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Operating instructions MulchTec planter with carousel transplanting technology

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Contents

Intended use

This machine makes it possible to plant mechanically into a closed mulch cover. It does not matter whether it is a transfer mulch cover, an in-situ mulch cover or a combination of both. The mulch layer is cut open by a specially developed cutting unit. A downstream planting unit enables young plants to be planted. At the same time, under-root fertilisation with commercial fertilisers can be applied in the planting row. Planting in uncovered soil is just as possible with this technology.

Any use beyond these specifications is considered improper use. The manufacturer is not liable for any resulting damage. The risk is borne solely by the operator.

Intended use also includes compliance with the operating, maintenance and service instructions specified by the manufacturer. Only original parts from the manufacturer may be used as spare parts.

The mulch planter (hereinafter referred to as **MulchTec planter)** may only be used, adjusted and maintained by persons who are familiar with the characteristics of the machine and have been informed of the dangers.

When using the machine, the instructions for transport, operation and safe handling, as described in the operating instructions and indicated by the manufacturer in the form of warnings and warning symbols on the machine, must be followed.

The generally recognised safety, occupational health and road traffic regulations, such as the relevant accident prevention regulations, must be observed when using the machine.

Unauthorised modifications to the machine are not permitted. They exclude the manufacturer's liability for any resulting damage.

Foreseeable misuse is indicated by warnings and warning symbols. We are very grateful for any suggestions gained from practical experience. We ask for appropriate feedback.

Requirements for the operating personnel

Thorough reading of the operating and maintenance documentation

Persons working with this machine must be familiar with the dangers involved in handling the machine. The operating and specialised personnel must have read and understood the operating instructions, in particular the safety instructions, as well as the applicable regulations before starting work.

The operating instructions and applicable regulations must be kept in such a way that they are accessible to operating and specialised personnel.

It may be necessary to revise individual passages or chapters due to new information. These will be sent to the operator electronically with the request to print out the pages accordingly and incorporate them into the operating instructions. Some passages or notes in the documentation refer to devices that are offered as options. Please understand that separate documentation is not created for each variant.

These operating instructions are intended for:

Operating personnel: These persons have been instructed on the unit and informed about possible hazards in the event of improper behaviour.

Specialised personnel: These persons have the appropriate technical training and several years of professional experience. They are able to assess and carry out the work assigned to them, in particular the setting parameters, and recognise potential hazards.

Wear suitable clothing/protective equipment

Loosely worn clothing increases the risk of being caught or wound up on rotating parts and the risk of getting caught on protruding parts. This can result in serious injuries.

- Wear tight-fitting clothing.
- Avoid clothing with straps, fringes or parts that could get caught.
- Do not wear rings, necklaces or other jewellery.
- Wear safety shoes and gloves.
- Use hearing protection and, depending on the weather, a dust mask if necessary

Observance of general regulations

Observe the following regulations and guidelines, among others:

- Legal and local regulations for accident prevention
- Legal and local regulations on environmental protection
- Country-specific, organisation-dependent provisions

Emergency shutdown

In an emergency, stop the tractor and switch off the PTO shaft and the tractor.

Instruction of employees

The manufacturer's employees instruct the operator in the operation and maintenance of the MulchTec planter. The operator must ensure that new operating and maintenance personnel are instructed to the same extent and with the same care in the operation and maintenance of the machine, taking these operating instructions into account.

Requirements for the tractor unit

The individual cutting motors on this machine are driven electrically via a generator with gearbox. The generator should deliver 8 kW of power (at idle speed), which implies the following requirements for the tractor:

- Working speed at the PTO shaft: min. 300 rpm
- Required power at the PTO shaft >= 12 kW
  (The power at the PTO shaft usually corresponds to 75% of the tractor power. At 60 kW, this is still 45 kW).

The tractor must be able to lift and hold the weight of the machine with the appropriate centre of gravity.

Depending on the distance to be planted in the row, it is advantageous for the working speed of the planting personnel to drive at supercreeper speed.

The tractor requires a 3-pin 12 volt socket (DIN 9680) for connecting the control unit and as a starting aid to start the generator from the cab.

General information and work instructions

Hazard symbols

You will find these symbols in all safety instructions in these operating instructions that indicate particular dangers to persons, property or the environment. They are also affixed to the machine in the appropriate places.

Observe these instructions and exercise particular caution in these cases. Pass on all safety instructions to other users.

Danger in general - hazard
Read operating instructions

Danger due to running V-belts
Warning of hand injury

Crushing
Warning against - Hand injury

Danger from spinning parts
Keep your **distance**

- Danger from running blades
Warning of hand injury

Explanation of the symbols and structure of the safety instructions

DANGER
DANGER - The signal word indicates a hazard with a high degree of risk which, if not avoided, will result in death or serious injury.

WARNING
WARNING - The signal word indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

CAUTION
CAUTION - The signal word indicates a hazard with a low level of risk which, if not avoided, may result in minor or moderate injury.

NOTE
NOTE - The signal word indicates a hazard with a high degree of risk which, if not avoided, will result in material damage.

All warnings in these instructions are emphasised with pictograms and signal words. The pictogram and the signal word give you an indication of the severity of the danger.

Warnings are displayed as follows:

	SIGNAL WORD
DANGER SYMBOL	Type and source of danger
	Consequence of the danger
	►Measures to avert the danger

General safety instructions

Only use the machine as intended.

	Danger
	Swinging up of the machine when lifting, centrifugal forces in curves

	**Bodily injury to persons due to collision with objects when turning (trees, fences, etc.) or falling down**
	Therefore applies: Before turning or hydraulically lifting the machine, all employees must get off the machine. You may only climb onto the machine to operate the lowered planting equipment

Employees may only be on the lowered planting machine during the planting process; during all other processes (e.g. turning, transport, etc.) no persons may be on the machine.

Only when the machine is used in the field may planting boxes be placed on the box storage.

When parking the machine or carrying out maintenance work, always lower the front and rear supports and lock them properly. This applies in particular if the machine is raised hydraulically in order to work on machine parts from the front or below (e.g. manually clearing possible blockages with mulch from the cutting units).

Never reach into running cutting discs or lift the side protective discs while the cutting discs are running or overrunning.

Regularly check the fastening screws for individual machine elements and connecting bolts for tightness and/or correct seating.

Do not clean the machine with a high-pressure cleaner. Warning symbols could become detached, grease in bearing bushes could be washed out and the generator could be damaged.

Transport of the machine

Loading the machine

Loading and securing the loaded machine for transport purposes is at your own risk. It is best to transport the machine on a trailer, pulling it onto the trailer with a winch. If it is to be lifted onto transport surfaces by forklift, fasten slings and **loops around the side frame in such a way** that the machine can be lifted with its centre of gravity horizontal.

Lifting with slings around the side frame

Attaching the machine to the three-point hitch

The machine may only be attached to the tractor's three-point linkage using standard category 2 and 3 components.

Transport positions of the machine when attached to the tractor

When transporting the machine on the towing vehicle, the crate storage must be properly folded in, otherwise road traffic may be jeopardised. Crates and persons must not be transported on the machine in road traffic.

Switching off the machine

- Drive the machine to a suitable (level, roofed) location
- Lower the machine so that the planting coulters do not rest on the ground
- Fold out the rear supports and secure with bolts
- Lower the front supports and secure with bolts
- Now unload the machine and loosen the upper and lower links, as well as the PTO shaft and all electrical connections to the tractor
- Insert plug for rear lights, 12 volt connection and connecting plug for electrical distribution of the machine into the side of the frame to ensure minimum protection from rain
- Store the operating housing with screen in a dry, frost and dust-free place

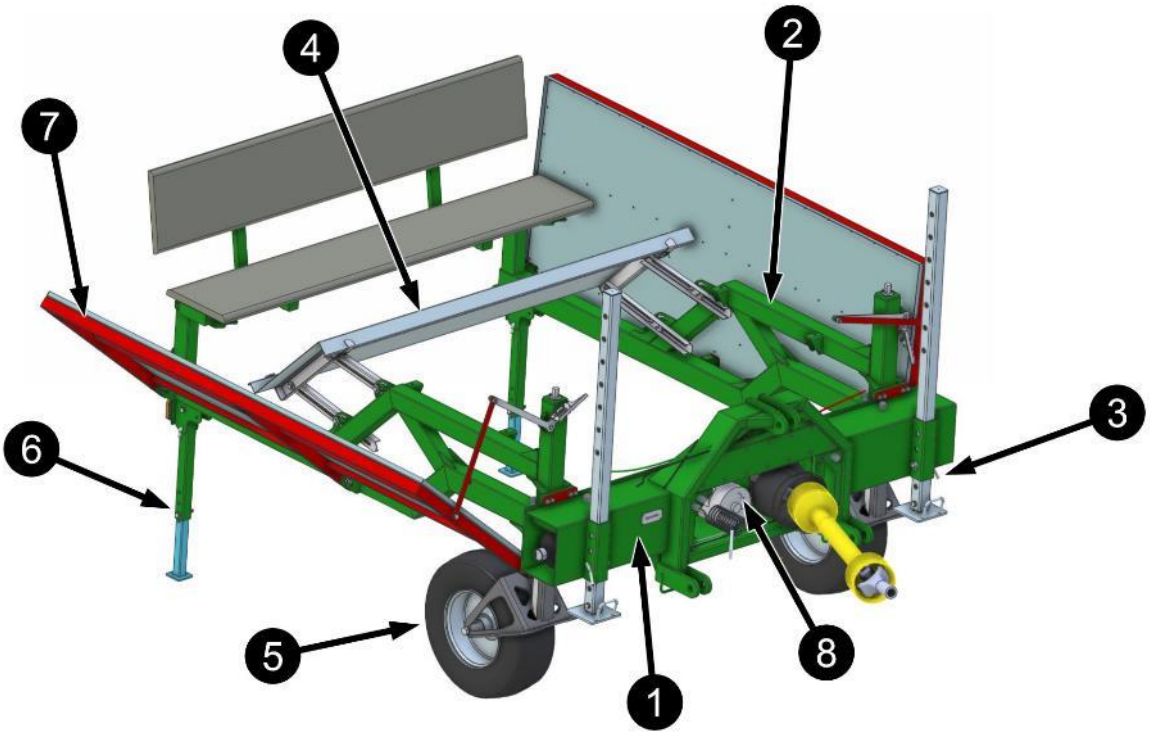
Machine in the centre of gravity

Description of the machine

Structure of the machine - The machine essentially consists of three parts.

- The frame (front frame with the two side frames)
- The cutting units are the core of the machine.
- The planting units enable planting in the cut mulch

Structure of the frame



The base frame of the machine

To 1: Front frame or main frame with three-point suspension - this also houses the generator with gearbox, the electrical control system with distribution, pneumatic tank and pneumatic control system

Re 2: Left and right side frames with brackets for the crate shelves, the planting tray and the bench

Re 3: Front support (main support) - safety device and assembly aid, but also required for parking the machine

To 4: Planting table

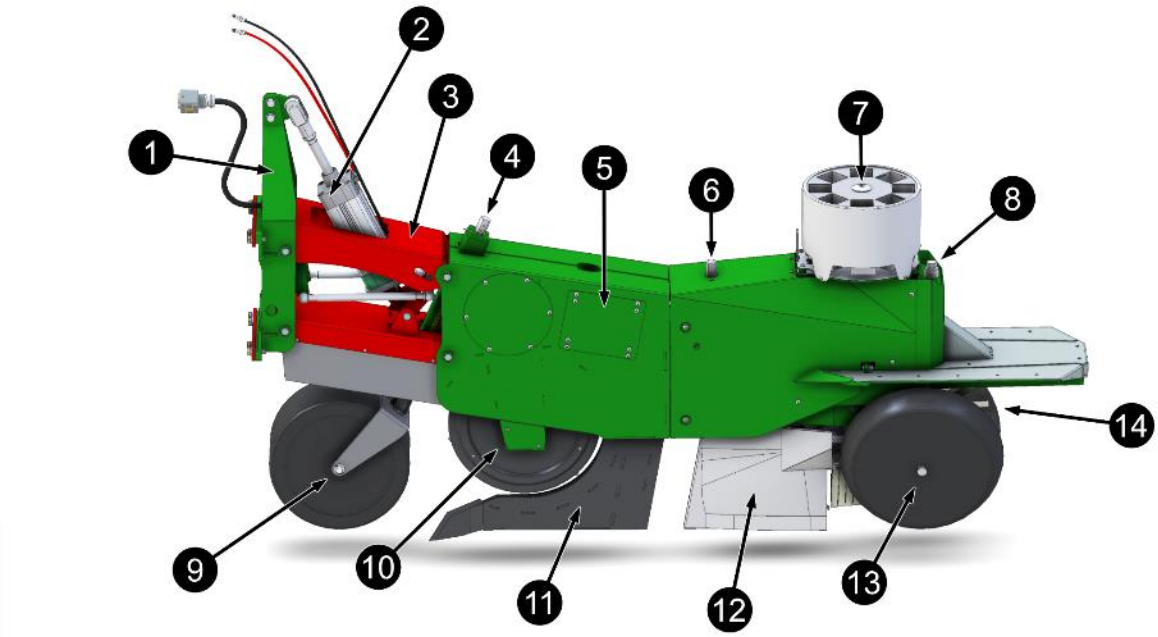
Re 5: Track wheels left and right (height-adjustable)

Re 6: Rear support (for parking the machine)

Re 7: Fold-out or fold-in frames for crate transport left and right

Ad 8: PTO-driven generator with gearbox

Structure of the cutting unit with carousel planting unit



Cutting unit with planting unit

To 1: Suspension of the parallelogram

Re 2: The pneumatic cylinder, which regulates the contact pressure of the pressure wheels on the floor via the control unit.

Re 3: Parallelogram with adjustment mechanism on the pneumatic cylinder - in conjunction with the jockey wheel, enables the cutting unit to be adjusted to the ground and creates the connection to the main frame. At the same time, it serves as protection against material being thrown out.

To 4: Hexagon - this is where the height of the touch wheel is adjusted.

Re 5: Cutterbar housing - this contains the holder for the cutting disc and the cutterbar motor (the cutting disc is driven by a ribbed belt). It is also a connecting element for the parallelogram, feeler wheel, protective share and planting unit. Various cover plates allow access to the inside for maintenance work.

To 6: Hexagon - the height of the planting coulter (planting depth) is set here.

Re 7: The revolver (8 cups). Inner flaps gently hold the plant pots in place after insertion and only allow them to fall over the downpipe to prevent the plants from tipping or turning.

Ad. 8: Hexagon for height adjustment of the pressure wheels (horizontal position of the section)

Re 9: Sensing wheel - is height-adjustable and thus regulates the working depth of the protective coulter in the ground. The height adjustment of the feeler wheel must be adapted to the thickness of the mulch layer.

Ad. 10: Cutting disc - consists of two discs, between which three freely rotating blades are mounted. The entire cutting disc rotates at an adjustable speed (max. 3,900 rpm) against the direction of travel in order to cut the mulch layer without clogging.

Re 11: Protective share - this share prevents the blades from colliding with soil or stones. It lifts the mulch and feeds it to the cutting disc where it is cut.

To 12: Planting coulter - prepares the soil under the mulch so that the young plants can be inserted (depending on the version, there are planting coulters for Speedies, EPT 36 or EPT 40 or bare-root plants). A pusher works inside the planting coulter, pushing the plants out of the coulter and into the soil furrow according to the driving speed and planting distance.

Re 13: Pressure wheels of the planting unit - these close the mulch layer after the young plants have been planted and press the soil down again. They are height-adjustable and can be set parallel or at a slight angle to each other.

To 14: Lamella chain, holds the plant after falling and deposits it in the ground before the pressure wheels close the gap.

The protective discs

The red protective discs on the left and right of the cutterbars have the task of pressing down the mulch, especially with narrow row spacing and long-stalked mulch material. They automatically adjust in height and roll along on the mulch according to the tractor's travelling speed.

The sensor for measuring the travel speed is also mounted on one of these discs. As soon as this disc moves, the slat chains also rotate.

Protective disc with speed sensor

The fertiliser box for underfoot fertilisation

The machine can be optionally equipped with a fertiliser box. This allows under-root fertilisation to be carried out during planting. This is the universal box spreader from RAUCH. See the manufacturer's instructions.

The fertiliser box

Mulch materials do not effectively release nitrogen to plants until around 4 weeks after application, which can lead to reduced yields due to a lack of nutrients in the early stages of development. Under-root fertilisation with readily available nutrients can bridge this gap and ensure an even

supply until the plants feed from the mulch layer. It is advisable to place the fertiliser directly under the plants to ensure rapid availability for the plant.

The underfoot fertiliser is hydraulically driven and feeds the fertiliser via a spreading device with hoses into the cutting units and thus directly into the planting slot. The spreading device can be opened and is therefore easy to clean.

The RAUCH control system can take over the travelling speed of the machine from the planter control system via a cable.

Planter control unit and universal box spreader control unit

Commissioning

Checking the mechanical connections

All screw connections on the machine must be checked before commissioning. This also applies after the first 10 hours of operation. The following measures should also be carried out:

- Visual inspection of the connecting bolts
- Check that all fastening screws are correctly seated
    - Fastening main frame - parallelograms
    - Mounting main frame - protective discs
    - Fastening main frame - side frame
    - Side frame attachment - crate storage

	WARNING
	Loosening screws or unsecured connecting bolts
	Machine parts could come loose and cause injury or damage to property
	► The following therefore applies: During commissioning and before using the machine in the field, check the fastening bolts for individual machine elements and connecting bolts for tightness and/or correct seating.

Adjusting the track width

- (this requires two people)
- To do this, the entire machine must stand on the front and rear supports
- the track wheels must be turned in so that they do not touch the ground
- Loosen the seat bench screws
- Loosen the screws of the fertiliser box holder
- Loosen the lower clamping strip from the respective side frame, which is held in place by four M12 screws
- Loosen the upper terminal strip with the four M12 screws
- Raise the rear support slightly to ...
- ... to be able to move the side frame according to the desired wheel distance (sliding surfaces can be greased to make moving easier)
- Move both side frames one after the other (ensure symmetry)
- Tighten all screws again

Red terminal strips for adjustment

Setting the row spacing

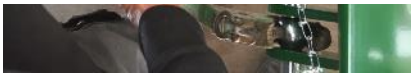
To do this, the cutting units must be moved accordingly on the main frame (this is also best done with two people):

- Turn both track wheels so that the protective coulters do not touch the ground
- Lock the front and rear supports accordingly
- Loosen the lower terminal strip, which is held in place by four M12 screws.
- Loosen the upper terminal strip with the four M12 screws
- Raise cutting unit or planting unit at the rear
- Move the complete cutting unit to the desired position (sliding surfaces can be greased to make it easier to move - lift slightly and move to the desired position)
- Move protective discs accordingly
- Tighten all screws again

Attaching the MulchTec planter to the tractor

- Attach the machine correctly to the three-point hitch.
- Shorten the supplied PTO shaft according to the tractor conditions. To do this, carry out two distance measurements - when raised and when parked (from PTO shaft to generator shaft). The PTO shaft must not be too short or too long in either position.
- Securely attach the shortened PTO shaft to both the tractor and the transmission - tractor is not switched on.
- Establish the electrical connection for the rear lights on the tractor (7-pin plug).
- Insert the 3-pin plug for 12 volt support.
- All protective discs are lowered
- Lift the machine hydraulically and move the front supports upwards.
- Fold in the rear supports and secure all supports with bolts

Adjusting the PTO shaft



Operating the control unit

Structure of the operating housing

To 1: Main switch for switching the control panel on or off

Re 2: Connection to the fertiliser box from RAUCH

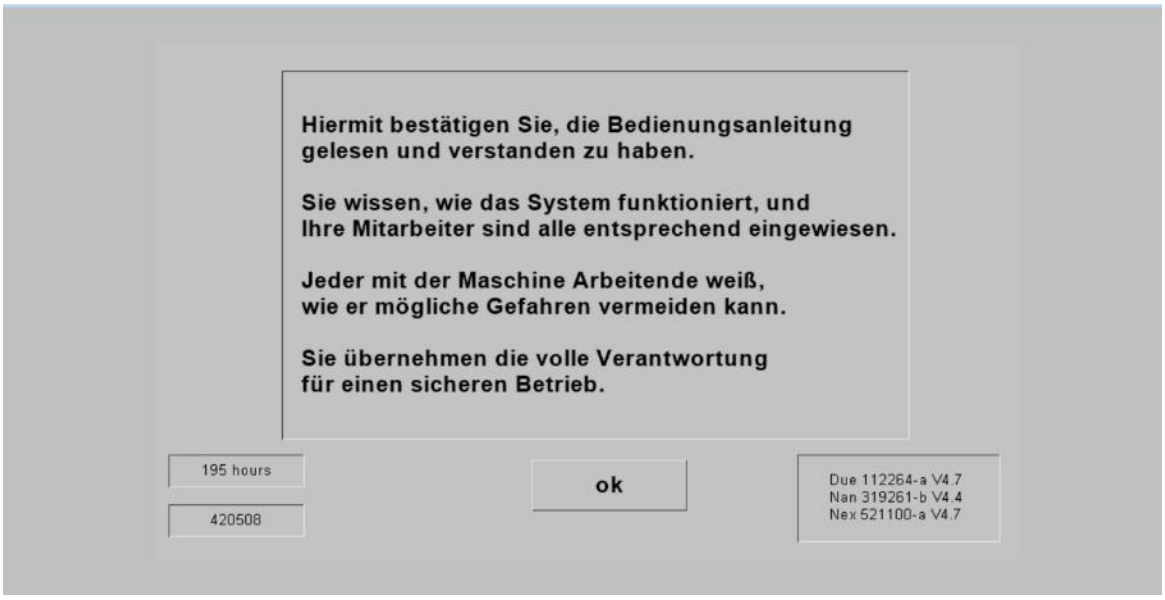
Re 3: Connection of 12V socket in the tractor (supply voltage for control unit)

To 4: Connecting the control line from the MulchTec planter

The connections of the control panel

Switching on the operating device

When the 12 volt connection on the tractor and the 11-pin plug of the control cable from the machine are connected to the control unit (4), the control unit can be switched on. After the main switch (1) is pressed, the following screen appears:



Input menu

Here you will find a safety warning that must be confirmed and additional information (software versions at the bottom right and bottom left, the machine's operating hours and the number of

plants grown with the machine to date). The confirmation button (an OK button) appears after a short time, which opens the following menu. Depending on how many cutting units are connected, these are displayed on the screen.

Re 5: Potentiometer for controlling the set speeds for the cutting units

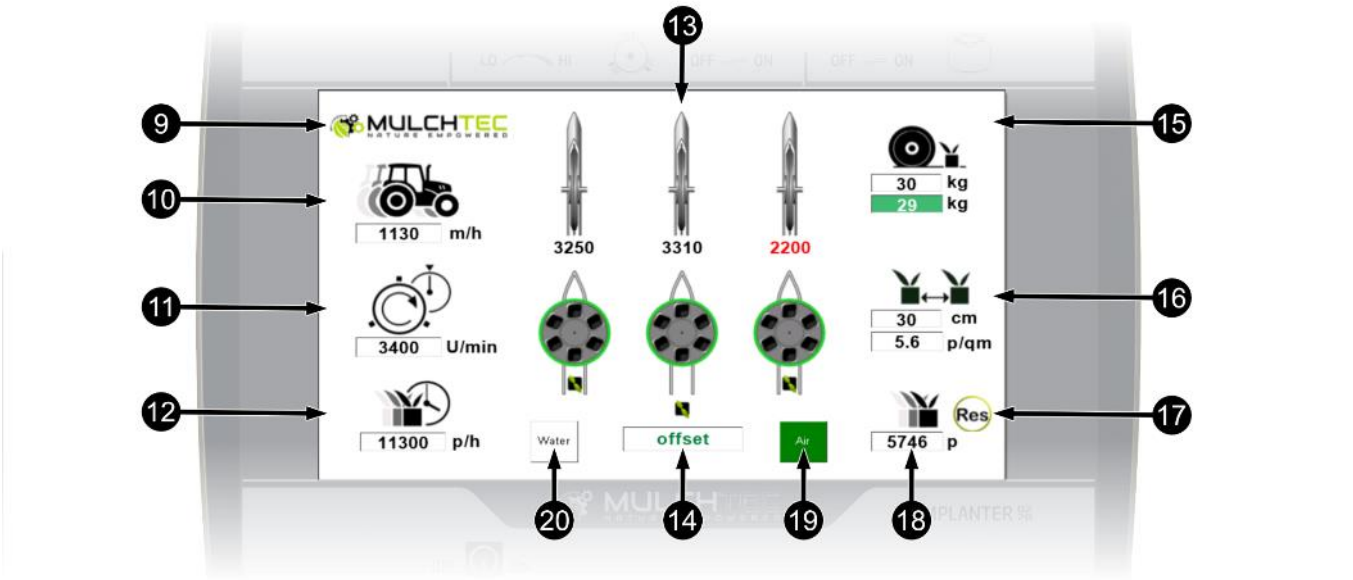
Re 6: Cutterbar switch for switching the cutterbars on or off (this activates the potentiometer)

Re 7: Carousel switch for starting or stopping the rotation of the planting carousels

Re 8: The screen - a touchscreen

The screen

The screen with three cutting units is displayed here. The control system has **automatic cutterbar recognition** - the screen layout changes with the number of connected cutterbars up to four sections.



The screen (main menu)

Re 9:Touching the MulchTec logo calls up the "Basic settings" page .

Re 10:Driving speed display (shows the current measured speed)

Re 11: Display of target speed for cutting discs

Re 12: Display planting performance (plants per hour - the displayed value is calculated)

Re 13: Display of recognised sections with display of actual speeds

Re 14: Display planting mode (touching the text switches between different planting modes: "parallel", "offset" (planting in offset) and "noSynchro"). In addition, the colour of the carousels indicates whether they are switched on or not (red=off, green=on).

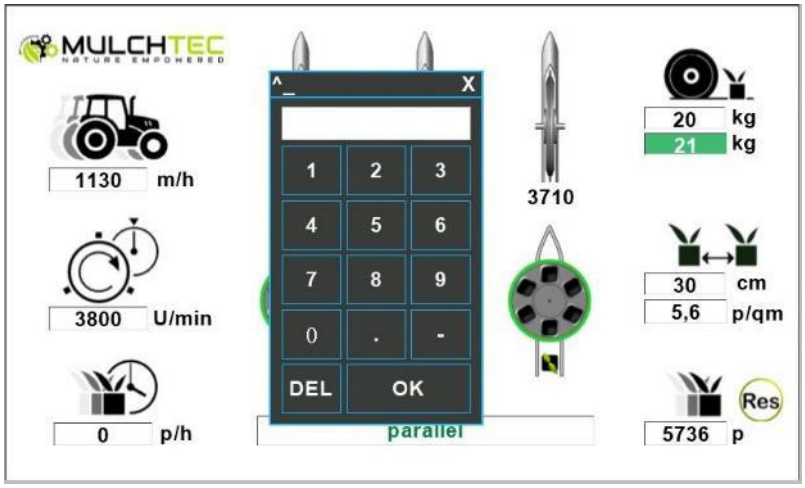
Re 15: Pressure display (the target pressure can be entered by touching the image) below this is the actual pressure.

Ad. 16: Plant spacing display (the plant spacing can be entered by touching the image) below which the calculated number of plants per square metre is displayed.

Re 17: Plant count display (counts up the number of plants already planted) and can be reset by pressing the **Res** button (18).

Ad. 19: Air indicator (electronic switch) switches the automatic coulter cleaning of the planting coulters on or off by air pressure (green indicator = switched on).

Ad. 20: Water display (electronic switch) switches automatic watering on or off when planting (green display = switched on).



The input window

Enter values

Whenever a value is to be entered, this input window appears. After entering the new value, confirm with "OK". The input window then closes and the value is displayed in the corresponding field.

If we want to exit the window without making any changes, press the "X" in the top right-hand corner. "Del" deletes values in the view window.

Starting up the system

- The control cable and 12 V cable are connected.
- If necessary, also connect the connection cable to the universal box spreader.
- Tractor is switched on.

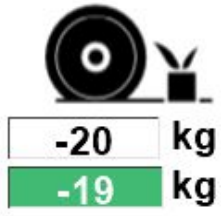
- Press the main switch. After a short time, the screen appears with a security prompt. If this is confirmed, the main menu is displayed on the screen.
- Switch on the PTO shaft.
- Switch on the cutting unit switch and set the desired target speed with the potentiometer (max. speed at approx. 3,900 revolutions per minute). The cutting discs must now all rotate or accelerate. The actual speeds of the cutting unit motors are displayed.
- The carousel switch initially remains in the "OFF" position - the carousels are displayed in red, indicating that they cannot yet rotate.

Preparation for the planting process

- Drive into an area of the bed that is not covered with mulch (see section: Basic settings to be made for planting)
- The contact pressure for the pressure wheels is now set depending on the soil and mulch conditions (see section Adjusting the contact pressure)
- The control system automatically resets the last set planting distance. It is easy to make a change (see section Adjusting the planting distance)
- The operating personnel can now move up
- The planting process is switched on with the carousel switch ON, i.e. as soon as the machine is started, the control unit receives signals from the speed sensor and the carousels and slat chains rotate depending on the travelling speed. The pushers operate accordingly and the carousels are displayed in green. When the switch (7) is switched off, these motors stop and the carousels are displayed in red again. The slat chains run as long as the speed sensor is rotating.

Contact pressure adjustment

Contact pressure display



The contact pressure of the planting unit on the soil was developed to be able to react to different soil strengths. Depending on the soil conditions (e.g. with or without mulch), more or less pressure should be applied to close the opened furrow again. The pressure is set pneumatically. The pressure is switched off as standard.

Two values are shown, the target pressure at the top and the actual pressure at the bottom. The actual pressure is always active and shows the pressure contained in the pneumatic tank. For safety reasons, the target pressure must be re-entered after each switch-on. A "20 kg" display means that the planting unit is pressing on the ground with 20 % of the possible pressure (approx. 7 bar). A minus sign in front of the pressure indicates that the planting unit is relieved accordingly, i.e. lifted. Both can be activated or set as follows:

- Press the pressure display to adjust
- The input window appears

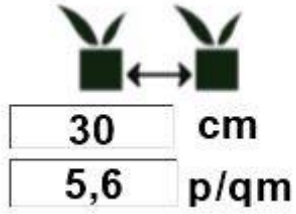
- Enter the desired pressure and confirm with **OK**
- The value is accepted and displayed immediately - pneumatic control begins

Adaptation of plant spacing

When switching on, the last selected **plant spacing** is always active

- Press on the image or display to adjust or change it
- The input window appears
- Enter the desired planting distance (at least 10 cm) and confirm with **OK**
- The value is accepted and displayed immediately
- The plants per square metre figure is calculated automatically

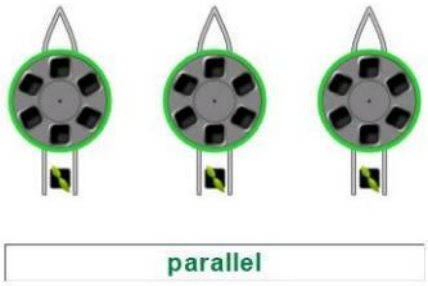
Plant spacing



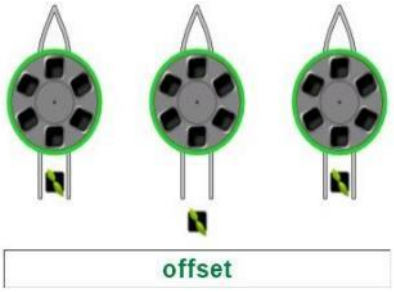
Adaptation plant species

When the system is switched on, the last **plant type** selected is always active. The adjacent illustration shows the "parallel" planting type and below it the "offset" type, i.e. plants in offset; this is shown both with the image and with the text.

- Press the text once to change it
- The offset planting method is used for
- immediately - the planting is staggered
- After another press on the text, the plant type "parallel" appears again
- Caution: after pressing this button, you should wait at least one second before changing the plant type again, otherwise the input will not be processed correctly.



Plant species

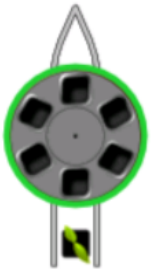


Planting performance and number of plants

Depending on the travelling speed and the selected planting distance, a planting capacity is determined and displayed (12). In principle, the machine is able to process up to 4000 plants per hour and section. That is not quite one second for planting one plant. This can quickly lead to the planting staff being overtaxed, not all cups are filled and the result would be an irregular planting pattern.

Number of plants

What has actually been planted (since the last time the main switch was switched on) is also counted and displayed. The "Res" button can be used to reset the "Number" display to zero at any time (e.g. if a new crop is to be planted).



Coulter cleaning using air pressure

The "**Air**" button is used to activate automatic coulter cleaning so that each planting coulter receives a blast of air at regular intervals to keep the coulter clean. The frequency of this cleaning can be set (see AirClean 1-10 on the next page).

Permanent cleaning of planting shares

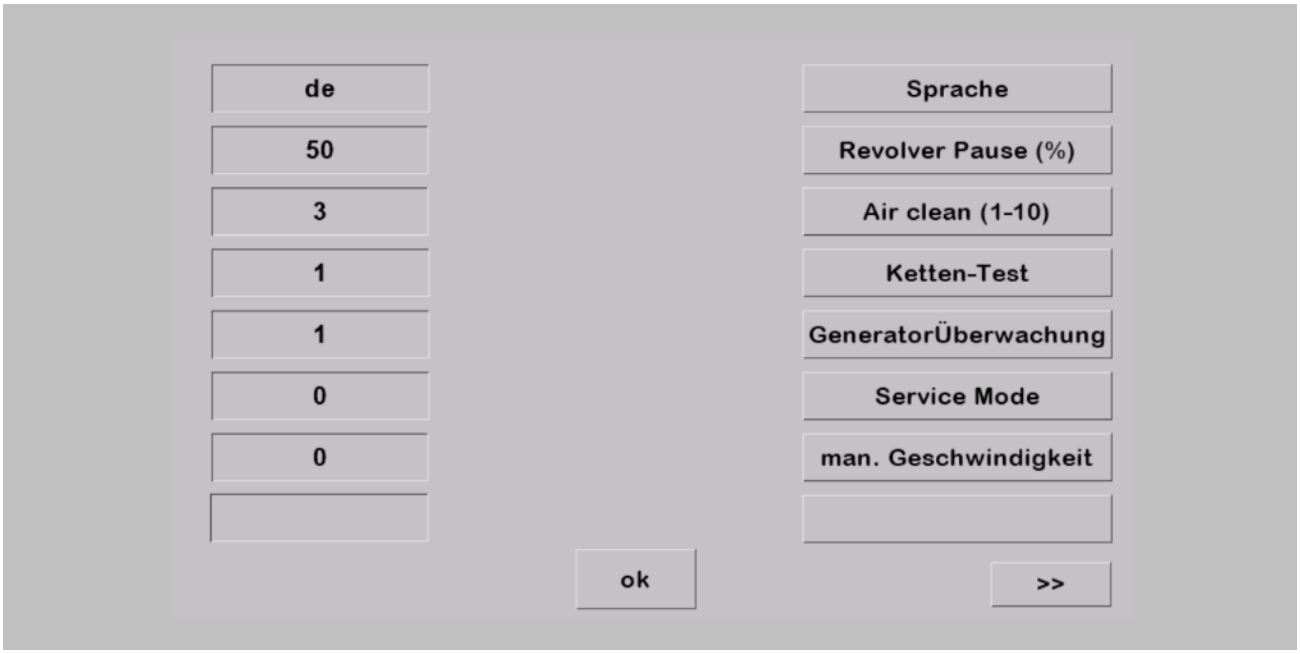
If you want to continuously "blow through" the coulters when stationary, press this button for longer than 2 seconds - it then changes colour to blue.

Basic settings

As already mentioned, we can call up the basic settings page by clicking on the MulchTec logo. **These are machine settings that may only be changed selectively and with care. They are then automatically saved for the following machine processes**.

	NOTE
	Only change the basic settings selectively and if necessary
	Incorrect entries or inadvertent changes can significantly influence the planting process or individual functions of the machine.
	Therefore applies: Only specialised personnel may change these values.

To do this, press the text field on the right-hand side that you want to change. A selection is displayed for "Language" and "Service Mode". The input window appears again for all other fields.



The Basic settings page

- By clicking on the "Language" area, you can currently choose between German (de), English (en) and French (fr).
- The "Carousel pause" specifies how high the proportion of time the carousel drum stands still should be in relation to the rotation of the carousel drum. The value can be a maximum of 50 % of a planting process. The higher the value, the longer the rotation of the carousel drum pauses and the more time the plant has to fall out. Long plants in particular need a longer carousel pause.
- The "Air clean" switch is used to set the interval length for how often compressed air cleaning should be carried out during the planting process (provided the "Air" button is switched on in the main menu). The smaller the value, the more frequently the cleaning process takes place. If, for example, the value 5 is selected, a different coulter is blown out for every fifth plant (in relation to a section). For a 3-row machine, this means every 15th plant (in relation to a section).
- Use "Chain test (on/off)" to switch the monitoring of all slat chains on or off. If this function is switched on (=1), the function of all slat chains is checked by a sensor. If one of these chains is blocked, a message with a warning tone is triggered on the screen and the corresponding carousel only rotates in small steps. This lets the planting staff and tractor driver know that there is a problem and that something needs to be done.
- The "Service Mode" is normally switched off and is explained in the next section.
- The "manual speed" is only enabled in "Service Mode".
- All values are accepted and saved with the "ok" button.

- Press >> to go to the next page of various machine settings such as:

- The "hysteresis" of the pneumatics should not be set too low according to the pneumatic source (usually the tractor) so that the relays do not constantly switch on and off.
- The "rpm tolerance" can be used to set the deviation of the actual speeds of the cutting units from the set value at which an error message should appear
  (speed display turns red)
- The "track width" is decisive for calculating the plants per square metre.

Driving without speed sensor (service mode)

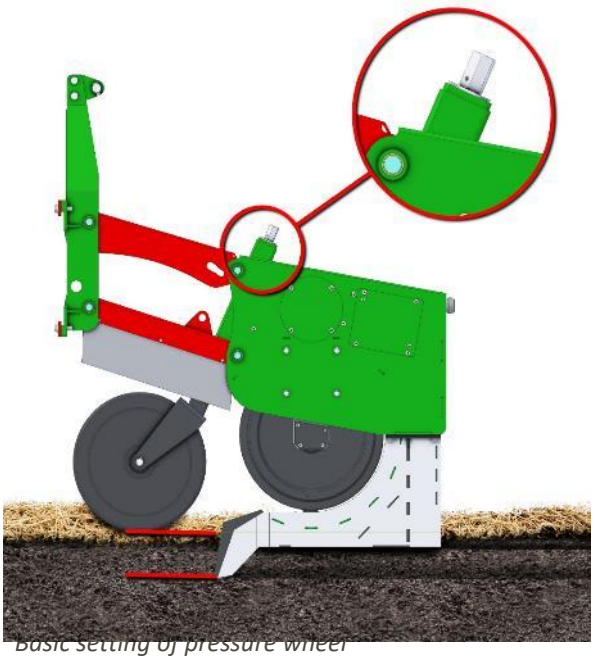
It is possible to set a constant speed for the planting units. This can be useful if you want to test the function of the carousel, chains and pusher without driving the tractor. It could also happen that the speed sensor does not work reliably or has failed. In this case, planting is still possible if you select this mode.

- To do this, the "Service Mode" is switched on in the basic settings.
- The "manual speed" can now be changed; pressing it opens our input window. The speed can be entered here and accepted with "ok".
- After leaving the basic settings window with "ok", our work page appears again. Here we notice that our tractor symbol flashes as a warning (service mode is switched on) and only the entered speed is displayed.
- Synchronisation planting (parallel or offset) is not possible in service mode
- The specified tractor speed should be maintained when driving, otherwise the planting distances will no longer be correct.
- The carousel switch must be operated manually when starting and stopping.

Tractor symbol flashes in service mode

	NOTE
	Only use the service mode for testing or in an emergency if the speed sensor is not working properly.
	No synchronisation planting (parallel or offset) possible
	Therefore applies: If no signals are transmitted, check plug connections, search for cable faults or have the sensor replaced as soon as possible.

Basic settings to be made for planting

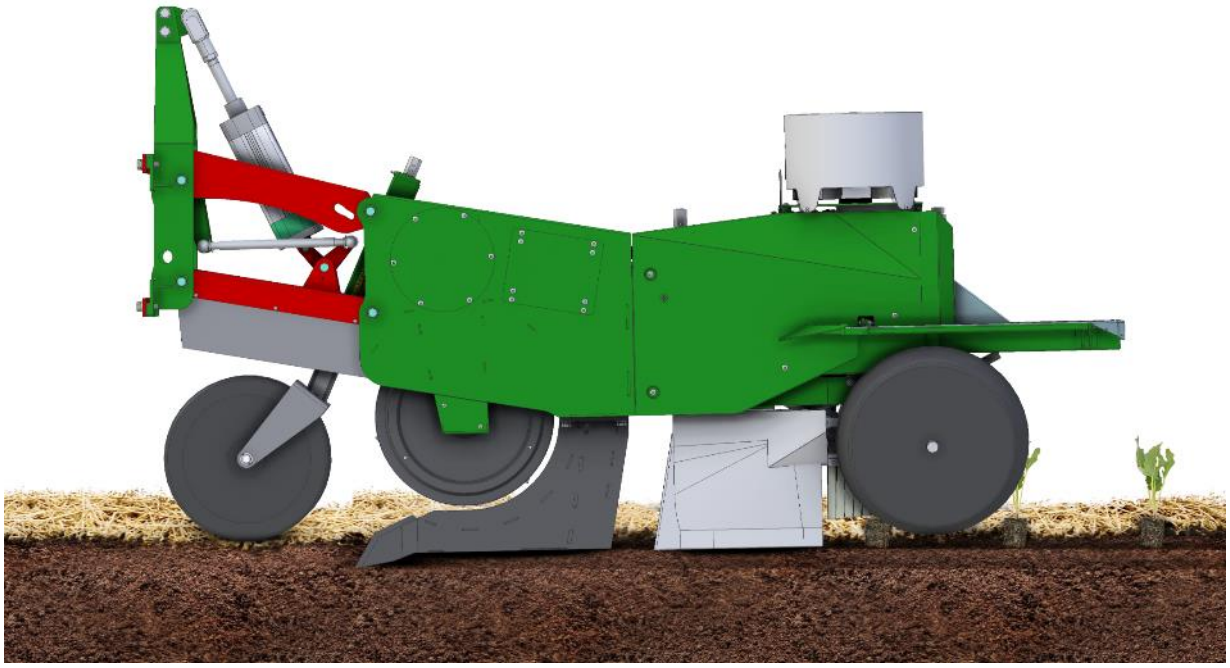


Basic setting of pressure wheel

- Lower the machine onto an area that is **not** covered with mulch or has been cleared.
- Set the two track wheels to a suitable height so that the parallelogram-guided cutting units have sufficient clearance upwards and downwards (using a 24 mm ring spanner or socket spanner).
  The parallelogram and cutting unit housing should form a line as shown in the adjacent illustration.
- Set the feeler wheels so that the protective coulters are approximately halfway into the ground (if necessary, move forwards slightly to retract the protective coulters).
- The jig wheels allow you to adjust the cutting bars to the thickness of the paillage. It is important to take account of the fact that the paillage is strongly compressed by the pressure of the jig wheels.
- The basic setting is initially as follows (information for scales for height adjustment - see sub-chapter **Summary of adjustment options**):
  gauge wheels 0 - feeler wheels 0 - planting coulters 3 - press wheels 0
  These are adapted to the plant culture and soil conditions
- Switch on the PTO shaft
- Make settings on the control unit of the control system (see Operating the control system)
- Drive off and check or adjust machine settings if necessary.

	WARNING
	Setting with the machine running
	Injuries due to crushing or being run over
	► The following **therefore applies:** Only make adjustments to the machine when it is at a standstill

For the settings on the planting unit (carousel planting unit):



Complete section - cutting unit with planting unit - relatively horizontal position

- The horizontal position is set via the height settings at the front on the jockey wheel and at the rear on the pressure wheels (they are therefore more or less at the same height).
- To do this, first set the planting coulter to the desired planting depth using the front hexagon (24 mm).
- Then adjust the height of the pressure wheels with the rear hexagon so that they are level with the feeler wheel.

Inclined position of the pressure wheels in relation to each other

Depending on the type of mulch and whether you are planting with or without mulch, the pressure wheels can be set at a slight angle or parallel to each other when viewed from above. To do this, use a 13 mm spanner to loosen a hexagon head screw to adjust the angle of the press wheels in relation to each other. This can be done by tapping lightly against the side of the pressure wheels from behind. Then retighten the 13 mm nut. A small viewing window allows you to compare the settings for the different sections.

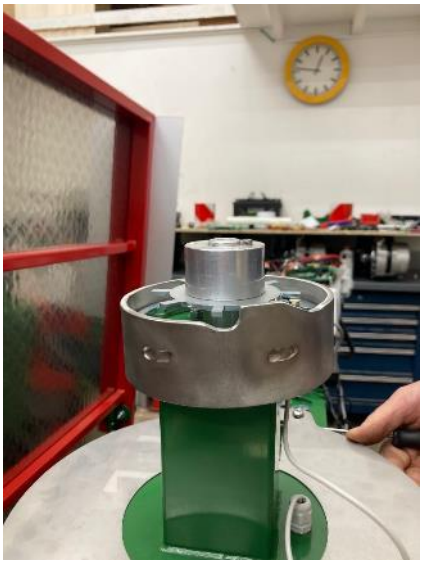
Height adjustment of the pressure wheels using a 24 mm hexagon and tilting of the wheels in relation to each other using

Settings on the carousel drum

The carousel must be adjusted depending on whether speedies or pressed soil pots, rootless leeks or garlic are to be planted.

To make this possible, the cam disc must essentially be positioned correctly. This is a ring with two different contours on which the rollers of the drum flaps run.

When the carousel drum is removed, the cam disc is revealed



Cam disc in EPT position

When the barrel of the revolver is removed, the cam disc appears, which is responsible for opening and closing the flaps. Both cam shapes are incorporated here.

Depending on how it is installed (the smooth curve is used for Speedies root-activated leeks and sowing/planting, the other side, turned 180 degrees, with the more pronounced curve, is used for EPTs), the flaps always open more or less. The spacer ring (5 mm thick), which initially rests on top, takes on its function for sowing/plugging when it is positioned under the disc. The flaps then close completely. It is screwed together with the cam disc.

Cam disc and spacer ring

This can influence the time at which the flaps above the planting shaft open. A small triangle pointing to a toothing serves as a guide to the correct position.

the dot

The four basic positions

The position of the carousel break above the downpipe is defined by the screw-on position of the carousel drum. In newer versions, the cover of the carousel drum already has four pre-milled positions. They define the opening position of the cup flaps. Depending on the pot shape or the setting of the carousel's closing flaps, the plant is always ejected in the centre above the downpipe.

Setting for EPT (earth pressure pots):

1. Cam disc with the **more pronounced** cam shape:
2. Bucket flaps are open until just before the downpipe, where they are closed and the EPT is guided over the downpipe and only dropped there. This prevents the EPT from tipping into the downpipe.
3. The spacer ring is **not used** - it is screwed onto the top of the cam disc.
4. Screw-on position of the cam disc: Triangle points to the **first tooth** after the clockwise point.
5. Screw-on position of the carousel drum: Position 1 or 2
   - 5s and 4s EPT in position 1;
   - 3.7 EPT and smaller in position 2

Settings for speedies (tray plants, etc.)

1. Cam disc with the **less pronounced** cam shape:
2. Cup flaps are almost closed (approx. 1 cm opening between flap and cup wall) and only open above the downpipe.
3. Spacer ring is **not used** - it is screwed onto the top of the cam disc.
4. Screw-on position of the cam disc: Triangle points to the **second** tooth after the clockwise point.
5. Screw-on position of the carousel drum: Position 2 or 3
   - bigger speedies in position 2,
   - smaller on position 3

Settings for bare root leeks and coarse seeds and onion sets and garlic

1. Cam disc with the **less pronounced** cam shape
2. Bucket flaps are completely closed and only open above the downpipe
3. The spacer ring is used here - it is screwed under the cam disc.
4. Screw-on position of the cam disc: Triangle points to the **third or fourth** tooth after the clockwise point
5. Screw-on position of the carousel drum: Position 3 or 4

   For leeks, the carousel pause in the screen should be set to 50% so that they have enough time to fall out of the cup due to their leaf length.

Result in all cases described: This synchronises the carousel pause with the opening of the bucket flap - the bucket comes to a standstill at the same time as the bucket flap is opened. The plant or seed is dropped in the centre above the drop tube while the carousel is stationary without any lateral movement.

Setting the flap mechanism

The plant pots are held inside the carousel by a flap and released above the downpipe at the right moment so that they do not tip over the edge. The flap position is preset, but should be checked from time to time so that the pots can continue to fall down cleanly. To do this, proceed as follows:

- Use Tx 25 to loosen four screws to remove the carousel cover
- Use Tx 45 to loosen the upper retaining screw to remove the carousel
- Turn the carousel over - now you can see the 8 rollers that open or close the flaps through the cam disc

Dismantling the carousel drum to correctly adjust the pretensioned rollers or flap mechanism

- If a 6 mm object (wooden block or M8 nut) is placed under the roller and pressed onto the roller, the flap should almost close.
- If this is not the case, then loosen the corresponding screw with an 8 mm socket spanner, adjust the flap against the spring and then tighten the screw again.
- This pretension should be the same for all 8 flaps

- Reassemble the carousel in reverse order

Turning in the field

All employees must dismount for safety reasons. Secure the plant boxes accordingly.

	**DANGER**
	Swinging up of the machine when lifting, centrifugal forces in curves
	Bodily injury to employees due to collision with objects when turning (trees, fences, etc.) or falling down
	Therefore applies: Before turning or hydraulically lifting the machine, all employees must get off the machine. You may only climb onto the machine to operate the planting equipment

Preparation of the soil and mulch material

The ground should be level, as coarse unevenness would be filled with mulch when spreading mulch and could quickly lead to blockages.

The mulch layer should have a uniform thickness of around 8 cm. Gaps in the mulch layer lead to weed growth, "mulch heaps" can lead to clogging of the machine or covering of the young plants. The mulch layer should be free of coarse objects.

Fault - Troubleshooting

Avoid / remove blockages from the cutting unit

The following preventive measures are required to avoid blockages when working with the machine:

- Ensure a uniform mulch layer thickness; the mulch layer should ideally be 8 cm
- level ground surface, no holes in the ground that would be filled with mulch (protective coulter would push these open)
- Adjust the height of the feeler wheel so that at least half of the protective blade is in the ground
- No large sods, branches, stones etc. on the soil surface or in the mulch
- Ensure sufficient cutting disc speed, 2500 to 3500 rpm depending on the mulch material, increase speed if necessary
- Protective discs are particularly useful for long-straw material and narrow row spacing, as they press down or "hold" the mulch to ensure a blockage-free result - **so do not remove them**!

However, if one or more cutting units become blocked, proceed as follows:

- Stop tractor unit
- Switch off the cutting unit motors - wait **until the cutting discs have come to a standstill**.

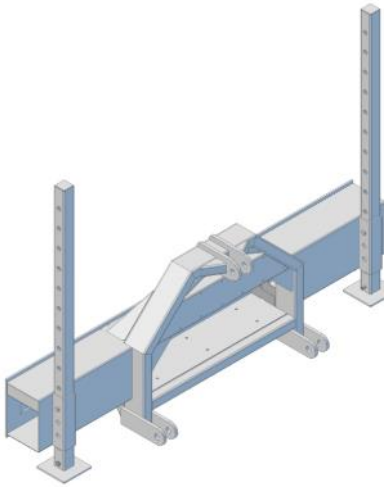
<table>
<tr><td rowspan="4"> 
</td><td>WARNING</td></tr>
<tr><td>After-running of the cutting discs after the drive is switched off</td></tr>
<tr><td>Cut injuries, risk of burns and danger from ejected material</td></tr>
<tr><td>Therefore applies:
►Wait until all cutting discs have come to a standstill
►Keep a safe distance from moving discs; do not interfere with moving discs under any circumstances</td></tr>
</table>

- Allow staff to dismount from the planting machine
- Lifting the planter hydraulically

- Lower both front supports to the ground and lock them correctly (see illustration).

Main supports in working position

It is essential that the two supports are lowered and locked in place with the bolts. If the tractor's hydraulics were to fail for any reason, the MulchTec planter would lower uncontrollably, which would be life-threatening for the people working on the machine.



The front supports

	**DANGER**
	Possible lowering of the machine in the event of hydraulic failure
	Risk of crushing or crushing
	The following therefore applies: When working on or under the machine: ►Lower both support stands to the ground and lock them securely in place.

- clear the blocked areas with a pitchfork/manure fork from the side or from above
- Test run to see if the cutting discs run friction-free again, otherwise look for other causes of clogging
- **Completely clear the ground under the machine of mulch so that the coulters can be reinserted into the ground unhindered.**
- Lower the planter hydraulically, switch on the cutting units
- Now get on the planter and drive on.

When slat chains no longer rotate

The slat chains have the task of holding the leaves of the young plant upright so that they do not fold over and become covered in mulch. The rotation speed is adapted to the travelling speed (up to a maximum speed).

When these slats come to a standstill, the leaves are bent over by them and buried by the mulch. There can be several reasons for the lamellar chains or even just one chain coming to a standstill; in most cases it is a mechanical blockage because long-stalked mulch material or very solid, woody material has become entangled.

The individual carousel units are equipped with a **chain monitor** that uses a sensor to check whether the slat chains are rotating or not. If one of these chains comes to a standstill, a warning message is automatically displayed on the control unit via image and sound. In addition, the corresponding carousel only rotates in small steps so that the operator also realises that something is wrong.

A blockage is present if the slat chain can no longer be turned by hand (to do this, carefully pull both slat chains towards you from behind - turn from bottom to top). This will either release the blockage or it is located inside the unit. To do this, you can try to remove the blockage with the hook supplied or, in the worst case, unscrew the pressure wheel or the planting coulter to gain free access to the blocked areas.

The slat chains

Check for free movement

- Stop tractor unit
- Switch off cutting unit motors
- Allow staff to dismount from the planting machine
- Lifting the planter hydraulically
- Lower both front supports to the ground and lock them correctly
- Unscrew the relevant share (remove the wheels beforehand if necessary), remove the cause of the blockage.

- Screw the coulter back on

Extreme case: slat chain has become firmly wedged as shown in the picture. The individual plastic fingers are made of polycarbonate. They are extremely robust and can also be straightened again. However, there are limits here too. They may break or bend beyond repair. In the meantime, the affected slat can be removed and replanted. In the medium term, however, the slat or the entire chain should be replaced.

Blockage due to stuck slat

When plant pots do not sit properly or tip over

If the EPTs or Speedies are not set correctly in the ground, this can have various causes:

- There is too much soil in the planting tray or it is clogged - clean with a hook!
- Too much dirt can cause the pusher position to change, it looks out too far so that the plants fall onto the pusher - clean the coulter and push the pusher into position! All pushers should be aligned.
- The plants are too small or the stalks are too short so that the slats cannot hold them - pay attention to the size and quality of the plants!
- The soil is uneven or has holes. The mulch may also be too coarse; when planting without mulch, the soil may be too coarse (lumps of soil will knock over the pots) - make sure the soil is well prepared and the mulch material is suitable!
- Pressure wheels are too close together - increase the distance with spacer discs!

- Pressure wheels are positioned incorrectly in relation to each other - when planting without mulch, they should be parallel, otherwise they will lift the pot out of the soil again; when planting in mulch, position them in a V-shape (looking in the direction of travel: close more at the back so that the mulch is closed)!
- Do the pots fall cleanly into the planting tray? - Possibly adjust the carousel flaps correctly or increase the carousel break!
- The slanted position of the pusher flap also has an influence on pushing out the plant pot. If it is too slanted on EPTs, the plants would tip forwards. If it is almost vertical on Speedies, they would tip backwards - adjust the angle of the sliding flap to the shape of the plant pots using the adjusting screw!
- Slat chains do not close at the front, so they cannot grip the plant - adjust them correctly in relation to each other!

The pusher flap - behind it is an adjustment screw

Summary of adjustment options

The individual adjustment options are summarised here as follows:

- Track wheels can be adjusted to compensate for the difference in height between the track and the bed so that the segments in the parallelogram have sufficient clearance upwards and downwards (see subsection: **Basic adjustment to be made for planting**).
- The height of the feeler wheels can be adjusted to determine the depth of the protective coulter in the soil (see subsection: **Basic settings to be made for planting**). Scales make it possible to compare the setting depth of all feeler wheels with each other.
- The adjustable height of the pressure wheels makes it possible to change the angle of the planting coulter in the ground so that it ideally runs horizontally (see subsection: **About the settings on the planting unit**).
- The pressure to be exerted by the pressure wheels on the soil to be closed in order to close the furrow again can be set via the control unit. If the soil is open, loose or very moist, the pressure can be relieved; if the soil is hard or dry, the pressure can be increased.

- The depth of the planting coulters in the soil can also be adjusted and determines the position of the planting pots under the mulch. Scales make it possible to compare the setting depth of all planting shares with each other.



Scales for setting depths on the gauge wheel, feeler wheel and planting coulter

- The adjustable inclination of the wheels allows planting with and without mulch. When planting without mulch, the wheels should be parallel to each other.
- The desired plant spacing is entered via the control system, as is whether planting should be offset or parallel.
- The rotational speed of the cutting discs can be adjusted via a potentiometer; it should be adapted to the type and thickness of the mulch.
- The left and right slat chains of a segment can be adjusted closer or further and also slightly at an angle to each other by loosening two nuts. This is necessary so that the plants are held by the leaves when they are set down and do not tip over or get buried by the mulch.
  To do this, use a 10 mm socket spanner to loosen the respective screws from below and adjust the chain so that the fingers are just touching at the front and are about 1-2 cm apart at the back.

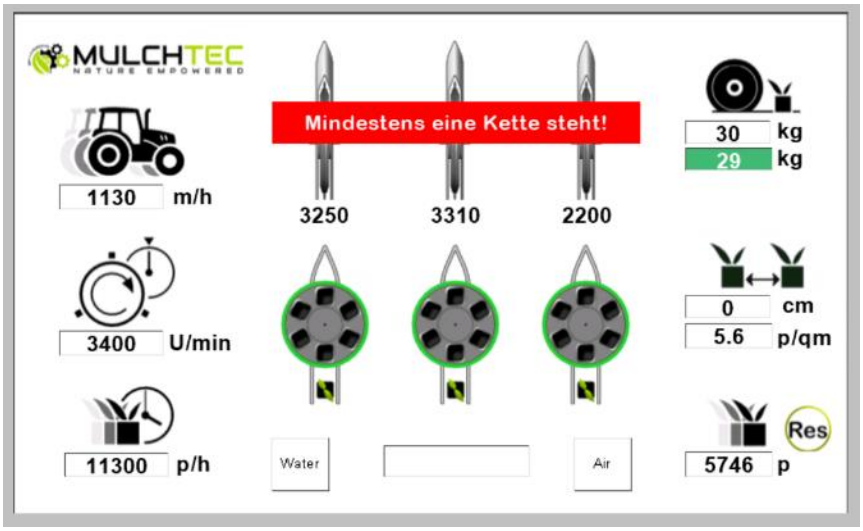
Slat chain adjustment

- An adjustable cam ring underneath the rotating carousel ensures that the flaps open at the right time so that the plant falls at the right time and in the right position. Depending on whether you are working with Speedies or EPT plant pots, the ring must be reversed (different curve behaviour for the cup flaps - flat curve for Speedies). However, appropriate planting shares are also required, which are adapted to the size of the planting pots.

The control unit beeps

The curve ring for speedies or EPT

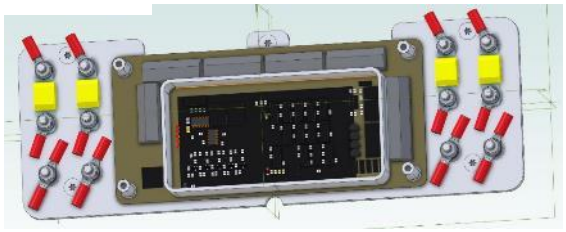
The control system has a built-in signalling device that emits a signal tone at intervals if the machine is travelling too fast and the pusher in the carousel cannot keep up with this speed. This happens at planting rates of over 4000 plants per hour and section. In this situation, the planting units cannot be synchronised. The planting distances are also no longer maintained. Further warnings are issued if a chain does not rotate or if the cutting units rotate too slowly. At the same time, there is also a warning on the screen



Warning message (visual and audible)

Fusible links for cutting unit motors

The individual motors operate with 48 volts DC, which they receive from the generator. The electrical connections are located in the front frame and are accessible through the front cover. Standard fuses for each connection (80 A) are also located here - yellow fuses in the picture.



The electrical distribution

These are intended to protect the cutting unit motors and as cable protection. If a motor is overloaded due to a blockage in the cutting unit, this can cause the fuse to blow. A blown fuse can be recognised by the blown fuse wire. It must be replaced.

If the fuse trips repeatedly, the manufacturer must be contacted to clarify the cause and rectify the problem.

Not all cutting units are recognised and displayed

The control unit has an automatic cutting unit recognition function. Depending on the connected sections, one, two, three or four cutting units with the corresponding speeds are displayed on the screen. The sequence of the connected sections is recognised automatically.

They are installed in a form-fit and splash-proof manner. They may only be connected or disconnected when the generator and cutting discs are at a standstill. The plug connectors must always be locked.

Electrical connection to the frame

If, contrary to expectations, not all sections are displayed, check the plug connections for a clean, positive fit.

NOTE
Connecting or disconnecting plug connections during operation (energised)
Contact pins and fuses can suffer damage
Therefore applies: Plug connections must not be connected or disconnected under load.

Preventive maintenance and care of the machine

Inspection and cleaning

Before every journey	Checking the two rear lights	Light, indicator, brake light	
	Check the screws for tightness	for cutting units and side frames on the main frame	
	Check for ease of movement	of the protective discs and feeler wheels	
	Check for unnatural noises	Especially when turning the cutting discs, no permanent rattling noises should be heard, e.g. from striking blades	Protective coulters are filled with soil and must be cleaned. Set the protective coulters less deep
	Check for completeness and secure seating of locking pins and linchpins	for track and feeler wheels, upper and lower links, attachment of the planting units and front and rear supports	Replace damaged ones, be sure to replace missing ones
	Visibility of the labelling	Warning and operating signs	Clean with water
After each use	Cleaning the parts in contact with the floor (Sticking material could lead to unnecessary friction for the cutting disc or excessive noise from the blades. Accumulation of soil in the planting coulter could also impair the pusher function and lead to blockages)	Protective coulter and planting coulter per cutting unit Cutting discs **Planting coulters inside**	Clean soil and mulch from cutting discs and shares with compressed air or a water jet **Any soil or mulch stalks that have got into the coulter must be scraped out horizontally so as not to impair the scraper function in the long term**

	Checking the cutting blades **Lubricating the slat chain and corresponding sprockets**	Natural wear and tear due to stones etc. in the floor	Turn or replace damaged blades Commercially available chain spray
	Bearing the machine on front and rear supports	Preferably in a covered area protected from moisture and sunlight	**The operating housing in particular**
After 10 hectares and after the end of the season	Lubrication at corresponding grease nipples	Track wheels (1 nipple each) Carousel unit (4 each)	
	Cleaning the machine parts	In particular the interior of the generator and gearbox But also assemblies such as parallelograms, protective coulters, protective discs, frames and housings, etc.	Do not use a hard water jet best with compressed air with a damp cloth and lukewarm water (cleaning agents are not required)
	Protection against moisture, Protection against rust formation	In particular, the cable connections to the tractor and the control of the generator, but also the entire machine, as moving parts would otherwise suffer from rust	Dry shelter would be ideal - at least a cover
	Checking the cutting blades	Natural wear and tear due to stones etc. in the floor	Turn or replace damaged blades
	Draining the irrigation rail	To prevent damage to the device in the event of frost	Open the drain plug
	Visibility of the labelling	Type plate, warning sticker	
Only when changing the V-belt of the cutting disc	Lubrication at corresponding grease nipples	**Ball bearing (2 pcs.) of the belt drive of the cutting discs**	Commercial multi-purpose grease **Ensure that no grease escapes from the inside of the V-belt**

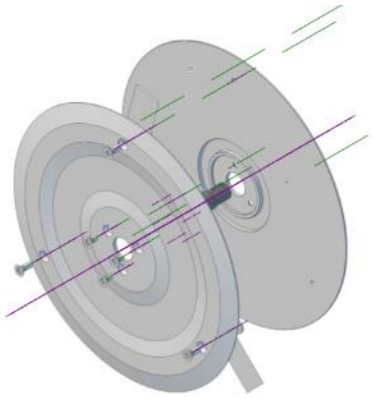
Cleaning the machine

	NOTE

	Clean the machine by spraying it with water using a hard water jet
	Warning symbols could come loose, grease in bearing bushes could be washed out, electric motors or generators could be damaged. Electronics in the carousel housing would receive incorrect voltages and be destroyed.
	Therefore applies: Do not spray the machine with a high-pressure cleaner. Clean the machine with a damp cloth or compressed air.

Changing the blades on the cutting discs

The cutting blades come into contact with the soil and stones. This will inevitably wear down the blades over time and in some cases severely damage them. The blades must therefore be regularly checked for proper function and rotated or replaced**.**



The cutting disc

To remove the blades, simply loosen the corresponding screw that holds the blade with spacer ring. Proceed as follows:

- PTO shaft is not connected to the tractor or all plugs to the electric motors are disconnected.
- To access the blades, we generally approach the cutting disc from the left in the direction of travel
- Machine at a standstill
- Machine stands at the front and rear on lowered or folded-out supports that are secured with bolts
- Lock the protective discs to gain access to the cutting discs
- Unscrew the blade screws with a Torx screwdriver (3 countersunk screws M8 x 20 with Tx 40) - **Caution! As a rule,** the screw slots are very sticky and must **first be cleaned (scraped clean)** before a Torx insert will fit. If screw heads are damaged, it is difficult to get the screws out (in extreme cases it would then have to be drilled out)
- Remove blade with spacer disc
- Install new blade with spacer disc (or turn blade around - it is best to use new screws!)

Bl

- The disc is slightly thicker than the blade so that the blade can rotate freely. Never **install the disc without a spacer ring!**
- Tighten the screws with approx. 25 Nm (do not use a cordless screwdriver)
- Continue turning the cutting disc by hand until the next blade can be replaced.
- Replace all three blade inserts to avoid imbalance.
- The direction of the blades (front and back) is irrelevant and can also be different.
- Check that all blades can be turned easily
- Lower the corresponding protective disc again.
- Restoring the electrical connection

- Only use blades with the following dimensions (max. length 96 mm, width 40 mm, thickness 3 mm (commercially available mower blades).

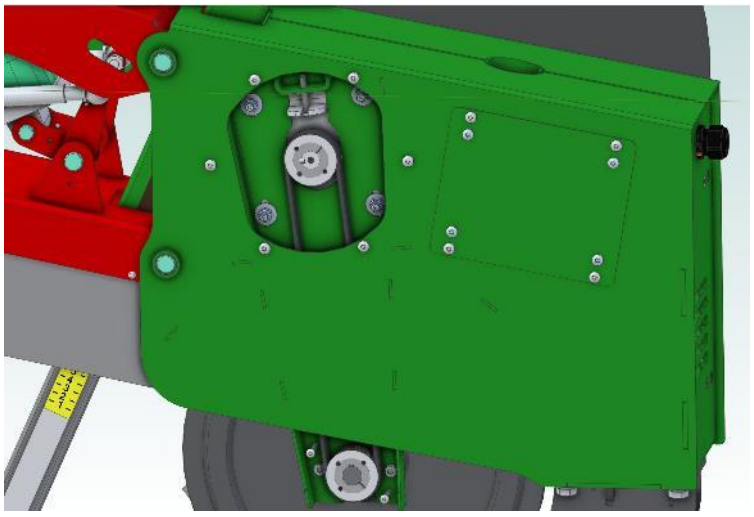
	NOTE
	It is important to ensure that, firstly, only blades with the original dimensions are used and, secondly, that the securing screws are tightened to 25 Nm.
	Knives with different dimensions will impair the proper cutting function. **Insufficient torque of the locking screw: blades could come loose, with possible damage to the housing** **Excessive torque: Thread could be destroyed, making it impossible to fasten the blade.**
	Therefore applies: ►Only use replacement blades with original dimensions Tighten the screw belonging to the cutting blade to 25 Nm

Tensioning the ribbed belt on the cutting unit

Retensioning may be necessary if the cutting unit squeaks when starting up.

The following steps are required for this:

- Fold up the protective discs and fasten with bolts
- Loosen the cover screws of the round engine cover on the left (in the direction of travel) (4 pcs. Tx 30)
- 4 Loosen the retaining nuts
- Increase the tension of the ribbed belt by turning the tensioning screw with a 10 mm open-end spanner - Check the tension of the V-belt
- Tighten the retaining screws
- Screw the round cover back on



Belt tension adjustment

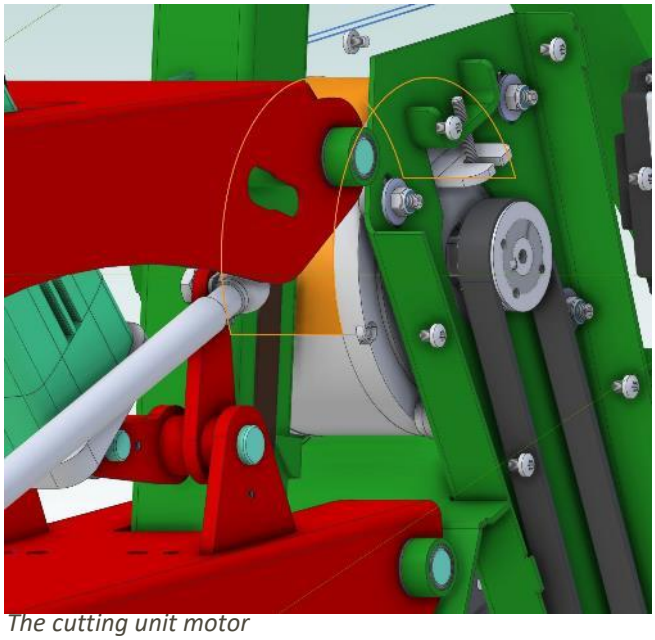
Changing the ribbed belt on the cutting unit or removing the cutting disc

The ribbed belt for driving the cutting disc must be replaced if it shows signs of wear (cracking, can no longer be retightened, etc.)

The belt tension must also be released if you want to remove the cutting disc.

The following steps are required for this:

- Decoupling the electrical plug for the section
- Remove the protective blade with four screws (M12)
- Loosen cover screws left and right (motor cover) (Tx 30)
- Unscrew the covers on the left and right of the cutting wheel holder (Tx 25)
- Loosen the four retaining screws of the electric motor
- Release the tension of the ribbed belt
- Unscrew the retaining screws of the electric motor
- Remove electric motor with ribbed belt pulley
- Loosen both ball bearing retaining screws on the right and left (4 M8 screws in total) (Allen key size 6 with 13 mm lock nut)
- The cutting disc can now be removed
- Remove belt (replace later if necessary)



The cutting unit motor

Reassemble in reverse order. Ensure that the cutting disc with the blades can move freely in the housing; the blades must not touch the housing or protective blade (avoid axial imbalance at all costs; this can be compensated for by the slotted holes in the motor bracket). Ensure that the retaining screws for the motor are tightened to max. 9 Nm.

Ensure that the ribbed belt is centred on the upper and lower belt pulley.

The ball bearings of the cutting disc only need to be lubricated when the V-belt is replaced. Lubricate before fitting the V-belt so that no grease reaches the inside of the V-belt!

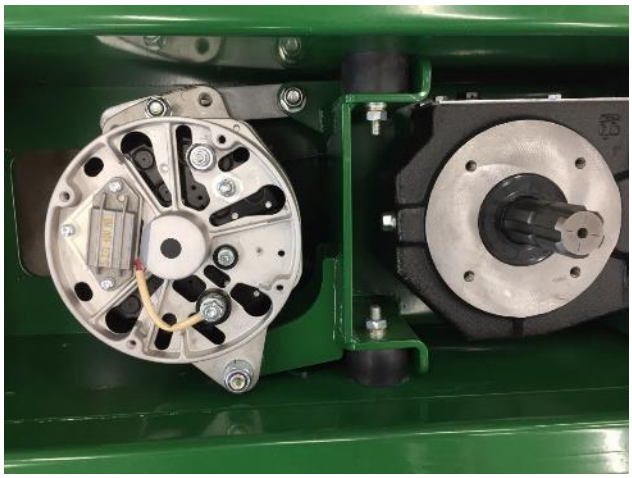
	WARNING
	Cover plates are not screwed back on.
	Risk of reaching into the direction of the V-belt or risk of loose items of clothing getting caught in the belt during operation.

	**Therefore applies**: ►Screw on all cover plates properly, both on the cutting unit and on the generator set.

Tensioning the ribbed belt on the alternator

If the ribbed belt has loosened slightly (audible squeaking when the PTO shaft starts up), it should be checked for correct tension.

- To do this, unscrew the perforated grille and drive shaft guard (4 x Tx30 and 4 x M10)



Generator and gearbox

If it is too loose on the pulleys, it must be retightened. To do this:

- Loosen the lower screw (pivot point) slightly
- Slightly loosen the upper left screw
- Use a lever to push the alternator away from the gearbox and tighten the upper screw at the same time
- Tighten the bottom screw again
- To replace the belt, the cover plates must be unscrewed from the rear (remove the corresponding cutting units beforehand - also loosen the corresponding screws here and remove the belt. Ensure that the new ribbed belt is centred on the two belt pulleys).
- Refit the perforated plate with PTO shaft guard.

Tensioning the alternator V-belt

Technical data

- Number of cutting units ..... three
- Frame width ..... 2,16 m
- Length, width, height in m .....ca . 2.7 x 2.2 x 2.0
- Track width (adjustable up to 2m)..... 1.6m
- Planting depth .....approx. 2 - 8 cm
- Minimum row spacing infinitely adjustable ..... minimum 36 cm
- Weight .....approx. 1,400 kg
- Electrical power generator .....8 kW
- Electrically generated voltage .....48 V
- Electric motor power per cutting unit..... 3.0 kW
- Adjustable cutting disc speed..... 2,800 - max. 3,900 rpm

- Required PTO shaft power at nominal speed ..... 16 kW
    - At planting speed (idle speed)..... 8 kW
    - Required speed of the PTO shaft (idle speed)..... 300 rpm
    - Max. Working speed for cutting unit depending on Mulch thickness and mulch material
        - with stepper motors ..... 1.4 km / h
        - with servomotors .....3.0 km / h
- Maximum planting capacity for carousel units ..... 4000 p / h each
- Three-point suspension ..... Category 2 and 3

- Track wheels diameter / width (2 pieces)..... 574 mm / 213 mm
- Tyre pressure .....2.5 bar

- Noise level (depending on floor conditions)..... 75-80 dB

Declaration of conformity in accordance with the EC Machinery Directive (2006/42/EC, Annex II B

The manufacturer,

live2give gGmbH
Waldstrasse 37a
57520 Dickendorf

declares under its sole responsibility that the machine,

Designation: Mulch planter (MulchTec planter)
Model: PlanterEP200
Serial number: S05M029

Year of construction: 2023

complies with the essential health and safety requirements of the following EC Directive by virtue of its design and construction as placed on the market by the manufacturer.

Machinery Directive 2006/42/EC

The following harmonised standards were applied:

EN ISO 12100-1:2003 Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology

EN ISO 12100-2:2003 Safety of machinery - Basic concepts, general principles for design - Part 1: Technical principles

The company has been commissioned to compile the technical documentation:

Peter Storch, in-house

Signatory and information on the signatory: Peter Storch, administrative employee

Place, date: Dickendorf, 16.5.2023 Signature: .....