the hydraulic component is located lower than the hydraulic tank, you must close the hydraulic tank via the strainer valve.

   Otherwise the entire contents of the tank will drain away! In the case of hydraulic valves that are located higher than the hydraulic tank, you do not have to close the strainer valve.
3. Use a receptacle to catch the oil that is released.
4. Clean the area directly surrounding the connections for the hydraulic component.
5. Remove the component.

6. Clean the connections and ensure that dirt does not enter the hydraulic circuit.
7. Install the new component.
8. Reopen the straining valve.
9. Check the oil level in the hydraulic tank.
10. Switch ON the machine again.
11. Check the pressure values.

10.3.8 Replacing a picking belt

If the picking belt exhibits too much damage or is worn too much, you can replace it as preventive maintenance. Or you can replace the picking belt if the picking belt breaks.

Executor: maintenance technician

Required: puller for picking belt, article number 8000004819

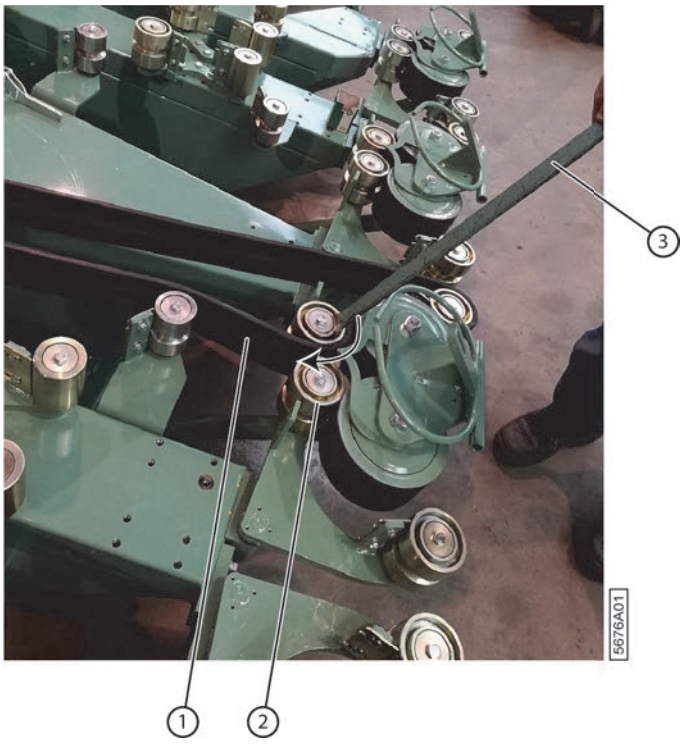


Fig. 170: Replacing a picking belt

CAUTION
2 persons are required to perform this task. Decide how you are going to divide up the work, prepare an action plan, and discuss all actions beforehand with each other. Keep other persons away from the machine.

1. Switch OFF the machine safely.
2. Remove all guides that are in the way, before removing the picking belt.
3. Release the detensioner of the picking belt.
4. Remove the picking belt.
5. Manually install the new picking belt as best as you can.
6. Switch ON the machine again.
7. Activate the remote control.
8. Insert the belt puller into the schijfriem at the location where the picking belt has not yet touched the flat belt pulley.

9. Allow the 2nd person to rotate the picking belt in the desired direction via the remote control, and pull the picking belt backwards until it is on the flat belt pulley.
10. Repeat from step 8 until the entire picking belt is installed.

10.3.9 Checking the fuel level

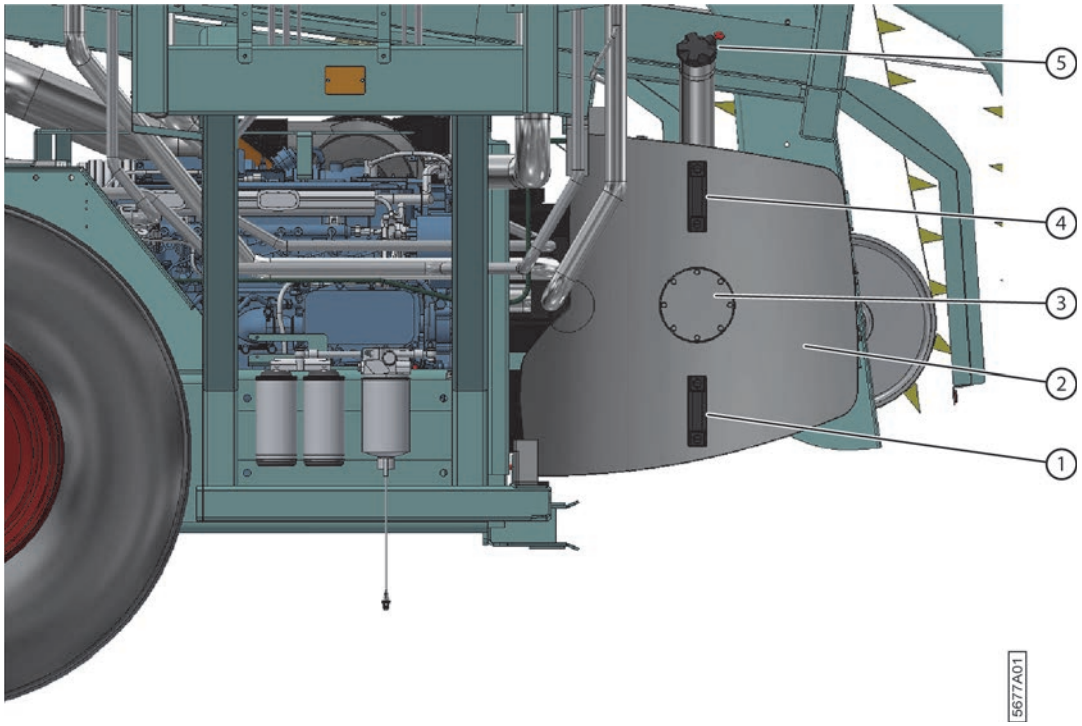


Fig. 171: Checking the fuel level

Check the fuel level on the level meters (1) and (4) mounted on the fuel tank (2).

See also
- 2.3.21 The fuel tank on page 38
- 10.3.10 Permitted fuel on page 210

10.3.10 Permitted fuel

Only sulphur-free fuels with the following specifications may be used:

Fuel	Specification
Diesel	EN 590 Sulphur <10 mg/kg
	ASTM D 975 Grade 1D S15
	ASTM D 975 Grade 2D S15 Sulphur <15 mg/kg
Light fuel oil	EN 590 quality Sulphur <10 mg/kg

The guarantee is rendered invalid if fuels that do not satisfy the requirements stated in this manual are used.

CAUTION
When selecting a fuel, also take the current local regulations into account.

See also
- 10.3.9 Checking the fuel level on page 210

10.3.11 Filling the fuel tank

It is recommended to fill the fuel tank with diesel at the end of the working day in order to prevent water vapour from being present in the tank.

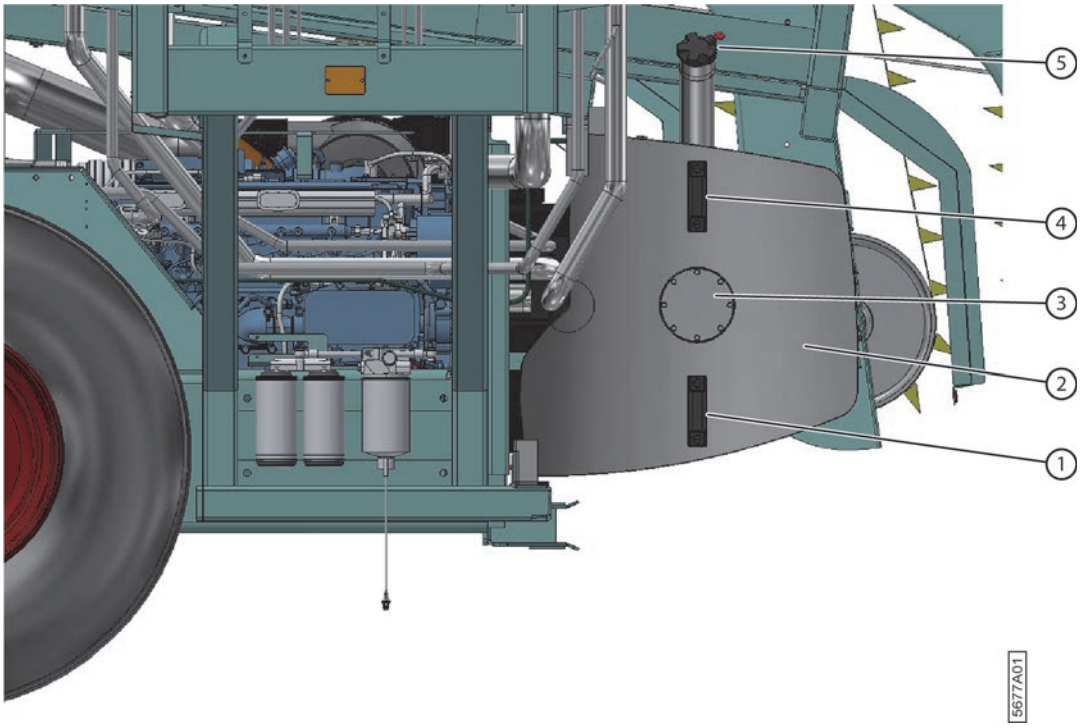


Fig. 172: Filling the fuel tank

1. Switch OFF the machine safely.

   CAUTION
   - Never fill the fuel tank in the vicinity of naked flames or sparks.
   - Never smoke when filling the fuel tank.
   - Immediately wipe away any spilled fuel. Fuel that ends up on hot parts can self-ignite.
   - Ensure that you are not overcome by fuel vapours.

2. Unscrew the filler cap from the fuel filler pipe (5).

   The filler cap can only be removed by using a key.
3. Fill the fuel tank (2) with diesel that has an optimal quality, and during the filling, use the level meters (1) and (4) that are mounted on the fuel tank to check the level of fuel.
4. Fill the fuel tank up to the top mark on the level meter (4). Never fill the fuel tank up to the brim! Space must always be provided for the expansion of the fuel!
5. Before driving away, check that there are no signs of leaks underneath the fuel tank.

10.3.12 Replacing an attachment on the conveyor belt

Executor: maintenance technician

Required:

- Attachment See the spare parts list for the correct reference.
- Special bolts M6 x 20. See the spare parts list for the correct reference.

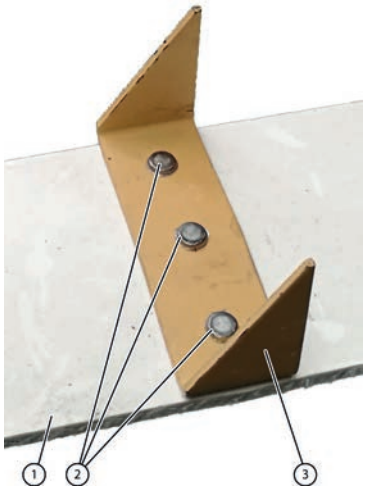


Fig. 173: Replacing attachment

1. Switch OFF the machine safely.
2. Grind off the rivets (2) on the side of the attachment (3).
   This prevents damage to the belt (1).
3. Install the attachment on the belt and secure it using the 3 bolts.
   You install the flat head of the bolt in the belt. On the other side of the belt, you install the attachment with lock nuts.

10.3.13 The exhaust gas post-treatment system

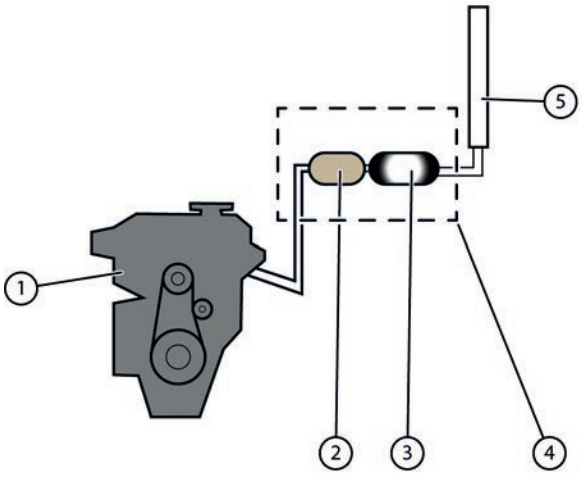


Fig. 174: Exhaust gas post-treatment system

The SCR (Selective Catalytic Reduction) system reduces the amount of nitrogen oxide emitted by the engine (1). For this, AdBlue is injected into the exhaust gas system. In the SCR catalyser (2), the AdBlue reacts with the nitrogen oxide that is present in the exhaust gas, to produce nitrogen and hydrogen.

In order to satisfy the European directives, if the exhaust gas post-treatment system (4) does not operate correctly, the relevant fault messages are displayed and limitations are implemented. For example, in the initial phase of incorrect operation, the engine power can be reduced and, in the next phase, the engine revs./minute can also be limited. If the engine continues to be used, it will come to a standstill, and can then only be restarted by DEUTZ!

The disabling of the power limitation is ONLY intended to allow the driver to bring the machine to a safe location!

The soot and fine particles are retained by the soot filter (3) and are stored there. If necessary, or after every 500 hours, a message is generated stating that the regeneration process must be performed. The regeneration combusts the soot in the soot filter. During the combustion, the temperature of the exhaust gases in the exhaust (5) increases to more than 600 °C.

After every regeneration, ash particles are left behind in the soot filter. A message is displayed if too much ash accumulates in the soot filter, and the soot filter must be replaced or cleaned. The replacement of a soot filter depends on the use of the engine and the message for this will be displayed between 5,000 and 10,000 hours or between 20 and 40 years for this machine.

NOTE
AdBlue is a registered trade name. The technical name is AUS32. In the United States, it is known as DEF (Diesel Exhaust Fluid), and in Brasil as ARLA32.

10.3.14 Performing the regeneration of the engine

After every 500 hours, a message is displayed on the control screen stating that a regeneration must be performed.

During a regeneration, the soot filter of the engine is cleaned. It is recommended to perform the regeneration as soon as possible after the message, in order to prevent certain engine protection functions from being activated, causing the engine power to be decreased.

WARNING

- The regeneration can ONLY be performed if a corresponding message is displayed. The engine temperature must be at least 75 °C! Closely monitor the exhaust system during the entire regeneration.
- During the regeneration, the exhaust reaches temperatures of approximately 600 °C!

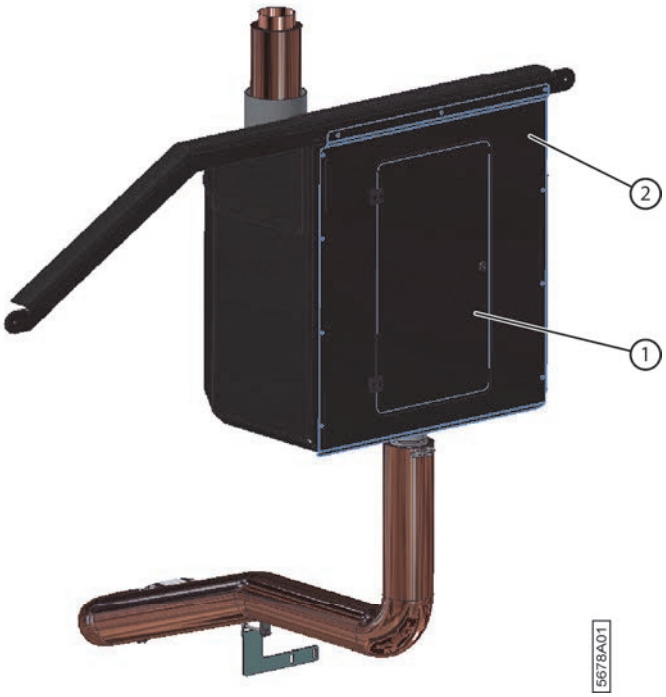


Fig. 175: Removing cabinet door and front plate (2018 version).

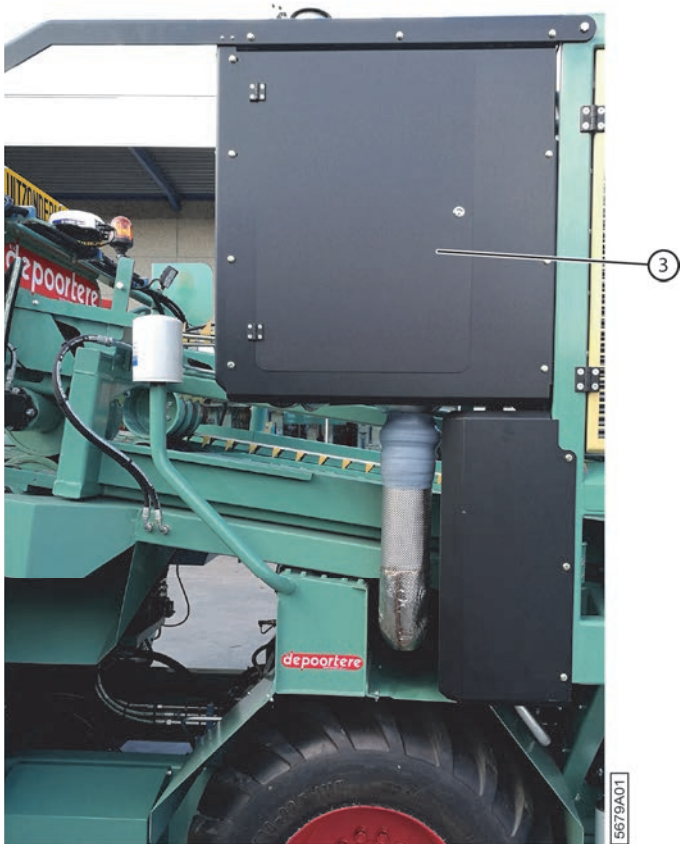


Fig. 176: Open the cabinet door (2019 version)

1. Place the machine on open land, at a safe distance from flammable objects.
2. Perform one of the following actions:

- 2018 version: Remove the cabinet door (1) with the front plate (2).
- 2019 version: Open the cabinet door (3).

For every regeneration of the catalyser (the first time after 500 hours), you must remove the entire door with the front plate in order to ensure that the generated heat can be optimally dispersed. Just opening the door, is not sufficient for regeneration! If the generated heat is not optimally dispersed, this can result in the cabling and the sensors becoming damaged.

3. Remove all of the dust and dirt beside the cabinet and exhaust.

WARNING
FIRE RISK! During a regeneration, dust and dirt can start to combust! Keep the fire extinguisher within easy reach!

4. Allow the engine to warm up until the coolant temperature has reached at least 75 °C.
   In the Field mode, or the Road mode, you can read the coolant temperature on the control screen.
5. Run the engine at idling speed.
6. Place the joystick in the neutral position,
7. Go to the menu via  .
8. Select  .
9. Select **Adjustment Engine**.
10. Select **Activate regeneration**.
    The regeneration starts. By pressing **Stop regeneration**, you can interrupt the regeneration. However, this is not recommended. Closely monitor the entire regeneration.

WARNING

During the regeneration, the exhaust reaches temperatures of approximately 600 °C!

You may not use the machine during the regeneration! Risk of burns!

10.3.15 Forcing the EAT system

If the requested regeneration is not performed, then the system will react after a certain time with a power limitation, and also later with an engine speed limitation. The power limitation caused by the EAT system can be temporarily disabled:

The engine and the EAT system (Exhaust After Treatment or exhaust gas post-treatment system) are synchronised and connected to each other by electronic control.

WARNING
The disabling of the power limitation is only available for a limited time, and is ONLY intended to enable the operator to bring the machine to a safe area!

1. Go to the menu via  .
2. Select  .
3. Select **Adjustment Engine**.
4. Select **Force EAT system?**.
5. Confirm in the dialog box.
   The **Force EAT system** button flashes.

10.3.16 Replacing a sensor

Executor: maintenance technician

1. Switch OFF the machine safely.
2. Measure and note the present position of the sensor.
3. Replace the sensor and install it in the same position as the previous sensor.
4. Test the operation of the sensor.

See also

- 2.3.35 Overview of the sensors on page 49

10.3.17 Replacing a fuse

The fuses are located in the electrical cabinet and in the cabin. For more information: see the electrical diagram.

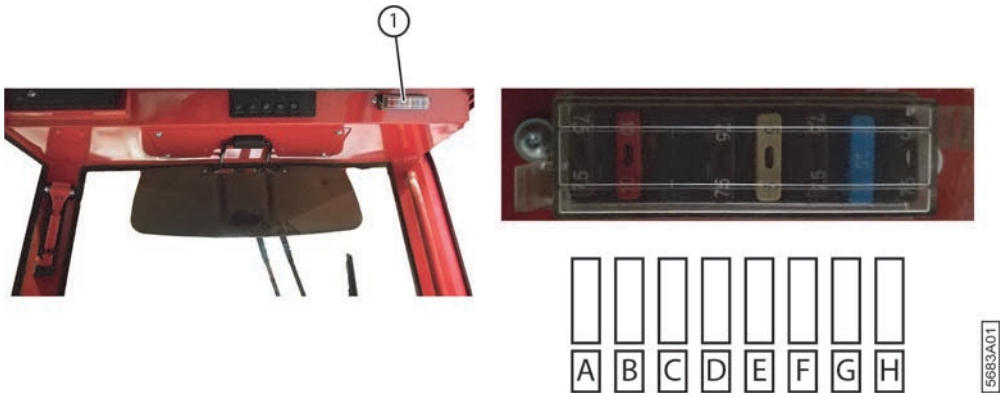


Fig. 177: Overview of the fuses in the cabin.

Nr.	Explanation
A	Windscreen washer
B	Windscreen wiper
C	Air conditioning system
D	Left-hand work light at the front, mounted on cabin
E	Radio
F	Right-hand work light at the front, mounted on cabin
G	Plug 12 V
H	Work light focused on the picking element, mounted on the cabin

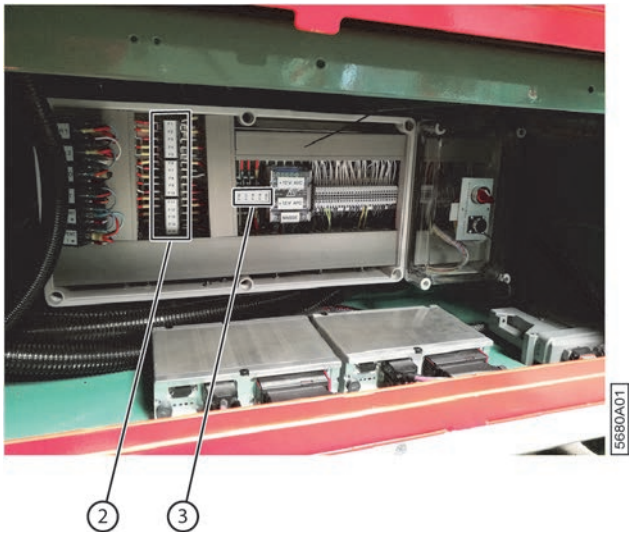


Fig. 178: Overview of the fuses in the electrical cabinet.

Nr.	Explanation	Value
FG1	General fuse battery	100A
F1	+ after ignition modules UPC20D / UST / Screen / Joystick	5A
F2	+ before ignition module UPC20D Gestion	30A
F3	Earth UPC20D Gestion	5A
F4	+ before ignition module UPC20D Extension	30A
F5	Earth UPC20D Extension	5A
F6	+ before ignition modules UST Extension	30A
F7	Earth UST Extension	5A
F8	+ after ignition module MC24	10A
F9	Exhaust gas post-treatment system sensors	15A
F10	Power supply sensors	5A
F11	Ignition switch key / engine module before ignition / flashing light	20A
F12	Engine module after ignition / parking brake / crushing rollers / sensor and compressor driver’s seat	30A
F13	Power supply cabin	30A
F14	Flashing light and work lights	20A
F15	+ before ignition modules UST Extension	5A
F16	Power supply AdBlue cabinet at the rear	30A
F17	Air conditioning compressor	10A
F18	Power supply sheet engine X23,28	10A
F19	+ before ignition engine module	30A
F20	Air conditioning fan	25A

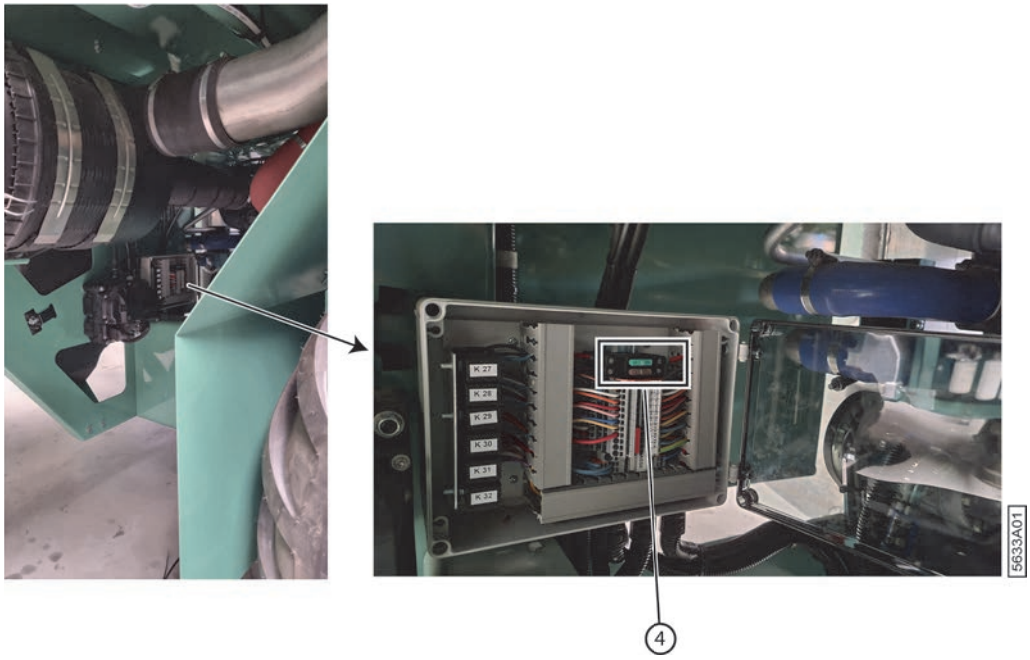


Fig. 179: Overview of the fuses for AdBlue

Nr.	Explanation	Value
F21	Heating resistance AdBlue	30A
F22	Heating valve AdBlue	5A

1. Perform one of the following actions:

Location	Fuses	Instruction
Cabin (1)	A - H	Remove the plastic protective cap.
Electrical cabinet (2) (3)	F1 - F15 F16 - F20	Close the cabin door. Open the cabinet. Remove the plastic protective cap.
AdBlue cabinet (4)	F21 - F22	Open the cabinet.

2. Replace the fuse.
3. Mount the plastic protective cap and/or close the cabinet.
4. Check the operation of the machine.

11 Troubleshooting

11.1 The engine does not start

Check the following:

- The level of fuel in the fuel tank
- The oil level
- The condition of the battery. Is the battery sufficiently charged?
- The position of the battery key
- The fuses

11.2 Performing tests

Perform a few tests to ascertain what does work and what does not work.

1. Perform the following tests:
   - Does everything work when driving forwards?
   - Does everything work when driving backwards?
   - Does everything work when the machine is stationary?
   - Can the conveyor belts rotate?
   - Can the picking element be raised or lowered?
2. Check the optimal operation of all sensors.

11.3 Check the voltage on the controllers

When the engine is not running, the voltage at the controllers is approximately 12.5 V. When the engine is running, the voltage is approximately 13.5 V.

1. Go to the menu via  .
2. Select  .
3. Check the voltage at the controllers: **Screen CEC90**, **UPC 20 Management**, **UPC 20 Ext**, **UST** and **MC024-120 (K400)**.

Voltage	Explanation	Cause	Solution
< 10.5 V	The controller reverts to safe mode, and no longer operates.	Battery defective. Alternator defective or not optimally adjusted.	Adjust or replace alternator. Replace battery.
Between 11 V and 15 V	The controller operates normally.		

Voltage	Explanation	Cause	Solution
< 15.5 V	The controller reverts to safe mode, and no longer operates.	Battery defective. Alternator defective or not optimally adjusted.	Adjust or replace alternator. Replace battery.

See also

- 8.2.55 Viewing the power supply to the controllers on page 117

11.4 General troubleshooting table

For fault messages that are displayed on the control screen, see 11.5 Troubleshooting table fault messages on the control screen on page 220.

Fault	Cause	Solution
A picking belt has broken	A foreign object was present in the flax.	Remove the foreign object from the flax. See 10.3.8 Replacing a picking belt on page 209.
	The picking belt is not correctly aligned.	Replace the picking belt. See 10.3.8 Replacing a picking belt on page 209. Align the picking belts correctly. See 9.4.9 Adjusting the alignment of the uppermost outermost picking belt on page 145. See 9.4.10 Adjusting the alignment of the lowermost outermost picking belt on page 146.
	The tension on the picking belt is too high.	Replace the picking belt. See 10.3.8 Replacing a picking belt on page 209. Adjusting the tension of the picking belt. See 10.2.24 Loosening / tightening an outermost picking belt on page 166. See 10.2.25 Loosening / tightening the innermost picking belt on page 166
The stems of the flax are not sufficiently broken.	The pressure on the crushing rollers is too low	Increase the pressure on the crushing rollers. See 9.2.4 Adjusting the pressure of the crushing rollers on page 134.
The crushing rollers do not rotate.	The screw conveyor is blocked.	Check where the screw conveyor is blocked, and unblock the screw conveyor.

11.5 Troubleshooting table fault messages on the control screen

View the active fault message, see 8.2.9 Viewing an active fault message on page 94 or view the history of the fault messages, see 8.2.57 Viewing the history of the fault messages on page 118.

All fault messages for the engine are displayed in the form of a SPN code or a FMI code on the screen. For explanation relating to the cause and the solution, see 11.6 Overview of DEUTZ engine faults on page 225.

The other faults are displayed without SPN code or FMI code on the screen. You can find an overview in the table below.

Nr.	Message / Fault	Cause	Solution
-	**Engine protection fault**		See 11.6 Overview of DEUTZ engine faults on page 225.
-	**Regeneration DPF required**	Regeneration of the soot filter is necessary.	See 10.3.14 Performing the regeneration of the engine on page 213.
-	**DPF maintenance required**		Contact DEUTZ.
-	**Regeneration DPF is active**	-	-
-	**Regeneration successfully performed!**	-	-
-	**Engine power limitation due to damage to EAT (Exhaust After Treatment)**	EAT damaged.	Contact DEUTZ.
-	**Significant limitation engine power due to damaged EAT (exhaust gas after-treatment system)**	EAT damaged.	Contact DEUTZ.
-	**Quality AdBlue not OK Engine power limitation**	Quality of AdBlue unsatisfactory.	Drain the AdBlue tank and fill the AdBlue tank with quality AdBlue.
-	**Quality AdBlue not OK Significant engine power limitation**	Quality of AdBlue unsatisfactory.	Drain the AdBlue tank and fill the AdBlue tank with quality AdBlue.
-	**Level of AdBlue too low Engine power limitation**	AdBlue level too low.	See 10.2.43 Topping up the AdBlue tank on page 174.
-	**Level of AdBlue too low Significant engine power limitation**	AdBlue level too low.	See 10.2.43 Topping up the AdBlue tank on page 174.
-	**Level of AdBlue low**	AdBlue level too low.	See 10.2.43 Topping up the AdBlue tank on page 174.
-	**Operation of SCR is not optimal Limitation engine power**	Operation of SCR is not optimal.	Contact DEUTZ.
-	**Operation of SCR is not optimal Significant limitation engine power**	Operation of SCR is not optimal.	Contact DEUTZ.
-	**SCR fault**	Operation of SCR is not optimal.	Contact DEUTZ.
A-100	**Power supply too low UPC20D Management**	During starting: battery is not sufficiently charged During operation: alternator defect	See 11.3 Check the voltage on the controllers on page 219.
A-101	**Power supply too high UPC20D Management**	Power supply too high.	See 11.3 Check the voltage on the controllers on page 219.
A-102	**Difference +BAT/+APC UPC20D Management**	Too large a difference between the battery voltage and the voltage after the ignition switch on UPC20D Gestion.	See 11.3 Check the voltage on the controllers on page 219 and check the wiring of the circuit that has a deviating value.
A-110	**Power supply too low UPC20D Ext**	During starting: battery is not sufficiently charged During operation: alternator defect	See 11.3 Check the voltage on the controllers on page 219.
A-111	**Power supply too high UPC20D Ext**	Maximum voltage on UPC20D Ext exceeded.	See 11.3 Check the voltage on the controllers on page 219.
A-112	**Difference +BAT/+APC UPC20D Ext**	Too large a difference between the battery voltage and the voltage after the ignition switch on UPC20D Ext.	See 11.3 Check the voltage on the controllers on page 219.

Nr.	Message / Fault	Cause	Solution
A-120	**Power supply too low UST Ext**	During starting: battery is not sufficiently charged. During operation: alternator defect	See 11.3 Check the voltage on the controllers on page 219.
A-121	**Power supply too high UST Ext**	Maximum voltage on UST Ext exceeded.	See 11.3 Check the voltage on the controllers on page 219.
A-122	**Difference +BAT/+APC UST Ext**	Too large a difference between the battery voltage and the voltage after the ignition switch on UPC20D Gestion.	See 11.3 Check the voltage on the controllers on page 219.
A-130	**Power supply too low MC024-120 Ext**	During starting: battery is not sufficiently charged. During operation: alternator defect	See 11.3 Check the voltage on the controllers on page 219.
A-131	**Power supply too high MC024-120 Ext**	Maximum voltage on MC024-120 Ext exceeded.	See 11.3 Check the voltage on the controllers on page 219.
A-500	**Power supply too low screen**	During starting: battery is not sufficiently charged. During operation: alternator defect	See 11.3 Check the voltage on the controllers on page 219.
A-501	**Power supply too high screen**	Maximum voltage on MC024-120 Ext exceeded.	See 11.3 Check the voltage on the controllers on page 219.
C-100	**CAN communication Screen**	CAN communication with the screen is no longer possible.	Check the cabling to the controller.
C-101	**CAN communication UPC20D Ext**	CAN communication with UPC20D is no longer possible.	Check the power supply. Check the cabling to the controller.
C-102	**CAN communication UST Ext**	CAN communication with UST Ext is no longer possible.	Check the power supply. Check the cabling to the controller.
C-103	**CAN communication MC024-120 Ext**	CAN communication with MC024-120 Ext is no longer possible.	Check the power supply. Check the cabling to the controller.
C-104	**CAN communication Joystick**	CAN communication with the joystick is no longer possible.	Check the power supply. Check the cabling to the controller.
C-200	**CAN communication Engine**	CAN communication with the engine is no longer possible.	Check the cabling to the controller.
E-100	**Accelerator pedal sensor fault**	Wiring sensor defect. Sensor defect.	Check the cabling and the sensor.
E-101	**Position picking element sensor fault**	Wiring sensor defect. Sensor defect.	Check the cabling and the sensor.
E-102	**Position sensor spreading tables**	Not applicable.	Not applicable.
E-106	**Driving pump feed pressure sensor fault**	The feed pressure sensor for the Drive pump is defective.	Replace the feed pressure sensor.
E-107	**Harvesting pump feed pressure sensor fault**	The feed pressure sensor for the Harvest pump is defective.	Replace the feed pressure sensor.
E-108	**Hydraulic oil temperature sensor fault**	Wiring sensor defect. Sensor defect.	Check the cabling and the sensor.
E-109	**Picking element sensor fault**	Wiring sensor defect. Sensor defect.	Check the cabling and the sensor.
E-120	**Driving speed sensor fault**	Fault sensor wheel motor.	Test the sensor. Replace the sensor as soon as possible.
G-100	**Engine oil pressure too low**	The oil pressure for the engine is not correct.	See the user manual for the DEUTZ engine.

Nr.	Message / Fault	Cause	Solution
G-101	**Level of hydraulic oil low**	Leaks	Check the hydraulic system for leaks See 10.2.51 Checking the hydraulic system for leaks on page 180 Check the oil level in the hydraulic tank, and top up as required. See 10.2.48 Checking the level of the hydraulic oil on page 177.
G-103	**Temperature coolant engine high**	The temperature of the coolant for the engine is not correct.	See the user manual for the DEUTZ engine.
G-104	**Temperature coolant engine very high**	The temperature of the coolant for the engine is not correct.	See the user manual for the DEUTZ engine.
G-105	**Temperature hydraulic oil high**	The radiator for the hydraulic oil does not operate efficiently. Quality of the hydraulic oil is not optimal.	See 10.2.9 Dedusting the radiators (using compressed air) on page 156. See 10.2.49 Analysing the hydraulic oil on page 178.
G-106	**Temperature hydraulic oil very high**	The radiator for the hydraulic oil does not operate efficiently. Quality of the hydraulic oil is not optimal.	See 10.2.9 Dedusting the radiators (using compressed air) on page 156. See 10.2.49 Analysing the hydraulic oil on page 178.
G-107	**Sensor(s) deactivated**	Sensors have been disabled via the control screen.	If sensors are defective, you must replace them as soon as possible. Activate all sensors.
G-117	**Air filter clogged**	The air filter is dirty.	Clean or replace the air filter. See the user manual for the DEUTZ engine.
G-118	**Oil filter clogged**	The hydraulic filter is dirty.	Replace the hydraulic filter. See 10.2.57 Replacing the hydraulic suction filter on page 182.
G-121	**Feed pressure too low Driving pump**	The feed pressure for the Drive pump is low.	Switch OFF the machine safely. Check the hydraulic system for leaks. Check the level of hydraulic oil. See 10.2.48 Checking the level of the hydraulic oil on page 177 Contact Depoortere NV.
G-122	**Feed pressure much too low Driving pump**	The feed pressure for the Drive pump is much too low.	Switch OFF the machine safely. Check the hydraulic system for leaks. Check the level of hydraulic oil. See 10.2.48 Checking the level of the hydraulic oil on page 177 Contact Depoortere NV.

Nr.	Message / Fault	Cause	Solution
G-123	**Feed pressure too low Harvesting pump**	The feed pressure for the Harvest pump is low.	Switch OFF the machine safely. Check the hydraulic system for leaks. Check the level of hydraulic oil. See 10.2.48 Checking the level of the hydraulic oil on page 177. Contact Depoortere NV.
G-124	**Feed pressure much too low Harvesting pump**	The feed pressure for the Harvest pump is much too low.	Switch OFF the machine safely. Check the hydraulic system for leaks. Check the level of hydraulic oil. See 10.2.48 Checking the level of the hydraulic oil on page 177. Contact Depoortere NV.
G-125	**Pressure too high picking element**	Picking element has jammed.	If this due to a blockage, see 8.2.29 Removing a blockage on the picking belts by machine (in the Field mode) on page 109 or 8.2.30 Removing a blockage manually on page 109.
G-126	**Blockage spreading tables**	Blockage at end of spreading tables (flax-laying belts).	Remove the blockage. See 8.2.30 Removing a blockage manually on page 109.
G-127	**Road mode active: Retract tables!**	-	Retract the tables. See 8.2.32 Retracting or extending the tables in relation to the machine on page 111.
G-128	**Passenger's seat sensor not detected**	The driver is not present on the driver’s seat. The sensor in the driver’s seat is defective.	Sit in the driver’s seat. Replace the sensor.
G-129	**Field Driving mode: Pedal Road Driving mode: Pedal**	-	-
G-130	**Field Driving mode: Joystick Road Driving mode: Pedal**	-	-
G-131	**Field Driving mode: Pedal Road Driving mode: Joystick**	-	-
G-132	**Field Driving mode: Joystick Road Driving mode: Joystick**	-	-
G-133	**Field Driving mode: Unknown Road Driving mode: Unknown**	-	-
G-500	**Problem writing date/time**	A communications problem exists with the “Real Time Clock” electronic component.	Contact Depoortere NV.
G-501	**Video switch initialisation problem**	Not applicable.	Not applicable.
G-502	**Initialisation fault flash memory**	There is a problem with the reading/ writing of the data (counters, ...) that is stored in the memory.	Contact Depoortere NV.
G-503	**Communication fault Limited operation**	The screen does not have access to the settings for the controller.	Contact Depoortere NV.
M-100	**Maintenance replace engine oil**	-	See the user manual for the DEUTZ engine.
M-101	**Maintenance hydraulic filter**	The filter is dirty.	See 10.2.32 Replacing the hydraulic high-pressure filter on page 170.

Nr.	Message / Fault	Cause	Solution
M-102	**Maintenance replace hydraulic oil**	The hydraulic oil is contaminated.	See 10.2.50 Replacing the hydraulic oil on page 179.
S-100	**Problem control Driving pump direction A**	There is a fault in the control for the Driving pump.	Check the values on the troubleshooting screen. See 8.2.51 Viewing the operation of the hydraulic pumps on page 116.
S-101	**Problem control Driving pump direction B**	There is a fault in the control for the Driving pump.	Check the values on the troubleshooting screen. See 8.2.51 Viewing the operation of the hydraulic pumps on page 116.
S-102	**Problem control picking element pump direction A**	There is a fault in the control for the picking element pump.	Check the values on the troubleshooting screen. See 8.2.51 Viewing the operation of the hydraulic pumps on page 116.
S-103	**Problem control picking element pump direction B**	There is a fault in the control for the picking element pump.	Check the values on the troubleshooting screen. See 8.2.51 Viewing the operation of the hydraulic pumps on page 116.
S-104	**Problem control EDC pressure limiter**	There is a fault in the control for the EDC pressure limiter.	Check the values on the troubleshooting screen.
S-105	**Problem control EDC flow rate controller**	There is a fault in the control for the EDC flow rate controller.	Check the values on the troubleshooting screen.
S-106	**Problem control valve controller raising/lowering picking element**	There is a fault in the control for the valve controller raising/lowering picking element.	Check the values on the troubleshooting screen.

See also

- 11.6 Overview of DEUTZ engine faults on page 225

11.6 Overview of DEUTZ engine faults

An overview of the most common engine faults from DEUTZ is provided below.

Code	Fault message	Explanation	Possible cause	Possible solution
SPN111 FMI1	Coolant level too low.	Level of coolant for the engine is too low	Coolant has evaporated or there is a leak.	Top up level of coolant for the engine.
SPN97 FMI12	Water in fuel level prefilter; maximum value exceeded	Too much water present in water separator filter for the fuel.	Too much condensation in the fuel tank. Quality of fuel is not optimal.	Drain the water.
SPN107 FMI0	Air filter differential pressure; air filter cologged	The air filter for the engine is dirty.	Too much dust in the air filter. Air filter not cleaned frequently enough.	Clean air filter or replace air filter.
SPN94 FMI1	Low fuel pressure	Low fuel pressure.	Not enough fuel.	Check the fuel level and, if necessary, top it up. Check the fuel feed circuit to the engine.
SPN524132 FMI0	Fuel low pressure upstream fuel low pressure pump	Low fuel pressure.	Not enough fuel to the fuel pump. Fuel pump defective.	Check the fuel level and, if necessary, top it up. Check the fuel feed circuit to the engine.

Code	Fault message	Explanation	Possible cause	Possible solution
SPN100 FMI1	Low oil pressure	Low oil pressure.	Not enough oil. Insufficient suction of the oil.	Check the oil level and, if necessary, top it up. Check the engine for an oil leak. Check the oil filter and, if necessary, replace it.
SPN110 FMI0	High coolant temperature	Koelvloeistof-temperatuur te hoog.	Te weinig koelvloeistof. Vervuilde radiator. Defecte ventilator.	Controleer het koelvloeistofniveau. Reinig de radiator. Controleer de werking van de ventilator.

You can consult the comprehensive overview of engine faults online by going to https://serdia.deutz.com/fileadmin/contents/shared/Zwischenspeicher/DTCList_MD1_DOC_DPF_DE_EN.pdf or via:

1. Go to serdia.deutz.com.
2. Select **SerDia 2010**.
3. Select the **DTCList_MD1_DE_EN.pdf** file.

See also

- 11.5 Troubleshooting table fault messages on the control screen on page 220

11.7 Troubleshooting table air conditioning system (manual type)

Fault	Cause	Solution
Insufficient air flow	• Dirty air filter • Dirty waste air outlet filter	• Clean the air inlet filter See 10.2.74 Cleaning the air filter of the air conditioning system on page 197. • Clean the waste air outlet filter.
Insufficient cooling	• Inadequate operation of the nozzles • Dirty microstop filters • Microstop filter is not correctly installed	• Check the nozzles. See 10.2.73 Checking the installation of the cassette for the air conditioning system on page 197. • Replace the microstop filters. See 10.2.76 Replacing the microstop filters of the air conditioning system on page 198. • Install the microstop filter correctly. Microstop filters on the roof underneath the protective cover: red arrows must point towards the front of the machine. Microstop filter beside the reservoir: red arrows must point upwards.
The red lamp is lit	• The air filter is dirty. • The air filter is worn.	• Clean the air filter. See 10.2.74 Cleaning the air filter of the air conditioning system on page 197. • Replace the air filter 10.2.75 Replacing the air filter of the air conditioning system on page 198.

Fault	Cause	Solution
Water enters the cabin (only during rainy weather)	• The cassette is not correctly mounted. • The air conditioning system is not correctly mounted or not correctly sealed.	• Check that the cassette is correctly mounted. See 10.2.73 Checking the installation of the cassette for the air conditioning system on page 197. • Contact your distributor.
Water enters the cabin (only during dry weather)	• The microstop filters were not replaced at the beginning of the season. • There is a problem with the pump. • The drain pipe is leaking or has been crushed.	• Replace the microstop filters. See 10.2.76 Replacing the microstop filters of the air conditioning system on page 198. • Check the operation of the pump. • Check that the drain pipe is clear and not crushed. • Check that the connections to the drain pipe are not blocked.

12 Taking out of service and scrapping

12.1 Taking the machine out of service

1. Activate the parking brake.
2. Use the ignition key to switch OFF the machine.
3. Remove the ignition key.
4. Wait at least 3 minutes after the engine has stopped.
5. Use the battery key to switch OFF the battery, and remove the battery key.

12.2 Scrapping the machine

1. Take the machine out of service. See 12.1 Taking the machine out of service on page 229.
2. Remove the battery.
3. Remove all hazardous substances from the machine. See 4.7 Hazardous substances on page 69.
   - 12.2.1 Removing and draining the AdBlue tank on page 229.
   - 12.2.2 Draining the hydraulic oil tank on page 230.
   - Remove and drain the windscreen washer reservoir.
   - 12.2.3 Draining the fuel tank on page 231.
   - Lubricating grease.
   - Engine oil. See the user manual for the DEUTZ engine.
   - Engine coolant. See the user manual for the DEUTZ engine.
4. Remove all hydraulic pipes and hydraulic filters and collect all oil.
5. Remove all electrical cables and electrical components.
6. Remove all plastic components.
7. Remove the wheels and remove the rubber tyres.
8. Dispose of the various types of materials in accordance with the current local statutory regulations.

12.2.1 Removing and draining the AdBlue tank

Carefully read the Safety Information Sheet for the AdBlue used.

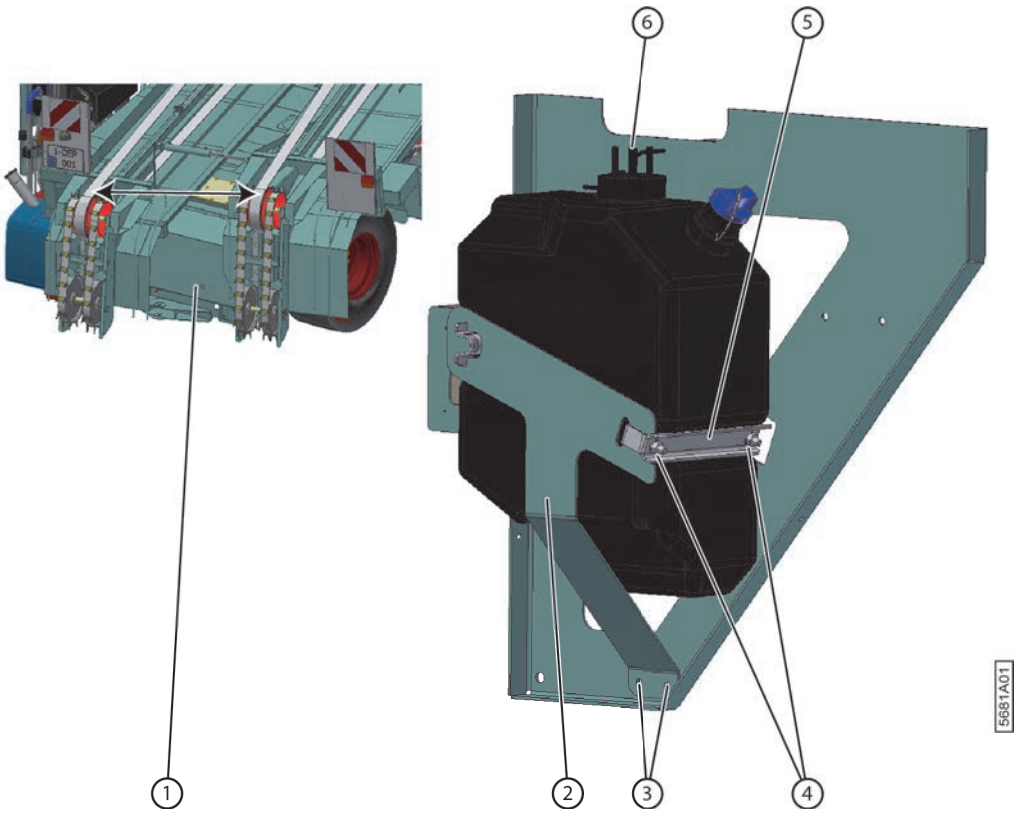


Fig. 180: Removing AdBlue tank

1. Ensure that there is enough space between the tables.
2. Position the tables so that the AdBlue tank is accessible.
3. Switch OFF the machine safely.
4. Disconnect all connections (6) above the AdBlue tank.
5. Disconnect the plate (1) from the chassis by unscrewing the bolts.
6. Undo the bolts (3) and remove the plate (2).
7. Undo the bolts (4) and remove the bracket (5).
8. Remove the tank from the machine.
9. Dispose of the AdBlue liquid in accordance with the current local statutory regulations.

12.2.2 Draining the hydraulic oil tank

The drain plug is located underneath the hydraulic oil tank.

Carefully read the Safety Information Sheet for the hydraulic oil used.

Drain the hydraulic tank when the oil is hot, then it flows better.

ENVIRONMENT
Spilled liquid must be removed in accordance with the regulations for the liquid and in accordance with the current local statutory regulations.

Required equipment:

- Drain tray with minimum capacity of 150 litres.
- Drain hose with a minimum inside diameter of 3/4” (20 mm).
- Cleaning rags

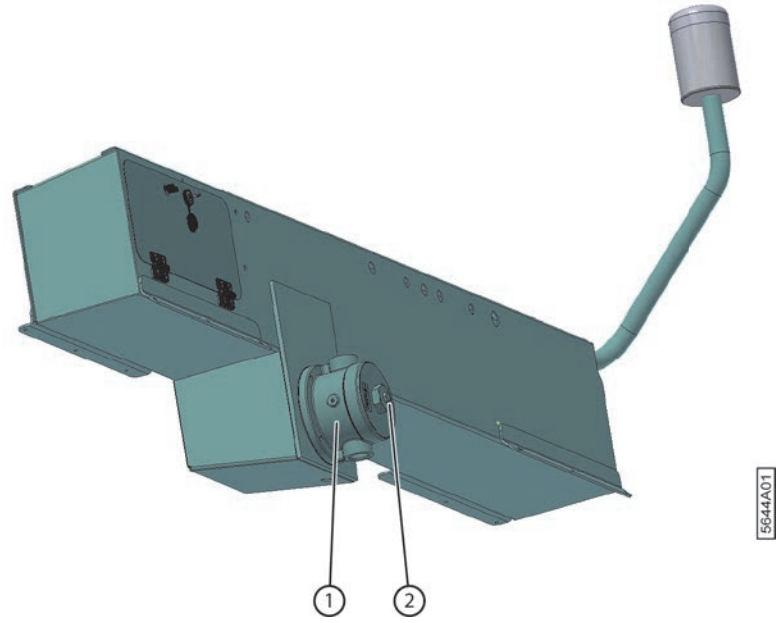


Fig. 181: Draining the hydraulic oil tank

1. Place the drain tray underneath the drain plug (1) of the hydraulic tank (2).
2. Unscrew the drain plug and collect the hydraulic oil.

12.2.3 Draining the fuel tank

Carefully read the Safety Information Sheet for the fuel used.

Required equipment: drain tray (a full fuel tank contains 450 l)

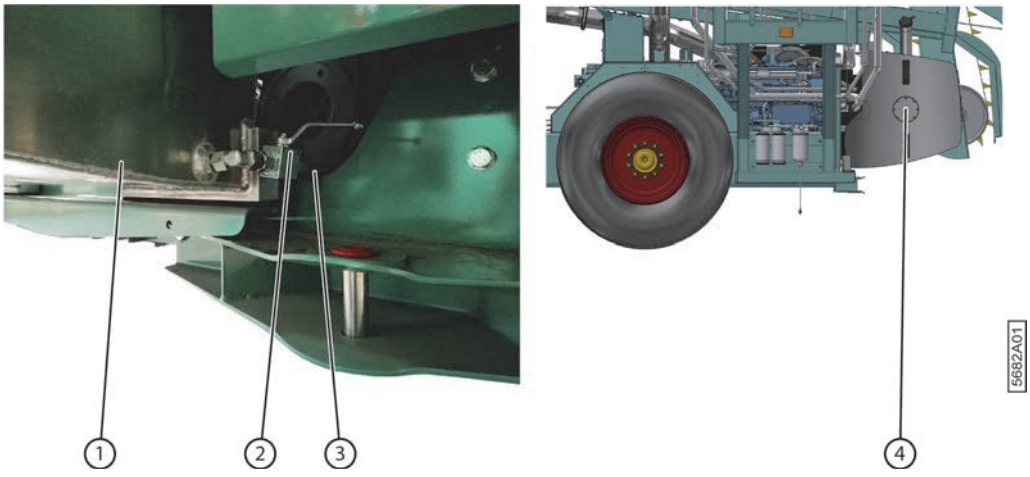


Fig. 182: Draining fuel tank

1. Close the valve (2). When the valve is closed, it is perpendicular to the pipe.
2. Place a drain tray underneath the valve.
3. Disconnect the pipe (3) after the valve, and collect the fuel.
4. After the fuel tank has drained, you open the inspection hatch of the fuel tank.
5. Drain the fuel tank further.
6. Clean the tank.

ENVIRONMENT
Spilled liquid must be removed in accordance with the regulations for the liquid and in accordance with the current local statutory regulations.

13 Annexes

13.1 Guarantee conditions

See sales agreement

13.2 Liability

See sales agreement

13.3 EC declaration

EC DECLARATION OF CONFORMITY

IN ACCORDANCE WITH ANNEX II.1.A. OF THE DIRECTIVE 2006/42/EC

This declaration relates exclusively to the machine in the condition in which it was placed on the market, and excludes components that are added and/or operations performed subsequently by the end user.

Business name and full address of the manufacturer:

Depoortere NV	Kortrijkseweg 105 8791 Beveren-Leie Belgium

Name and address of the person authorised to compile the technical file. The person stated below is domiciled in the European Community:

Rik Depoortere	Kortrijkseweg 105 8791 Beveren-Leie Belgium

Description and identification of the machine:

Name	Self-propelled double flax picking machine
Function	The picking of the flax
Type	DAEAHY 2WD

This machine satisfies all of the provisions of the directives stated below:

2006/42/EC	Directive dated 17 May 2006 relating to machines, and to the amendment of directive 95/16/EC (revision)
2014/30/EU	Directive dated 26 February 2014 relating to the harmonisation of legislation for the member states pertaining to electromagnetic compatibility (revision)

Place: Beveren-Leie Date of drawing up the declaration: 1/01/2022	**Identity and signature** of person who, on behalf of the manufacturer or his proxy, is authorised to draw up the declaration  Managing director Rik Depoortere

13.4 Specific certificates and forms

Not applicable.

13.5 Initial settings

Not applicable.

13.6 User manual diesel engine

See supplied user manual diesel engine.

13.7 Overview of the filters

Air filter for the engine.

Fig. 183: Main element and safety element of air filter

Nr.	Reference Depoortere NV:	Description	More information
1	0500300001	Main element of air filter	See the user manual for the new part
2	0500300125	Safety element of air filter	The safety element is installed in the main element.

Engine

Fig. 184: Engine filters

Nr.	Reference Depoortere NV:	Description	More information
1	0500200110	Fuel filter (2 items)	See 13.6 on page 235
2	0500200120	Fuel pre-filter	See 13.6 on page 235
3	0500100110	Lubricating oil filter	See 13.6 on page 235

Fuel tank

Fig. 185: Venting filter for fuel tank

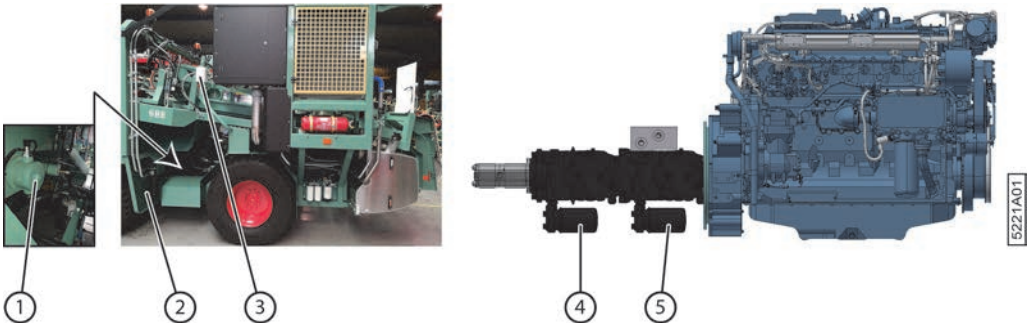
Nr.	Reference Depoortere NV:	Description	More information
1	0500200040	Venting filter for fuel tank	

AdBlue

Fig. 186: Location of the AdBlue filters

Nr.	Reference Depoortere NV:	Description	More information
1	0500400020	Venting filter AdBlue tank	This filter is mounted on the rear of the plate. Open the door of the engine compartment to access this filter.
2	0500400010	AdBlue pump filter	See the user manual for the DEUTZ engine.

Hydraulic filters



Nr.	Reference Depoortere NV:	Description	More information
-	0234515460	O-ring Ø 154.00 x 6.00 SHORE 70	This O-ring must be installed when the suction filter is replaced. Do not reinstall the O-ring supplied for the suction filter when replacing the filter element!
1	1210100000	Filter element Arlon 10µ	The suction filter filters impurities out of the hydraulic oil before this oil reaches the hydraulic tank
2	1212100080	High-pressure hydraulic filter	
l3	1210100050	Aerator	The aerator filters dust from the ambient air when compensating for the volume of required hydrauilc oil.
4	1211100010	Feed pressure filter for the Harvest pump	See 10.2.31 Replacing the feed pressure filters on page 169
5	1211100005	Feed pressure filter for the Drive pump	See 10.2.31 Replacing the feed pressure filters on page 169

Braking cocuit

Fig. 187: Brakes Filter cicuit

Nr.	Reference Depoortere NV:	Description	More information
1	0500200010	Venting filter	

13.8 Spare parts list

The spare parts list is supplied separately.

13.9 Maintenance sheet

Date	Executor	Maintenance performed

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