Original inside

GB Operator‘s manual

+ INSTRUCTIONS FOR PRODUCT DELIVERY . . . Page 3

"Translation of the original Operating Manual"

Nr. 99 3850.GB.80R.0

NOVACAT A10 ED/RC

(Type 3850 : + . . 00001**)**

• **Disc mower**

Chassis Nr.

Pöttinger - Trust creates Affinity - since 1871

"Quality pays for itself." Therefore we apply the highest quality standards to our products which are constantly monitored by our in-house quality management and our management board. Because the safety, perfect function, highest quality and absolute reliability of our machines in operation are the core competencies for which we stand.

There may be deviations between these instructions and the product as we are constantly developing our products. Therefore no claims may be derived from the data, illustrations and descriptions. Please contact your Specialist Service Centre for any binding information about specific features of your machine.

We would ask you to please understand that changes to the scope of supply with regard to form, equipment and technical specifications are possible at any time.

Product liability, information obligation

Product liability obliges manufacturers and dealers to issue operating instructions for the machine at the point of sale and to instruct the customer on the operation, safety and maintenance regulations governing the machine.

A confirmation is required to verify that the machine and operating instructions have been handed over correctly.

For this purpose

- **Document A** is to be signed and returned to Pöttinger or via the internet to www.poettinger.at
- **Document B** remains with the specialist dealer handing over the machine.
- **The customer receives document C**.

For the purposes of product liability law, every farmer is an entrepreneur.

In the terms of product liability law, damage to property is any damage arising due to the machine, but not to the machine, and an excess (500 euros) exists for this liability.

Corporate damage to property within the terms of the product liability law is excluded from this liability.

Be advised! The operating instructions must also be handed over with any subsequent machine sale or transfer and the transferee must be instructed in the regulations stated.

Refer to PÖTPRO for additional information about your machine:

Are you looking for suitable accessories for your machine? No problem! All the information you require is here at your disposal. Scan the QR code on the machine's type plate or look under www.poettinger.at/poetpro

And if we don't have what your looking for, then your Specialist Service Centre is there for you with help and advice.

GB

INSTRUCTIONS FOR PRODUCT DELIVERY

Dokument D

PÖTTINGER Landtechnik GmbH
Industriegelände 1
A-4710 Grieskirchen
Tel. 07248 / 600 -0
Telefax 07248 / 600-2511

According to the product liability please check the above mentioned items.

Please check. [X]

- ☐ Machine checked according to delivery note. All attached parts removed. All safety equipment, drive shaft and operating devices at hand.
- ☐ Operation and maintenance of machine and/or implement according to operating instructions explained to the customer.
- ☐ Tyres checked re. correct pressure.
- ☐ Wheel nuts checked re. tightness.
- ☐ Drive shaft cut to correct lenght.
- ☐ Correct power-take-off speed indicated.
- ☐ Fitting to tractor carried out: to three-point linkage
- ☐ Trial run carried out and no defects found.
- ☐ Functions explained during trial run.
- ☐ Pivoting in transporting and operating position explained.
- ☐ Information given re. optional extras.
- ☐ Absolute need to read the operating manual indicated.

In order to prove that the machine and the operating manual have been properly delivered, a confirmation is necessary.
For this purpose please do the following:

- sign the **document A** and send it to the company Pöttinger or via the internet to www.poettinger.at
- **document B** stays with the specialist factory delivering the machine.
- **document C** stays with the customer.

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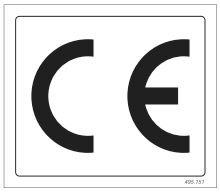
Attention!

Safety hints to observe in supplement!

SUPPLEMENT

SERVICE

CE sign



The CE sign, which is affixed by the manufacturer, indicates outwardly that this machine conforms to the engineering guideline regulations and the other relevant EU guidelines.

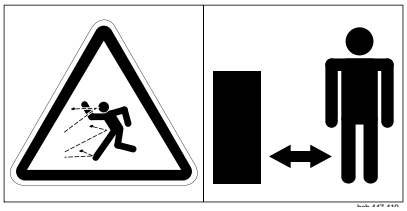
EU Declaration of Conformity (see supplement)

By signing the EU Declaration of Conformity, the manufacturer declares that the machine being brought into service complies with all relevant safety and health requirements.

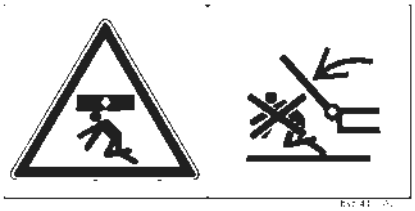
Recommendations for work safety

All points referring to satety in this manual are indicated by this sign.

Meaning of warning signs

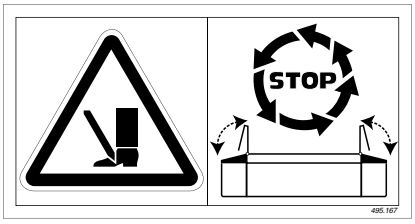


Danger - flying objects; keep safe distance from the machine as long as the engine is running.

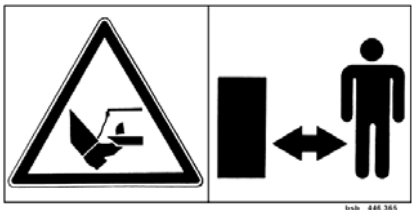


Stay clear of swinging area of implements

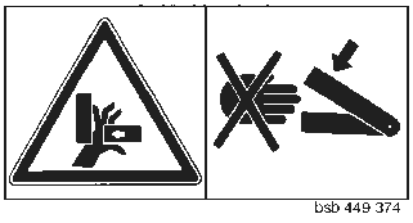
Wait until all machine components have stopped completely before touching them.



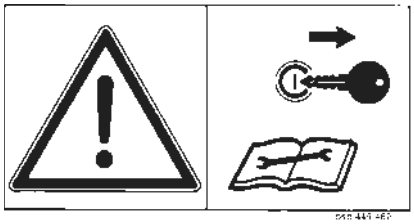
Close both side protective coverings before engaging p.t.o..



Stay clear of mower knife area as long as tractor engine is running with PTO connected.



Never reach into the crushing danger area as long as parts may move.



Shut off engine and remove key before performing maintenance or repair work.

Tractor

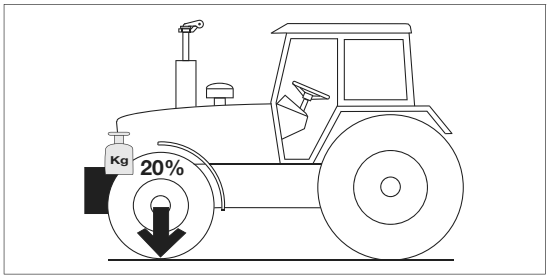
To operate this machine the following tractor requirements are necessary:

- Tractor power: Combination “Front/rear mower" above 118 kW/160 PS, Combination “Reverse drive" from 130 kW/200 PS
- Linkage: lower link cat. III
- Connections: see table “Necessary hydraulic and power connections”

Ballast weight

The front of the tractor is to have sufficient ballast to guarantee braking and steering abilities

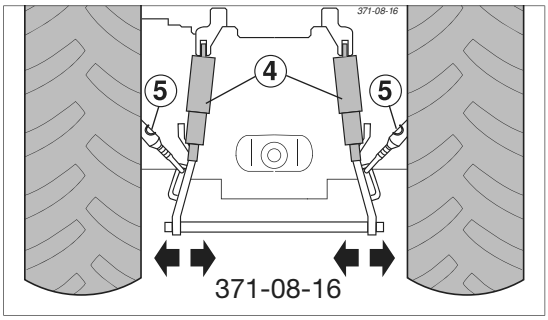
At least 20% of the tractor’s tare weight on the front axle!



Lifting gear (Three-point linkage)

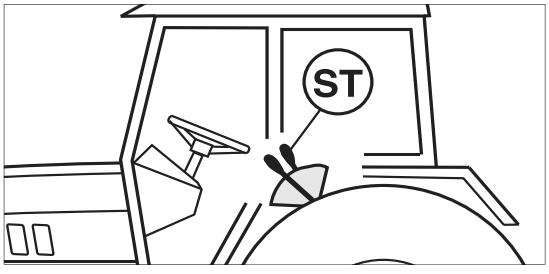
- The tractor’s lifting gear (three-point linkage) must be designed for the occurring load (see technical information).
- The lifting struts are to be set at the same length (4) using the relevant adjusting equipment

  (See the tractor manufacturer’s operator’s manual)
- If the lifting struts on the lower linkage can be fixed in various positions, then select the back position. this will relieve the tractor’s hydraulic unit.
- The limiting chain or lower link stabilisers (5) are to be set so that the coupled implement CANNOT move sideways. (Safety measure for transportation)



Hydraulic positioning control on the lifting gear

The lifting hydraulics are to be switched to positioning control when:



Necessary hydraulic connections

Design	Used for	Single action hydraulic connection	Double action hydraulic connection	Identification (on the implement)
Select Control	Rear mower		X	
	Front mower	X		
	hydraulic upper link (version)		X	

Power Control / ISOBUS Terminal	Hydraulic connection "Advance" SN 16 red
	Hydraulic connection "Return" SN 20 blue
	Load sensing connection SN 6 *)

Operating pressure	
Operating pressure minimum	170 bar
Operating pressure maximum	200 bar

Caution!

Check the compatibility of the hydraulic oils before connecting the machine to the hydraulic system of your tractor.

Do not mix mineral oils with bio oils!

Necessary power connections

Design	Used for	Pole	Volt	Power connection
Standard	Lighting	7-pn	12 V DC	According to DIN-ISO 1724
Select Control	Control unit	3-pn	12 V DC	to DIN-ISO 9680
Power Control / ISOBUS	Control unit	3-pn	12 V DC	to DIN-ISO 9680

*) not crucially necessary

Safety advice

Safety hints:

See Supplement-A1, 7.), 8a. - 8h.)

Caution

Implement is designed for operation only with a tractor (not with self-drive machines).

The driver's visual range is limited with self-drive machines when both outer mower bars are raised in the transport position.

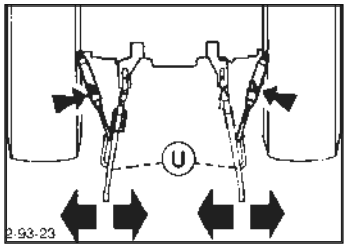
Important!

Before every startup, check vehicle for road worthiness (lights, brakes, protective panels, ...)!

Attaching machine to tractor

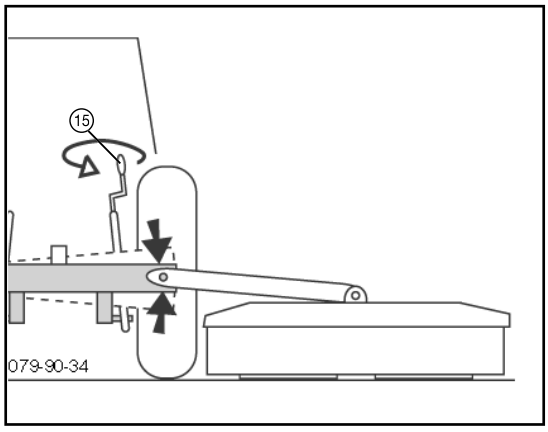
Attach mower centrically to tractor

- Adjust lower link accordingly.
- Secure the lower link so that the machine cannot swing out sideways.



Mounting frame horizontal

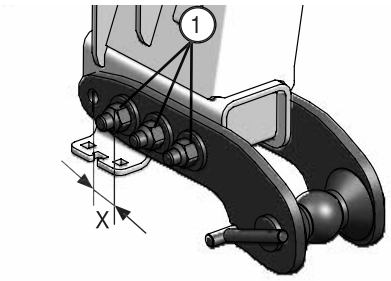
- Bring mounting frame to horizontal position by adjusting lower link jackscrew (15).



Hitch the implement on the three-point mount

1. The implement is designed for the hitching category III/3.(optional: category IV/3)
2. Setting the distance to tractor:

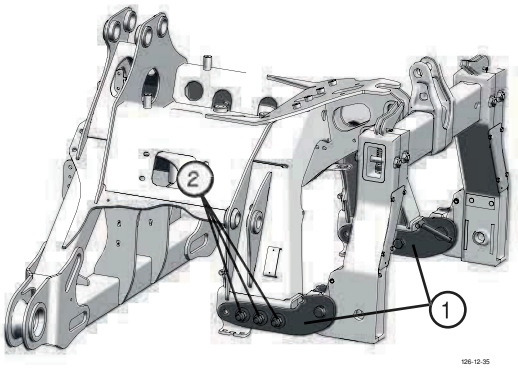
Make sure that when folding the mower units to transport position they do not collide with the tractor.



For a possible remedy, shift the two lower link bolts 62.5 mm (X) further from the tractor.

For this procedure, screws (1) shall be tightened with a torque of 450 Nm.

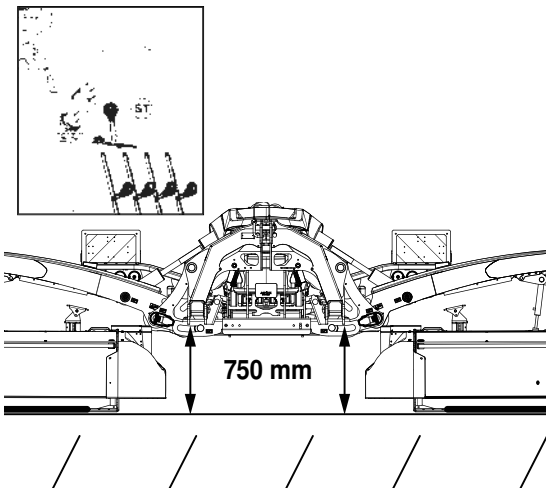
3. Conversion to Quick Hitch (USA):



When hitching as Quick Hitch, you must rotate the lower link straps (1) 180°. (see image) balls and spacer sleeves are not used any more.

For this procedure, screws (2) shall be tightened with a torque of 450 Nm.

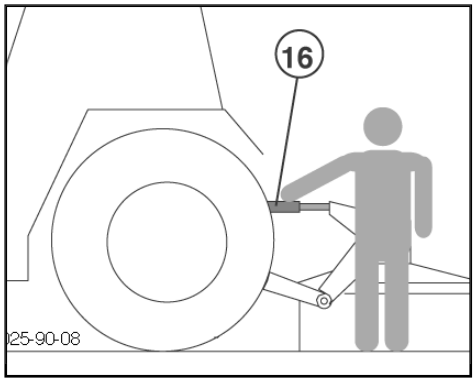
Setting lower link height



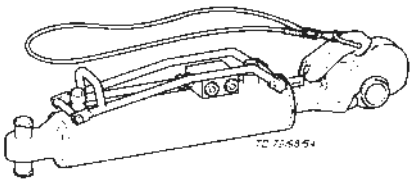
- Set tractor hydraulics (ST) using the depth stop.
  This height makes an optimum levelling of the uneven ground possible and does not need to be altered when swivelling the cutter bars up.

Adjust upper link spindle

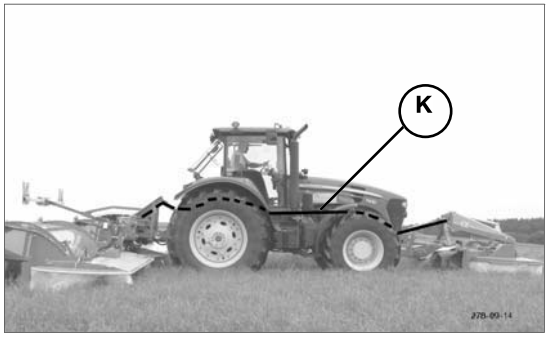
- Turning upper link spindle (16) adjusts the cutting height.



A hydraulic upper link is recommended (double-acting control unit)



Attach connecting lines from the front mower.



"Power Control" variant

The “Power Control” version offers the possibility of controlling the front mower unit's automatically folding side guard with the rear mower unit. (Optional extra)

Note:

The hydraulic hoses between front and rear mower are pressurized. Ensure they are depressurized before disconnecting:

Power Control Press key  until signal tone is heard (approx. 3 Sec)

ISO bus: Press key  until signal tone is heard (approx. 3 Sec)

Connect to tractor

Operation:

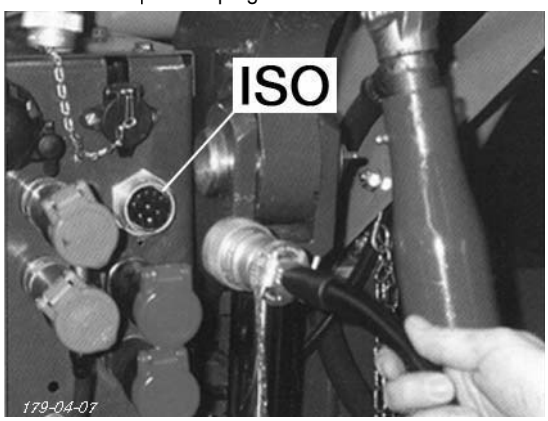
- Connect 3-pin plug to the DIN 9680 socket on tractor

Lighting:

- Connect 7-pin plug on tractor
- Check that lighting functions properly.

For tractors with ISO bus control

- Connect 9-pin ISO plug to ISO-Bus socket on tractor

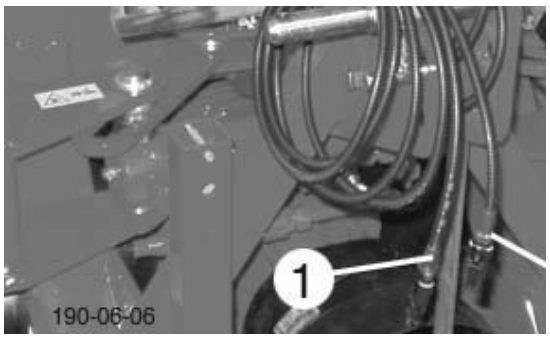


Connect sensor cable from front mower

Electrical cable connection between front mower and mower combination

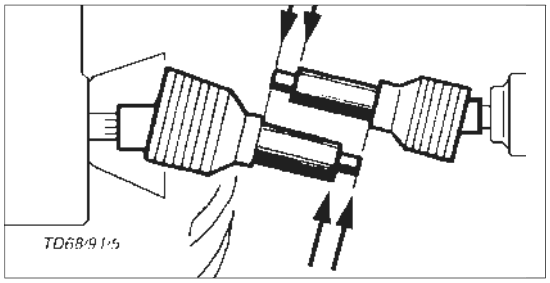
- 3-pin cable for sensor attachment kit (1)

  (Starting from the back, lay sensor cable to tractor so that the cable cannot become damaged e.g. tyres, exhaust, ...)



Detach cardan shaft

- Before initial operation, check cardan shaft length and adjust if necessary. See also chapter "Drive Shaft" in Supplement B.



Hydraulic connection for Select Control

Minimum hydraulic system:

1x dual-action hydraulic circuit (DW) for implement control

Optimum hydraulic system:

1x dual-action hydraulic circuit (DW) for implement control

1 dual-action hydraulic circuit (DW) for hydraulic upper link

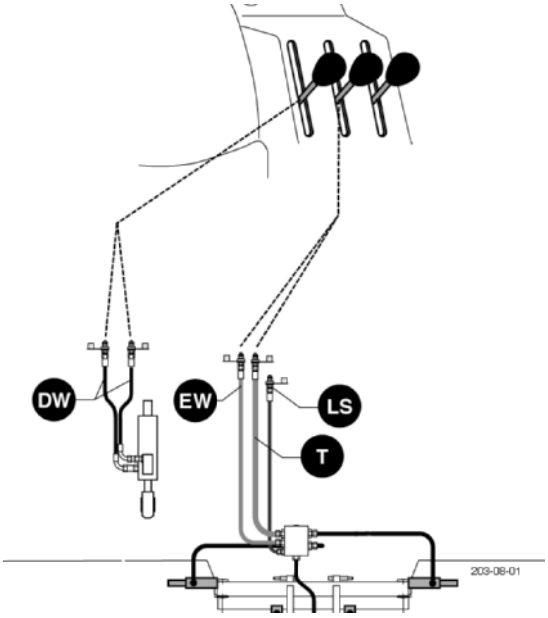
Hydraulic connection for Power Control

1x Load sensing hydraulic circuit (LS)

consisting of:

- single-action hydraulic circuit (EW)
- pressureless return (T)
- load sensing line

1 dual-acting hydraulic circuit (DW) for hydraulic upper link

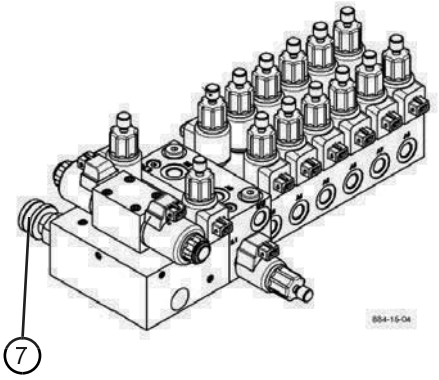


Settings

The screw (7) on the hydraulic block must also be adjusted.

Be advised!

Separate the electrical connection



For tractors with "Load sensing"

- Screw in screw (7) on hydraulic block completely

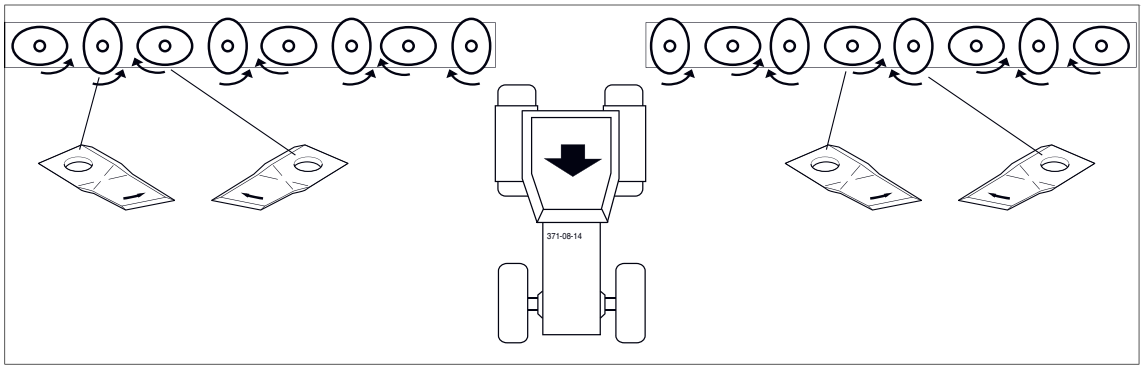
For tractors with a closed hydraulic system

- Screw in the screw (7) on hydraulic block completely

For tractors with an open hydraulic system

- Unscrew the screw (7) on hydraulic block completely

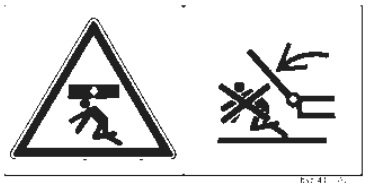
Note rotation direction of mower discs

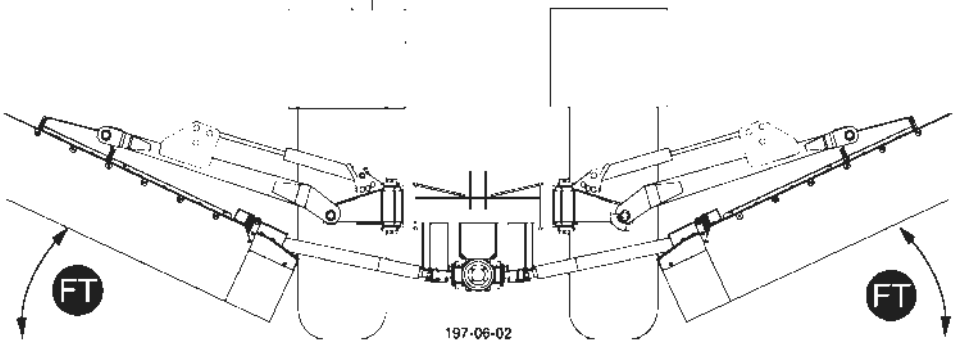


Conversion from working position to transport position

Safety advice!

- **Changing from working to transport position and vice-versa is only to be carried out on level, firm ground.**
- **Before swivelling cutter bar up, switch drive off and wait for mower discs to completely stop.**
- **Ensure that swivel range is clear and that no-one is standing in the danger area.**





Raise to road transport position

This key's function can only be activated when all mower units are in field transport position (headland FT)

- Switch drive off and wait for complete stop.
- Swivel all hoop guards on mower in

Variant with "Power Control"

Briefly press **key** 

the function is activated

Press **key** 

all mower units swivel to end position

Variant with "ISOBus-Terminal"

Press **softkey** 

to open Transport menu.

Briefly press **softkey** 

the function is activated

Press **softkey** 

all mower units swivel to end position

Lower to field transport position

Variant with "Pow ntrol"

Briefly press **key** 

the function is activated

Press **key** 

all mower units swivel to field transport position (FT)

Variant with "ISOBUS-Terminal"

Press **softkey** 

to open Transport menu.

Briefly press **softkey** 

the function is activated

Press **softkey** 

all mower units swivel to field transport position (FT)

- Swivel all guard hoops on mower out

Driving on public roads

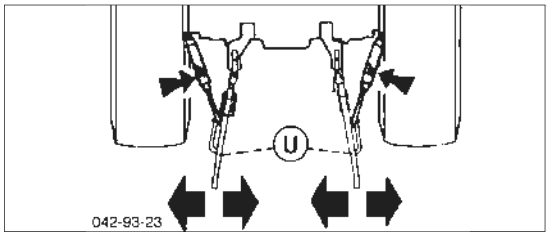
Be advised!

- **Be aware of the max. permissible transport height (4 m)!**

- Observe the official regulations of your state/country.
- Travel on public roads only in the transport position.
- Safety devices must be in proper condition.
- Before travelling, bring swivelling parts to correct position and secure against dangerous position changes.
- Check that lighting functions before travelling.
- Important information is also available in the supplement to this operator's manual.

Hydraulic lower link

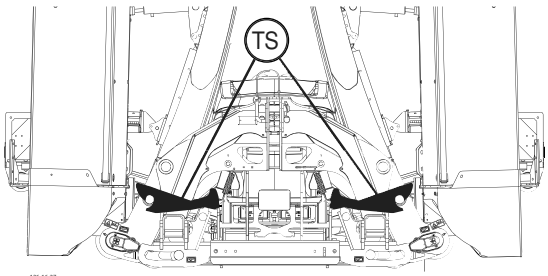
- Secure hydraulic lower link so that implement cannot swing out sideways.



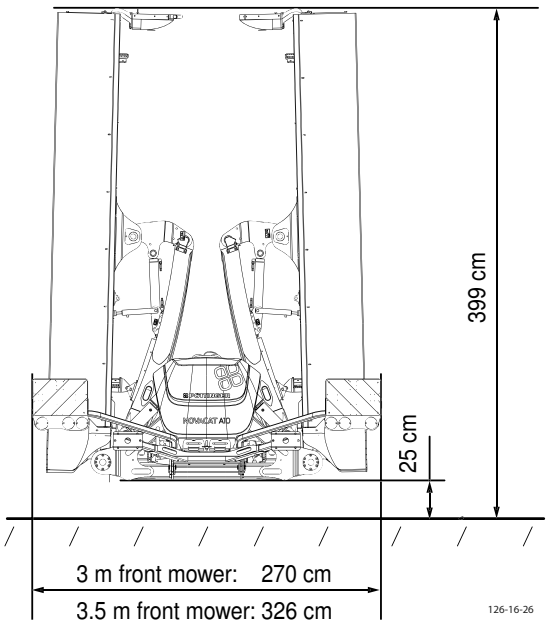
Transport safeguard (TS)

- Check transport safeguard before travelling!

  Check that both mower units are properly secured with safety hooks!



Transport position



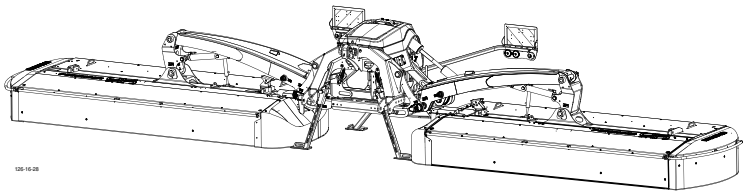
Parking position

Place disc mower only on stable, level ground and ensure a steadfast position.

The machine can be parked in the working position or the transport position.

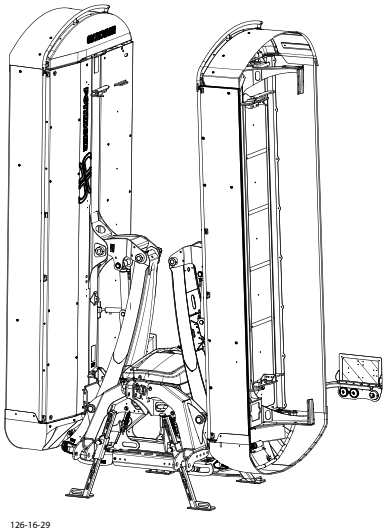
Parking in the working position

1. Set the front support stands to the height required using the spring bolt, and secure.
2. Unfold the rear support stands and set them at same height as the front support stands using the spring bolt, and secure.



Parking in the transport position

1. **Set the front supporting legs to the height required using the spring bolt, and secure.**
2. Unfold the rear support stands and set them at same height as the front support stands using the spring bolt, and secure.



Terminal performance features

Electrical connection

The terminal's electricity is supplied via a plug in accordance with DIN 9680 from the tractor's 12 V on-board electrical system. These 3-pin plugs may also be 2-pin versions as only two main wires (+12 V, ground) are required.

Be advised!

Other plug and socket designs are not permitted otherwise functional reliability cannot be guaranteed.

Technical data

Operating voltage:	+10V ..... +15V
Operating temperature range:	-20°C .... +60°C
Storage temperature:	-30°C .... +70°C
Degree of protection:	IP65
Fuse:	20A multifuse in an operating voltage plug

Function

The attached machine is operated by a single-acting control unit on the tractor with which the individual functions can be pre-selected using the Select Control terminal. The preselected functions are displayed on the LDC screen of the terminal.

Starting work

1. Positioning

Position the Select Control terminal so that it is easily visible in the tractor cab. (There is a magnet on the rear for attaching the terminal.)

2. Connecting

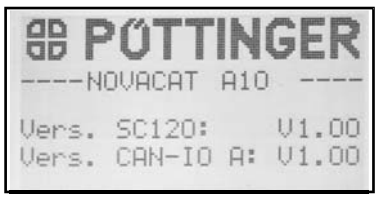
- Plug the connector (1) into the tractor's 12V power supply.
- Connect plug (2) to the 7-pin connection on the machine.
- During operation, insert the plug counterpart sealing cap (2) into the adjacent blind plug.

3. Switching on and off

Press key to switch terminal on.

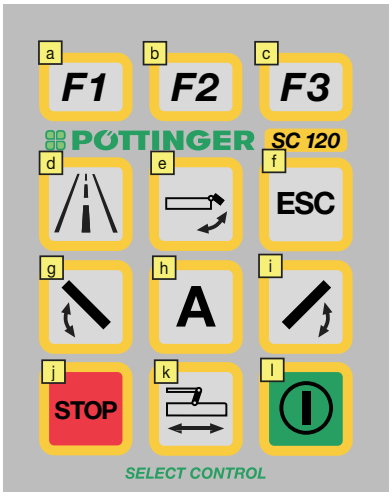
Press and hold key for 3 seconds to switch terminal off.

The Start screen appears when the terminal is switched on. The current software version number is located in the lower part of the Start screen.



- SC120: Control device software
- CAN-IO A: Extension module A software
- CAN-IO B: Extension module B software (optional)

Operating interface



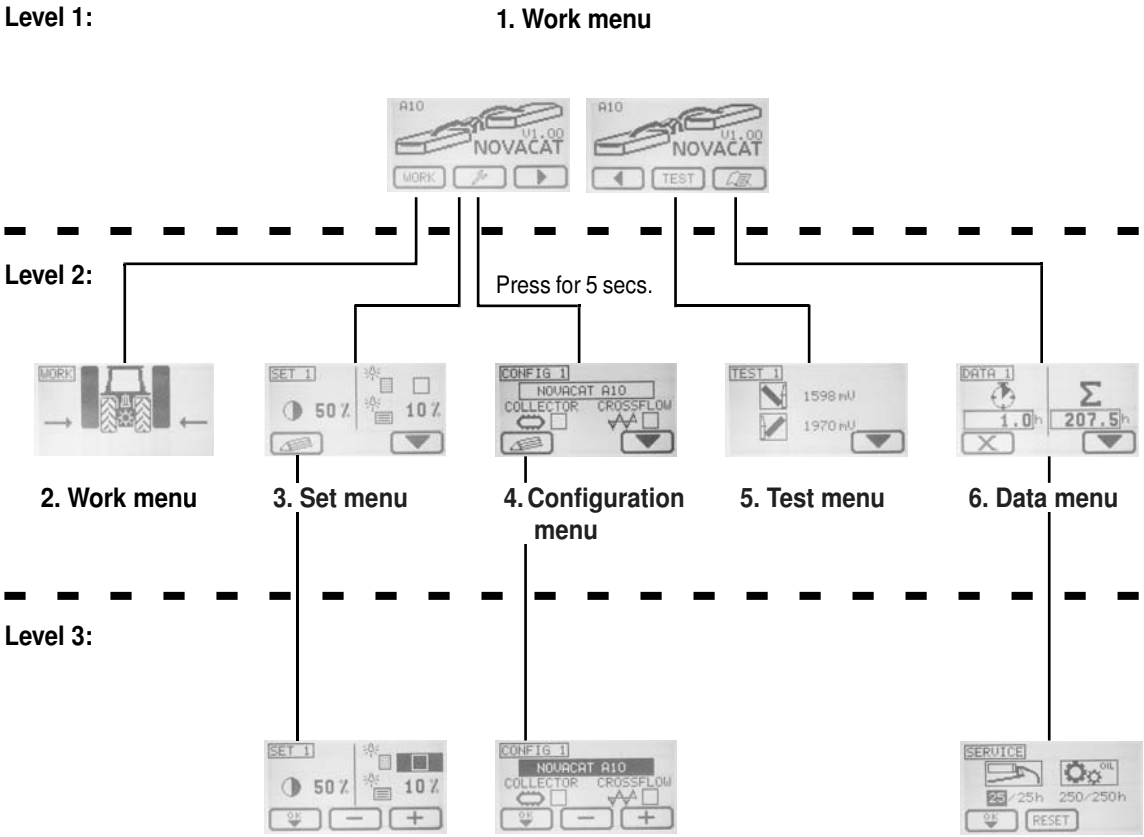
Meaning of keys

- a Function key 1
- b Function key 2
- c Function key 3
- d Preselect folding (road transport - operation)
- e Preselect side protection folding
- f Navigating the control device: Go back one menu level
- g Preselect left mower unit
- h Automatic operation
- i Preselect right mower unit
- j STOP
- k Preselect side shifting
- l I/O or menu

Operating notes

To preselect a function, press the appropriate key. Functions preselected on the terminal appear on the screen and are executed via the control device on the tractor.

Menu structure



1. Main menu

Keys	Display	Note
WORK		Press key WORK to access the Work menu without making a hydraulic preselection. The Work menu can also be opened with any preselection key. However. the relevant hydraulic function will also have been simultaneously selected.
		Press key to access the Set menu. Press key for 5 seconds to access the Configuration menu.
TEST		Press key TEST to access the Test menu.
		Press key to access the Data menu.
		If keys "Continue" or "Back" are displayed, then not all function keys can be displayed at the same time. Press keys "Continue" and "Back" to move the undisplayed keys into the visible area.

2. Work menu

2.1 Display

	Display	Note
WORK		Press key WORK to access the Work menu. Press key "ESC" key to access the Main menu.
		Mower position There are three different displays for the mower positions.  Transport position  Headland position  Working position
		Float position As soon as the mowers are in the float position, the wave symbol appears.
	 	Side shift (only A10) There are three different displays for the side shift positions. →← Inner end position ↔ Middle position ←→ Outer end position The side shift indicator always appears in the same place no matter where the mowers are located. If it is covered by a mower, the side shift indicator appears in white inside the mower unit.
		Automatic The automatic function (A) will be displayed once it has been activated. Refer to paragraph "Operation" for further information.

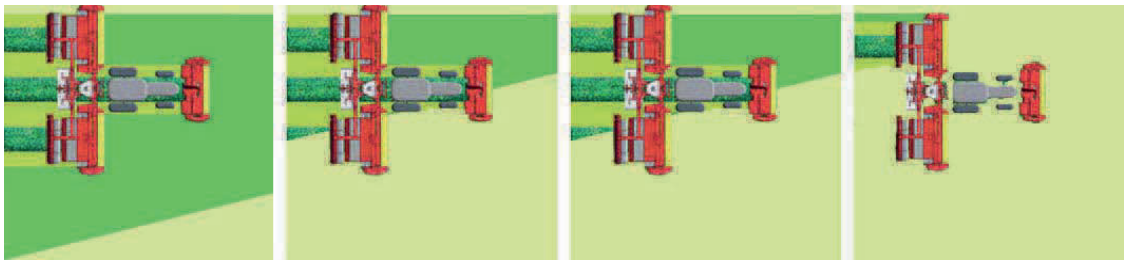
2.2 Operation:

2.2.1 Automatic mowing

The intelligent step sequence ensures easy mower operation. (see example)

Keys	Display	Note
A + +		Both mowers are pivoted between the "Field transport" and "Work position" positions using the tractor's control device.
A + /		Only one mower is pivoted between the "Field transport" and "Work position" positions using the tractor's control device. After the pivoting action it switches over automatically to both mowers.

2.2.2 Example:



			
Control device: Float position	Preselection: Right mower Control device: Raise	Control device: Float position	Control device: Raise
	With preselected automatic operation, it switches automatically to the second mower after a short period, following the completion of a single lifting procedure. A signal tone indicates this.	The left mower is located in the float position again without any further preselecting.	If the second mower is also back in the headland position, then both mowing units are automatically preselected for the next lowering procedure.

2.2.3 Manual mowing:

Control can also be carried out without automatic preselection if necessary, i.e. the selected function is carried out using the control device

Keys	Display	Note
+		Both mowers are pivoted between the positions "Field transport" and "Work position" using the tractor's control device.
/		Using the tractor's control device, the left or the right mower is pivoted alternatively between the "field transport" position and "working position". The second mower remains in the start position.

2.2.4 Pivoting from the "Field transport" position to the "Road transport" position.

Caution!

There is a danger of tipping when the pivoting procedure is performed on an incline!

For safety reasons, use individual raising to swing the mowers into road transport position!

Always swing the downhill side mower into the road transport position first, and then the uphill side mower.

Prerequisite for this function:

1. Side shift to inner end position
2. Headland position of both mowers
3. Cardan shaft at standstill.
4. Cross flow cover closed (for option Cross flow).
5. Cross conveyor in working position (with Cross Conveyor option)

Keys	Display	Note
1. 	 	1. Preselect "Road transport" key -> both mowers are activated (for individual raising, select the relevant mower) 2. Press and hold the "Road transport" key 3. Operate the tractor's control device until - the "Road transport" position is reached - the side protection is folded in - the mechanical transport safeguard is locked.

Note!

If the cardan shaft is moving and the "Road transport" key is pressed, the adjacent warning appears on the screen.

Wait until the cardan shaft has completely stopped before continuing to fold the mowers.

Note!

If side shifting is not in the inner end position, the adjacent notification appears on the screen.

The control automatically preselects "Side shifting" and moves the mower to the inner end position.

Note!

If the flap of the cross flow is opened, this note will appear. Close the flap before continuing to fold the mowers.

Note!

If the cross conveyor is not in the working position, the adjacent notification appears. Move both cross conveyors to the working position before continuing to fold the mowers.

2.2. Individual raising in the transport position

Keys	Display	Note
1.  /  2. 		Select left or right mower, then press the "Road transport" key, Press and hold the "Road transport" key and operate the tractor's control device until the "Road transport" position is reached and the mechanical transport safety is locked.

2.2.6 Pivoting from the "Road transport" position to the "Field transport" position or Working position.

Caution!

There is a danger of tipping when pivoting is carried out on an incline!

For security reasons the mower units must be individually swivelled during field transport!

But the transport locking can only be activated simultaneously:

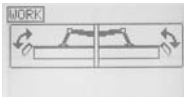
- **Carefully loosen the transport safety lock for both mower units.**
- **Swivel the uphill mower unit through individual lifting.**
- **Swivel the downhill mower unit through individual lifting.**

Be alert:

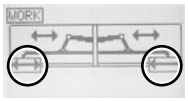
Life-threatening danger from ejected objects. Before mowing, ensure the side protection has been folded down again.

Keys	Display	Note
		(1) Preselect key "Road transport". (2) Operate the tractor's control device until the transport safeguard has engaged.
	 	(3) Press and hold the "Road transport" key, and operate the control device until the folding end position (just below the field transport position) is reached and the side protection is locked in place. When the mowers are in the folding end position (just below the field transport position), they are shown on the display 90° to the tractor. The preselection extinguishes. (The mowers are shown with a light frame.) **Press the "Road transport" key and operate the control device once again to ensure the side protection is folded down completely and is functional.**

2.2.7 Operating the side protection folding system

Keys	Display	Note
		(1) When servicing, press "Preselect side protection" key to operate the side protection separately from the mowers. (2) Use the tractor's control device to move the side protection into the required position. **Be alert:** **Life-threatening danger from ejected objects. Before mowing, ensure the side protection has been folded down again.**

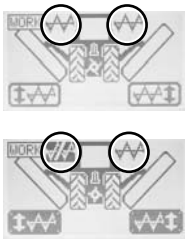
2.2.8 Operating the side shift

Keys	Display	Note
		(1) Press "Preselect side shift" key to push the side shift. (2) Use the tractor's control device to set the required distance between the mowers. **Notes:** **Folding when in the road transport position is only possible when the mowers are at the inner end position.** **If the sensor position inside cannot be reached, the machine will try to move it into the sensor position inside through emergency actuation (see segment emergency actuation).** **If the sensor position inside cannot be recognized due to a sensor fault, bring the machine into sensor position inside through emergency actuation (see segment emergency actuation) and deactivate the lateral displacement in the configuration menu (see segment configuration menu).** **Side shift is not possible in the road transport position.** Display:  The current side shift position is indicated by the arrows for the respective mower.

2.2.9 Cross conveyor (Option)

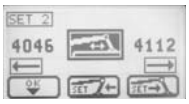
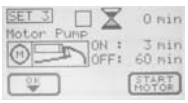
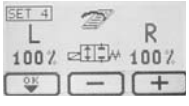
Keys	Display	Note
	   	Display:  Cross conveyor ready (Working position and activated)  Cross conveyor not ready Cross conveyor pivoting operation (1) Press  key. (2) Press key  or  to preselect the required cross conveyor. (3) Operate tractor's control device to pivot the preselected cross conveyor. With the configured option "Cross conveyor belt", the function keys are assigned in the Work menu as follows.  Operate once - select right cross conveyor Operate twice - select both cross conveyors The preselected cross conveyors have a black background.  Operate once - select left cross conveyor Operate twice - select both cross conveyors  Activate cross conveyors  Deactivate cross conveyors

2.2.10 Cross flow with hydraulic wall opening (Option)

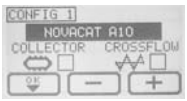
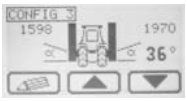
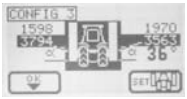
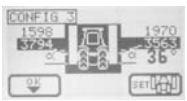
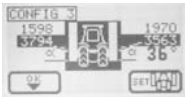
Keys	Display	Note
WORK		Display: Covering closed Covering opened Operation: (1) Press key WORK (2) Press the key or , in order to preselect the desired cross flow unit. (3) Activate the control unit from the tractor, in order to swivel the preselected cross flow units. When the option "Cross flow" is configured, the function keys in the work menu are arranged as follows. 1x press - preselects of the right cross flow unit 2x press - preselects both cross flow units The preselected cross flow units are displayed on a black background. 1x press - preselects the left cross flow unit 2x press - preselects both cross flow units The preselected cross flow units are displayed on a black background.

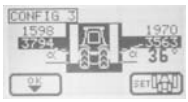
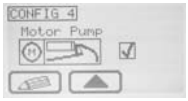
3. Set menu

Keys	Display	Note
		Press key to access SET 1 menu. There are 3 different screens here. Press "ESC" key to access the Main menu.
		SET 1 Menu: 50 % Screen contrast in percent Keypad lighting (on/off) 10 % Screen brightness in percent
		Press key to access the SET 2 menu - rotation angle sensor calibration. Press key to calibrate the side shift sensors. B11...Left rotation angle sensor B12...Right rotation angle sensor **Note!** **Calibrating the rotation angle sensors is only necessary after a rotation angle sensor has been exchanged.**

Keys	Display	Note
		Calibration mask - only when a rotation angle sensor has been exchanged. Calibration procedure: **Note:** **Make sure, that in every extreme position (inside, outside) you reach the end position while calibrating.** 1. Select side shift using key so that the side shift indicator has a black background. 2. Drive the lateral displacement completely inwards using the control unit (Was the end position reached?). 3. Press key to save the value. 4. Move the side shift completely out using the control device. (Was the end position reached?) 5. Press key to save the value. 6. Press "ESC" to end the calibration procedure.
		Press key to open the SET 3 menu - automatic lubrication. Automatic lubrication is optional. Press key to manually switch the the lubricating pump or to open the change mask. Press key to access SET 2 menu (calibration mask).
		Press key to manually start the lubricating pump. The "Elapsed lubrication cycle time" meter starts to count. Press key to manually stop the lubricating pump. The "Elapsed lubrication cycle time" meter stops. Press key to access the change mask
		Change mask: Press key to select a value to change. Press keys , to change the value. Press "ESC" key to access the Configurations menu. 1. Automatic greasing system active/inactive 2. Runtime of the lubrication pump per lubrication cycle. (Default setting: 4 min) 3. Pause time of the lubrication pump per lubrication cycle. (Default setting: 30 min) 4. Time counter per lubrication cycle
		Press key to access the SET 4 menu - cross conveyor speed. Display: Press key to change the cross conveyor speed. Press key to access SET 3 menu (automatic lubrication).
		Change mask: Press key to select a value to change. Here, the left or right cross conveyor Press keys , to change the value. 100% .. Maximum speed 0%..... Minimum speed Press key "ESC" to return to the SET 4 menu.

4. Configuration menu

Keys	Display	Note
		Press key  for 5 seconds to access the Config 1 menu. Set the machine configuration here.  Machine type selection  Collector (yes/ no)  Cross flow (yes/no) Press key  to access the change mask. Press key "ESC" key to access the Main menu.
		Press key  to access the change mask. Press key  to select a value to change or to save it after changing. Press keys  ,  to change the value. Press "ESC" key to access the configurations menu.
		Press key  to access CONFIG 2 menu.  Side shift (yes/no)  Indicate service interval (yes/no)
		Press key  to access CONFIG 3 menu - field transport position angle. Display: 1. Current value on rotation angle sensor in mV 2. Field transport position angle Press key  to access the change mask.
		Rotation angle sensor calibration: 1. Press and hold the preselect key for the mower 2. Move the mower to the transport position. 3. Repeat steps 1 and 2 for the second mower 4. Press key  to save the position. Press key  to access the change mask. Press "ESC" button to return to Config 3 menu.
		Change mask - Adjusting the the field transport position angle: Press keys  ,  to change the value. Press key  , to change to the next value. Press "ESC" button to return to Config 3 menu.
		Change interface - Configuration of the left mower unit: Press keys  ,  to change the value. Press key  , to change to the next value. Press "ESC" button to return to Config 3 menu.

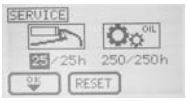
OK		Change interface - Configuration of the right mower unit: Press keys −, + to change the value. Press key OK, to change to the next value. Press "ESC" button to return to Config 3 menu.
▼		Press key ▼ to access CONFIG 4 menu. Motor Pump Electric lubricating pump (yes/no)

5. Test menu

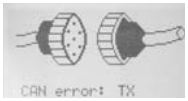
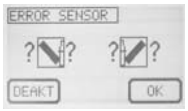
	Displa	Note
TEST		Press key TEST to access the Test 1 menu. Current voltage at the left mower (sensor B5) Current voltage at the right mower (sensor B3) Press key ▼ to access the Test 2 menu. Press "ESC" key to access the Main menu.
▼		Press key ▼ to access the Test 2 menu. The sensor function is displayed here. A dark field means that the sensor is currently active. Operating speed sensor (B10) Pressure: Press switch (B1) Press key ▲ to access the Test 1 menu (Sensors). Press key ▼ to access the Test 3 menu (Software Information).
▼		Press key ▼ to go to the Test 3 menu. The Collector sensor function is displayed here. A dark field means the sensor is currently active. Left cross conveyor in working position / Cross conveyor speed / Test field for inductive speed sensor Right cross conveyor in working position / Cross conveyor speed / Test field for inductive speed sensor Press key ▲ to access the Test 1 menu (Sensors). Press key ▼ to access the Test 3 menu (Software Information).
▼		Press key ▼ to access the Test 4 menu (voltage). The voltages for the extension modules (X1A/X1B) are displayed here: 1. Row: Control panel supply voltage (current / minimum) Extension module X1A: 2. Row: Control panel supply voltage (current / minimum) 3. Row: The reference power source voltage. (current / minimum) Extension module X1B: 4. Row: Extension module supply voltage(current / minimum) 5. Row: The reference power source voltage. (current / minimum) Press key ▲ to access the Test 1 menu (Sensors). Press key ▼ to access the Test 3 menu (Software Information). Press key RESET to reset the minimum values to the current values.

Keys	Display	Note
		Press key  to access the Test 5 menu (Software Information). The versions of the various software components are displayed here. 1. Row: (SC120) Control panel software version 2. Row: (CAN-IO A) Extension module (X1A) software version 3. Row: (CAN-IO B) Extension module (X1B) software version Press key  to access the Test 4 menu (voltage).

6. Data Menu

Keys	Display	Note
		Press key  to access the partial- hour counter (Data 1) Press key RESET to reset the partial-hour counter to 0h.
		Service mask - Lubrication intervals display Press key  to access the Change menu. Press key  to return to the Data menu.
		Change mask - Resetting the service counter Resetting the service counter to the initial value after successful lubrication. Operation: - Press key  to select the counter. - Press key RESET to reset the selected counter to the initial value (= interval). - Press "ESC" key to save the selected value and to return to the previous menu. Display:  1… Interval for the grease lubrication (Start interval:25h afterwards 50h) 2...Lubrication counter  3… Interval for the oil change (Start interval:75h afterwards 250h) 4...Oil change counter If a counter has expired, then the corresponding service message appears the next time the device is turned on. (see Service message) Refer to chapter "Maintenance" before lubricating or changing the oil.

7. Diagnostic message

Diagnostic screen	Meaning	Causes
	**Fault in the CAN-bus connection** The connection to the extension module x has been interrupted	- Connection to extension module interrupted - Extension module is faulty or missing - Operating console faulty **Note!** **This fault message cannot be ignored! Call customer service.**
	**Voltage Angle sensor Mower** The voltage on one or both angle sensors (B3/B5) lies outside the specified operating range (0.5V - 4.5V). - Press key DEAKT to access the manual emergency operation. - Press key OK to acknowledge the fault	- Faulty sensor - Connection to sensor interrupted - Gap between magnet and sensor is incorrectly set. (See chapter "Sensor" for setting) - Short circuit in the voltage supply or missing voltage supply
	Work menu - Manual Emergency Operation indicator  In the Work menu the manual emergency operation is shown by question marks over both mowers.	If the mower angle sensors fail and the the error message is acknowledged with DEAKT, the mower can then be controlled in the manual emergency operation. For example, in order to get home in the transport position. Conditions for manual emergency operation: - Unplug the failed angle sensors B3 and B5 before moving the mowers any further. - Visually monitor the movement of the mowers to prevent any collisions. **Be advised!** **There is a danger of property damage when using the manual emergency operation!** **Watch the mowers while travelling and check the end position of the mowers in the transport position.**
	**Voltage supply** - to the extension module - to a sensor	- insufficient voltage at the extension module - Extension module faulty - Short-circuit - Wiring error **Note!** **If there are problems with the voltage supply, check the page "Voltage supply" in the Test menu .** **Note!** **This fault message cannot be ignored! Call customer service.**
	**Voltage supply** - of the reference voltage source supplying the angle sensors	

	**Cross conveyor rpm is too low** - Press key [X] to ignore the fault until the next system start-up. - Press key [OK] to acknowledge the fault	- Faulty sensor - Faulty connection - Insufficient or no speed sensor voltage supply at the cross conveyor.
	**Cross flow Flap opened**	- Faulty sensor - Faulty connection - Insufficient or no speed sensor voltage supply at the cross conveyor.
	**Cross conveyor not in position**	- Faulty sensor - Faulty connection - Insufficient or no speed sensor voltage supply at the cross conveyor.

8. Service message

Note!

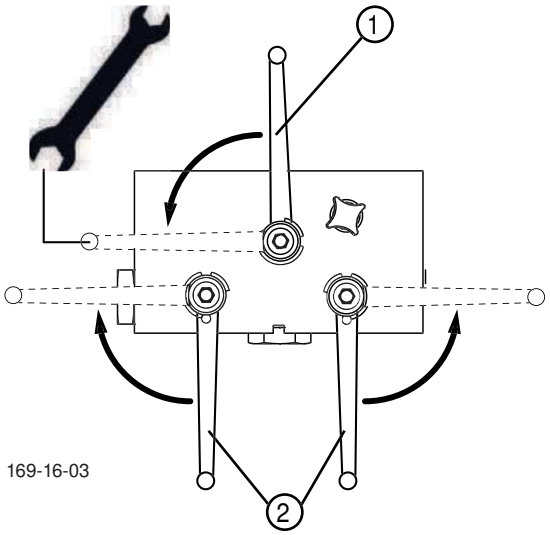
We recommend that lubrication and/or oil changes be carried out according to the lubrication plan, at the latest after the service message has appeared, to prevent damages to the lubricant consumers.

Service message	Meaning	Procedure
 	**Lubrication interval has been reached** This message appears after re-starting the terminal if the service message has been activated in the configurations menu. 1. Lubricate the relevant parts according to the lubrication plan. 2. Reset the service counter.	- If lubrication is not to be carried out immediately: - Press key [OK] to ignore the message until the next system start-up. The terminal returns to the Start menu. - After successful lubrication: Press key [RESET] to reset the service counter. Access the service mask (see Data menu) where the value can be manually changed.

9. Set relief pressure for hydraulics

Adapt the relief pressure to the ground conditions.

1. Make sure that both mower units are in the floating position. Otherwise the relief pressure cannot be adjusted.
2. Lift the outer rear unit manually. If this is even possible, this is equivalent to a relief pressure of approx. 70kg.



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The hydraulic block is located centrally under the white implement cover.

3. Bring the switching lever (1) from working to maintenance position
4. Open the respective hydraulic circuit with the corresponding jib lever (2)
5. Set the release pressure with the help of the tractor control device
6. Lift the rear unit to check release pressure
7. Close the open hydraulic circuit with the corresponding jib lever
8. Bring the switching lever to working position

Terminal performance features

Note!

Do not leave the control terminal out in the weather.

Electrical connection

The power supply for the entire electronic system (job calculator and terminal) is conducted through a plug (compliant with DIN 9680) from the tractor's 12V onboard electrical system. These 3-pin plugs may also be 2-pin versions as only two main wires (+12 V, ground) are required.

Be advised!

Other plug and socket designs are not permitted as otherwise the functional reliability cannot be ensured.

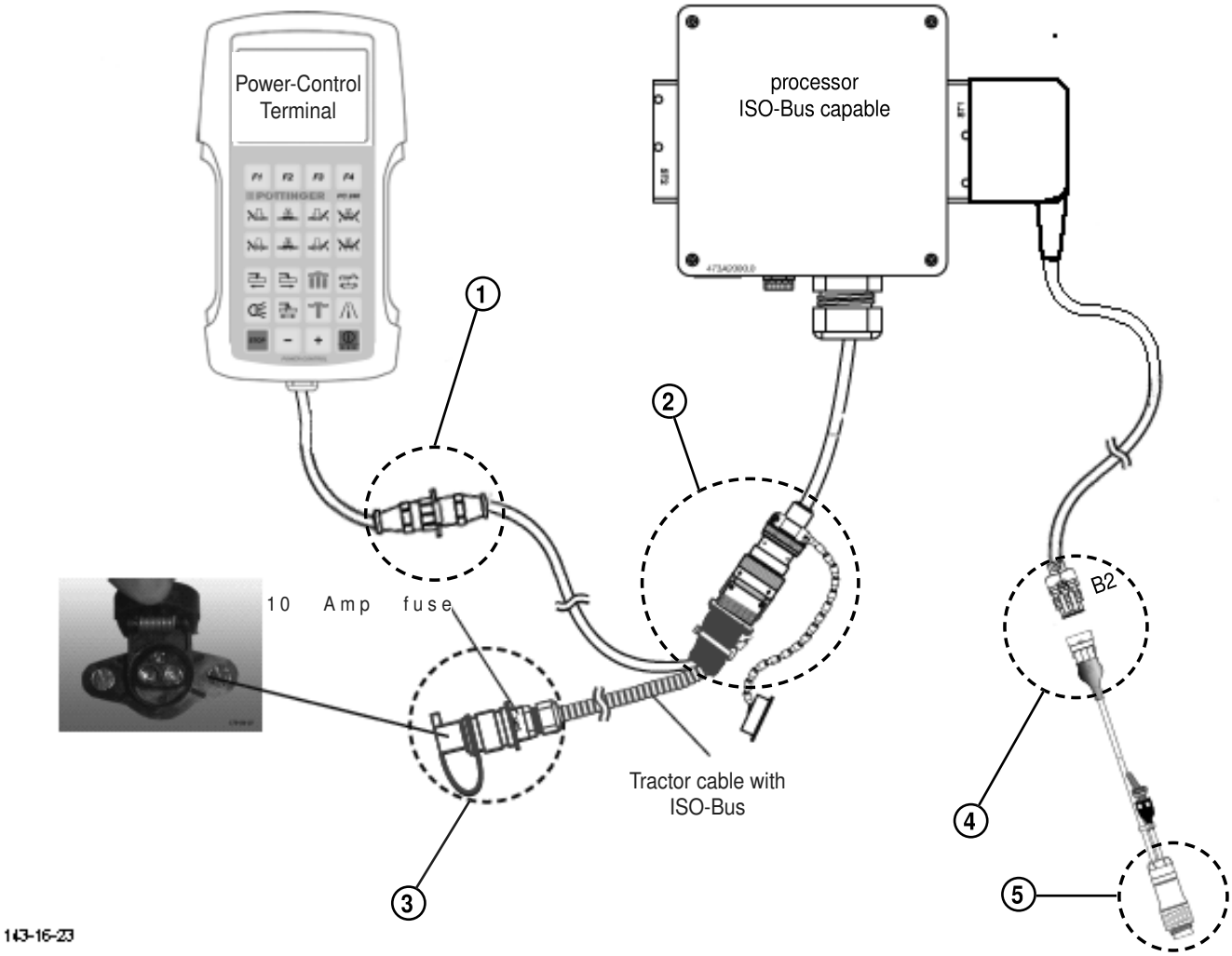
Technical data

Operating voltage:	+10V / +15V
Operating temperature range:	-20°C .... +60°C
Storage temperature:	-30°C .... +70°C
Degree of protection:	IP65
Fuse:	10A multifuse in an operating voltage plug

Function

All the functions of your implement can be directly controlled through the Power Control Terminal. Moreover, the Power Control Terminal has a big display for information regarding the current operating status as well as various menus and alarm messages. A prerequisite is a single-acting hydraulic circuit with depressurised return or load sensing.

Initial start



1. Position Power Control Terminal in tractor cabin where it can be clearly seen. (To secure the terminal there is a holder on the reverse side.
2. Connect the terminal with the tractor cable through the plug (1).
3. Direct the cable of the job computer from the implement into the tractor cab and connect it with the cable of the tractor through the ISOBUS plug (2). (Make sure that the cables are properly arranged!)
4. Plug the tractor cable plug (3) in to the tractor's 12V power supply.
5. When the area metering is required, plug the cable (Pöttinger No. 487.575) through the plug (4) at the position B2 on the wire harness of the job computer.
6. Connect the cable with the plug (5) at the tractor signal socket (according to DIN 9684.1 / ISO 11786).

To activate terminal, press key "I/O"  .

To deactivate terminal, press key "I/O"  for three seconds.

Keys allocation

Function keys

a Function key 1*
b Function key 2*
c Function key 3*
d Function key 4*

Raising and lowering the mower unit

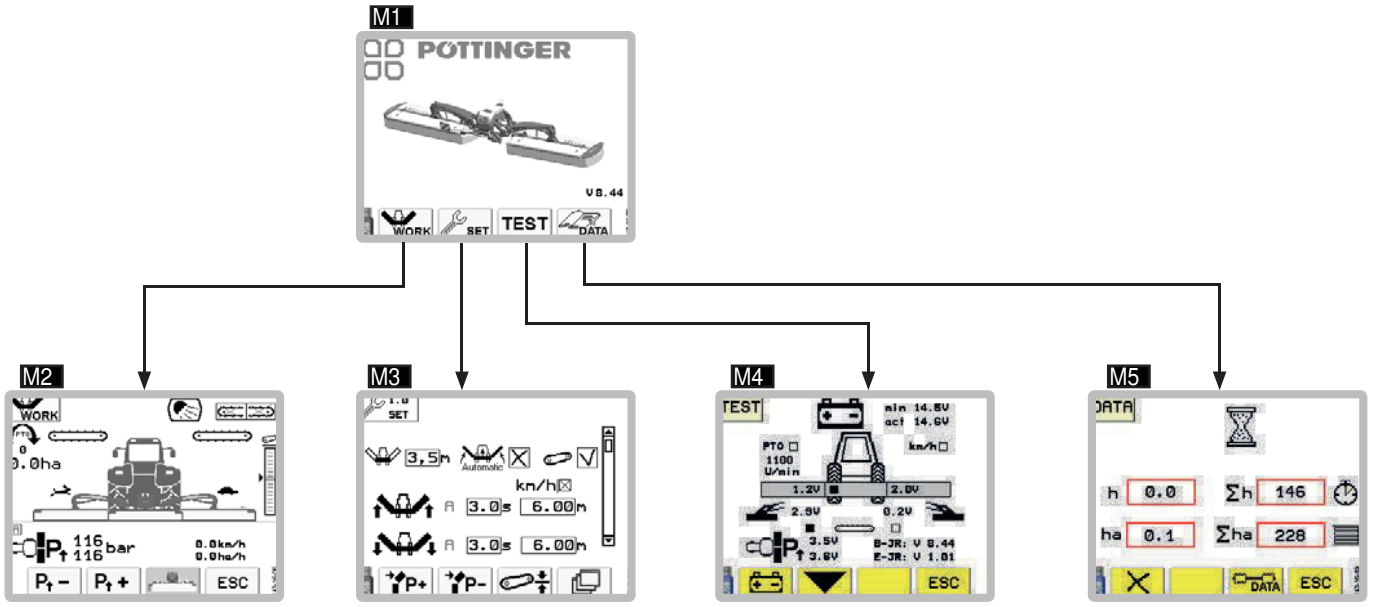
e Raise left mower unit
f Raise front mower unit
g Raise right mower unit
h Raise all mower units
i Lower left mower unit
j Lower front mower unit
k Lower right mower unit
l Lower all mower units

Side shift, cross conveyor, transport

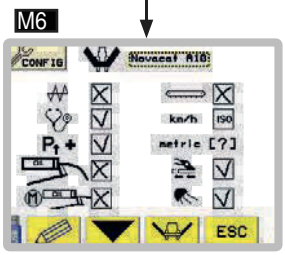
m Decrease working width
n Increase working width
o Open/Lift cross conveyor Cross Flow
p Alter cross conveyor speed
q Operating headlights on/off
r Slope travel preselection
s Close/Lower cross conveyor Cross Flow
t Road transport preselection
u Stop - stops every hydraulic function
The cardan shaft continues to run!
v Decrease a setting value
w Increase a setting value
X On/Off
Press [On/Off] key to switch on Power Control Terminal. Press [On/Off] key to open up System Menu.
Press and hold [On/Off] key longer to switch off Power Control terminal.

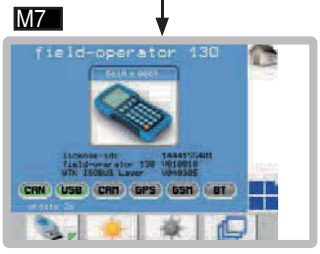
* Function keys have different functions depending on the menu.

Menu tree



Press and hold for 10 seconds!





Menus

Note!

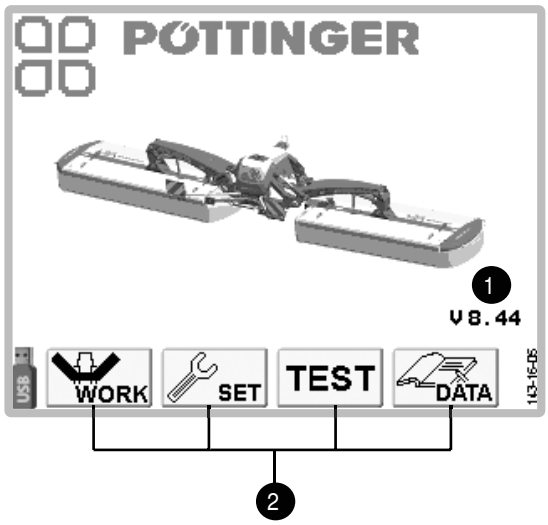
Any menu can be quit by pressing the ESC key.

ESC

Start menu

M1

After turning on the Power Control Terminal the Start menu appears.



Display:

1…. Software version

2…. Function keys

Function keys:

WORK ... Work menu M2

SET ... Set menu M3 / press longer: Configuration menu M6

TEST ... Sensor test menu M4

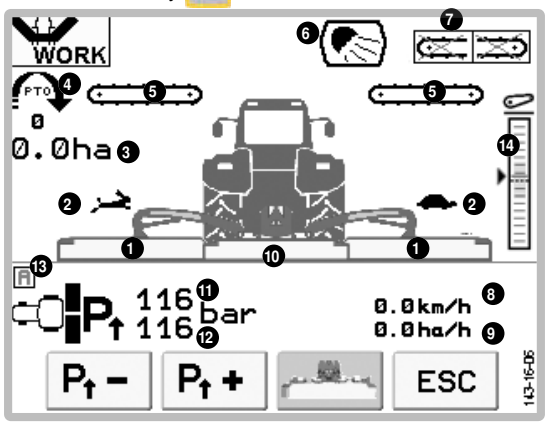
DATA ... Data menu M5

Work menu

M2

In Start menu, press function key F1 to open up Work menu.

Press function key F4 to return to Start menu.



Display:

1…. Operating status of the mower unit:
Working (Image 1), Field transport (Image 2), Road transport (Image 3)

2 ... Speed of the cross conveyor:
(only with collector)
quick (rabbit)/slow (turtle)/ A (automatic)

3… Daily hectare counter, only if tractor speed is selected in configuration menu.

4… Current speed of the cardan shaft

5… Preselect to either raise or lower cross conveyor.

6. Work lights on/off
only if the working light has been configured in the configuration menu.
When folding to transport position, the working light is switched off automatically.

7. Indication regarding a cross conveyor
As long as a cross conveyor is crossed out, it means that is has not reached the working position. The cross conveyor is not activated. Activate the cross conveyor using the „Speed of the cross conveyor" key.

8. Tractor speed:
can only be selected if in configuration menu

9... current area output in ha per h
only if tractor speed is selected in configuration menu.

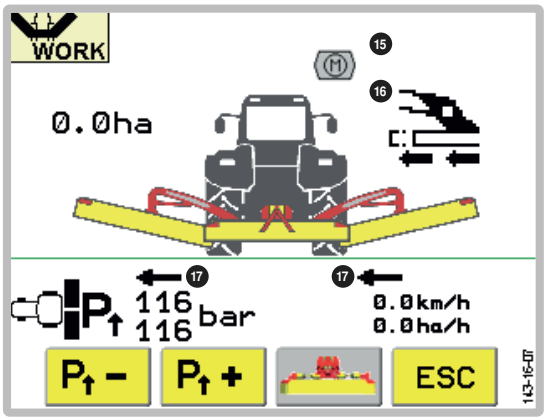
10... Front mower status: Operating position or field transport position. If this symbol is not displayed, there is either no front mower available or it cannot be managed with this control.

11... Left rear mower unit relief pressure

12... Right rear mower unit relief pressure

13. Automatic discharge adaptation is active, it is working only when the mower units are in the working position. (see set-menu)

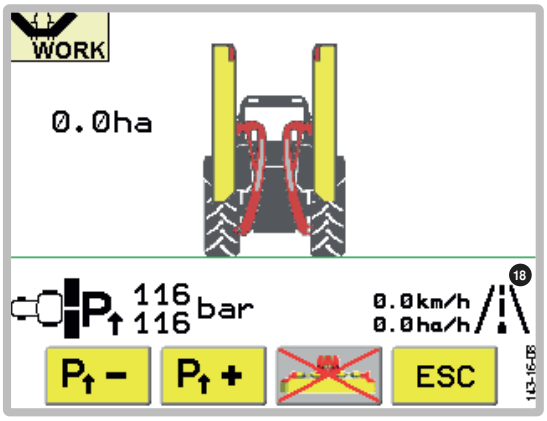
14. Lower link height prompt - the green field shows the correct lower link height. Angulations of the drive shaft above and below this are unfavourable.



15. Automatic lubricating pump (optional)
grey... The lubricating pump is not working
green... The lubricating pump is working

16 ... Slope travel preselection

17... Lateral adjustment
both arrows point outward = max. width
both arrows point inward = min. width
both arrows point in the same direction = slope travel



18... Road transport symbol
Only with the symbol displayed is raising and lowering, out of or to, the road transport position possible. If symbol begins to flash then press [Road transport] key once again.

Function keys:

Note!

To adjust the relief pressure the mower units must be in the neutral position.

P↑ - ... Decrease relief pressure of rear mower units

Momentary pressure differences could arise between left and right rear mower units. But these are automatically balanced out after the filling process.

P↑ + ... Increase relief pressure of rear mower units

Momentary pressure differences could arise between left and right rear mower units. But these are automatically balanced out after the filling process.

... Activate/deactivate front mower

ESC ... Go up one menu level (here: Start menu)

... Preselection cross conveyor left - The symbol "Preselection cross conveyor left" ❺ appears for a short period of time on the display.

Press the appropriate key, [Raise] or [Lower], to move the relevant cross conveyor.

... Preselection cross conveyor right - The symbol "Preselection cross conveyor right" ❺ appears for a short period of time on the display.

Press the appropriate key, [Raise] or [Lower], to move the relevant cross conveyor.

... Preselection Cross flow unit left- The symbol "Preselection Cross flow unit left" ❺ appears for a short period of time on the display.

Press the appropriate key, [Raise] or [Lower], to move the relevant cross conveyor.

... Preselection Cross flow unit right-The symbol "Preselection Cross flow unit right" ❺ appears for a short period of time on the display.

Press the appropriate key, [Raise] or [Lower], to move the relevant cross conveyor.

...scroll further to new function keys

Hard keys: Raising and lowering

	Lower left mower unit	Lowers left mower unit from field transport to working position
	Lower front mower	Lowers front mower from field transport to working position
	Lower right mower unit	Lowers right mower unit from field transport to working position
	Lower all mower units	Lowers all mower units from field transport to working position. In the set-menu you can configure the delay between the front mower and the rear mower. (see set-menu)
	Raise left mower unit	Raises left mower unit from working position to field transport position.
	Raise front mower	Raises front mower from working position to field transport position
	Raise right mower unit	Raises right mower unit from working position to field transport position
	Raise all mower units	Raises all mower units from working position to field transport position In the set-menu you can configure the delay between the front mower and the rear mower. (see set-menu)
	Road transport prese-lection	**Note!** **To be able to activate the key  , all mower units must be in the field transport position.** **Note!** **To be able to activate the key  , both cross conveyors must be in the working position.** **Note!** **To change to road transport position cardan shaft must be idle. The  key will not function as long as the cardan shaft is turning.** **Note!** **Pressing the key  for 3 secs. depressurizes the side protection hydraulic hoses. (e.g. before uncoupling)** 1. Press preselection key to make raising to and lowering from road transport position possible. 2. Press either the [Raise] or [Lower] key to move the respective mower units to, or out of, the road transport position.
	Stop	Stops any raising or lowering process.

Hard keys: Raise and lower cross conveyor / Open and close Crossflow

	Raise the cross conveyors / Open Cross Flow	Function depends on the type of cross conveyor: Raises both or only the preselected cross conveyor. Opens the back of the Cross flow screw
	Lower the cross conveyors / Close Cross Flow	Function depends on the type of cross conveyor: Lowers both or only the preselected cross conveyor. Closes the back of the Cross flow screw
	Cross conveyor speed levels (Optional extra)	Press the key to change the speed level of the cross conveyor belts. One of two levels can be selected which are represented by a "hare" or a "tortoise" Go to the Set menu to adjust the speed of the speed level.

Hard keys: Side shift

	Slope travel preselection	1. Press the preselection key to move both rear mower units in the same direction, one after the other. 2. Press the appropriate key [side shift] to start the side shift in the relevant direction. The mower units then move one after the other.
	Decrease working width / side shift left	Decreases working width of mower so that both mower units move inward to end position. In conjunction with [Slope travel preselection], both rear mower units move to the left.
	Increase working width / side shift right	Increases working width of mower so that both mower units move outward to end position. In conjunction with [Slope travel preselection], both rear mower units move to the right.

Note!

The keys "Decrease working width" and "Increase working width" are stayput keys (function activated by briefly pressing the key).

The function is interrupted with the STOP key or by pressing the key for the opposite direction. If function is interrupted with STOP key, no arrow appears in the display.

Note!

When mowing on slopes it is sensible to position both mower units uphill. Doing so will prevent streaking.

Note!

Adjusting the working width is only possible in the working and field transport positions.

If both mowers are to be moved to the transport position and one of the mower units is in the field transport position at max. working width, firstly bring both mower units to min. working width so as not to exceed the 4 m transport height.

Hard keys: General

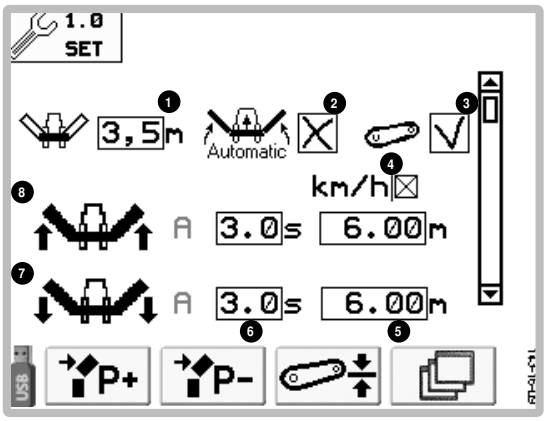
	Lighting system	Turning the working light on/off The working light is automatically turned off in the transport position. That means, that you have to manually turn on the working lights, when it is again in the working position.
	On/Off	**Operating console switched off** **Brief press < 1 second** - Turning the operating console on **Operating console switched on** **Short press < 1 second** - Change to system menu M7 (to set brightness) and return **Long press >= 2 seconds** - Turning the operating console off
	Minus	**Brief press < 1 second** - Changes the sign selected - Scroll through a list **Keep depressed** - If the +/- key is kept depressed, a faster run-through of the selection possibilities is activated.
	Plus	
	Stop	Press the „STOP-Key", in order to hold all the hydraulic functions.

Set menu

M3

In the Start menu, press function key F2, to open the Set Menu.

Press function key F4, to return to the Start menu.



Display:

1… Working width of the front mower

2...Automatic raise of all the mower units during reversing. (only in connection with speed signal via ISOBUS)

3....Activate/Deactivate displaying the lift in work menu

4… Time or distance controlled delay when lowering the rear mower.

Note:

The values for the distance controlled delay will not appear if the speed has not been selected in the configuration menu.

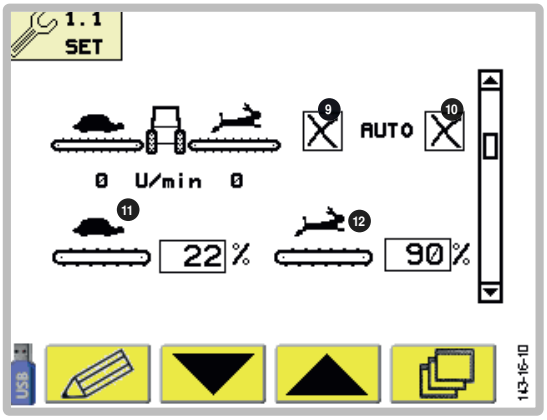
5… Column for the distance controlled delay

6. Column for the time controlled delay

7. Line for lowering the mower unit

8. Line for raising the mower unit

Collector:



9 ...Speed selection for the cross conveyor:

Tick = Differing speeds between the left and right cross conveyor belt (for mowing in contour lines)

Cross = Same speed for both cross conveyor with the possibility of switching between two speeds.

10...Automatic speed adjustment of the cross conveyor at the lateral displacement.

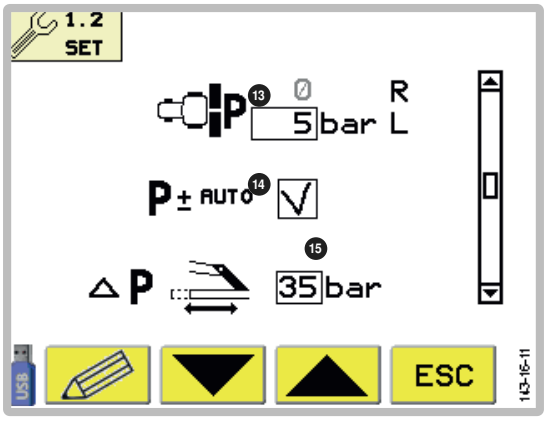
Lateral displacement outside: Cross conveyor fast (rabbit)

Lateral displacement inside: Cross conveyor slow (turtle)

11...The configuration for the cross conveyor speed slow (turtle) - percentage of the maximum speed

12...The configuration for the cross conveyor speed fast (rabbit) - percentage of the maximum speed

Adjusting the release pressure:



13...The configuration of the discharge pressure difference between the left and the right mower unit. Set here the deviation of the left mower unit from the right mower unit. A negative value means that the right mower unit relief pressure is greater than the left one.

14...Automatic discharge adaptation

Display in work menu, see position 13, work menu

If the automatic discharge adaptation is activated, the following pressure limits are monitored:

At a shortfall of 5 bars or more the pressure is increased.

At an excess of 1 bar or more the pressure is decreased.

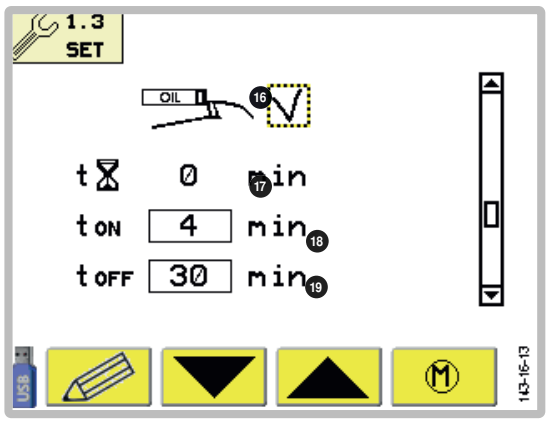
15...Adjustment of the relief pressure in case of position change of the lateral displacement (configuration interval: both mower units inside: 15 bars - both mower units outside: 50 bars).

Set relief pressure for hydraulics

Adapt the relief pressure to the ground conditions.

1. Ensure that both mower units are in the neutral position. Otherwise the relief pressure cannot be adjusted.
2. Raise an outside rear unit. If this is even possible, this is equivalent to a relief pressure of approx. 70kg.
3. Press the function keys P↑ – or P↑ + to adapt the relief pressure to the ground conditions.

Automated lubrication



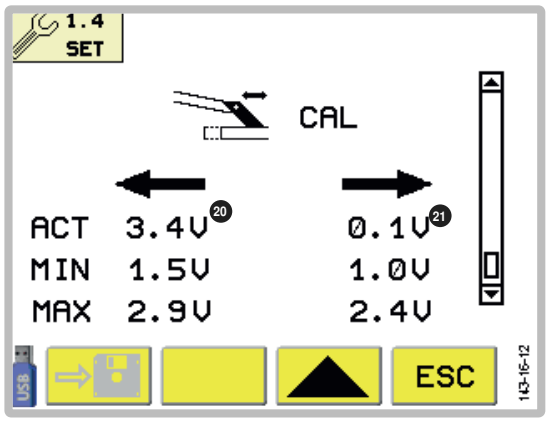
16.. automatic grease lubrication active

17 time counter per lubrication cycle

18... Run time of the lubrication pump per lubrication cycle

19.. Waiting time of the lubrication pump per lubrication cycle

Angle sensor lateral movement



20... Voltage - left angle sensor (B11)

21 ... Voltage - right angle sensor (B12)

curr = current

min = minimum

max = maximum

Function keys:

... Edit menu entry

... page down

... page up

ESC ... switch to the next higher menu level (here: Start menu)

...increase collision protection system pressure

...reduce collision protection system pressure

...turn over to the new function keys

..save the current values (possible only from 1V difference from the previous value)

...manual folding-up of the side covers

...manual folding-down of the side covers

...manual activation of the lubrication pump.

Do not forget to deactivate the lubrication pump.

...calibrate the lift height

1. Configure the lower link at the setting dimension (800 mm)
2. Press and hold the key for 2 seconds

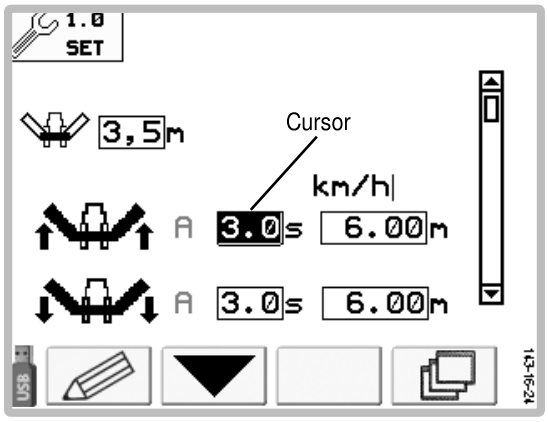
Danger to life due to ejected objects.

Fold the side protection down before reactivating the mower.

Fold upwards only the side protection when the drive shaft is not working.

Fold upwards only the side protection during maintenance or service work. Afterwards fold the side protection down!

Calibrate the angle sensors for lateral movement:



A sensor swap is necessary to calibrate the angle sensors. The function serves to memorize the voltage level at end positions.

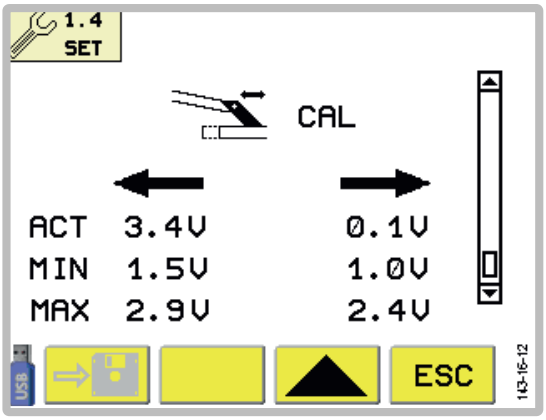
Starting the minimum and maximum working width takes place using keys (the function is only active as long as the [side shift left] key or [side shift right] key is depressed).

The mower units must be in the field transport position for this.

- Calibration procedure
  - Press key until both mower units are against the inner stop.
  - Press key until both mower units are against the outer stop.
  - Press and hold the key [ ].
    Saving is confirmed by an audible signal.

Saving is only possible starting with a difference bigger than >1V. Before that the key is greyed out.

Changing a value



1. Press function key [✎] to change a value.
2. Press function key [OK] until cursor has reached the value to be changed.
3. Change the value with the keys [−] and [+] until the desired value is reached.
4. Press function key [OK] to save the value and to select the next value.
5. Press [ESC] to exit the change screen.

Function keys

[OK] ... save the current value and change to the next variable

[−] ... change the current variable value down

[+] ... change the current variable value up

[ESC] ... change to higher menu

(here: Set Menu)

Sensor test menu (together)

M4

In the Start menu, press the function key F3 to open the Sensor Test menu.

Press function key F4, to return to the Start menu.

Display:

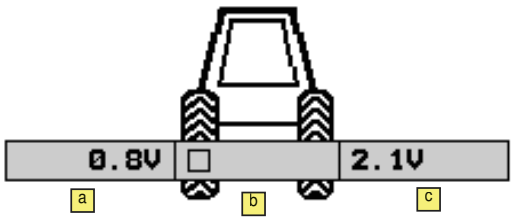
A shaded square shows an active sensor.

A white square shows an inactive sensor.

Note!

When a turning component with sufficiently low speed rotates past the sensor, the field begins to flash.

Sensors:



a ... B5

Tension value on the angle sensor of the left mower unit

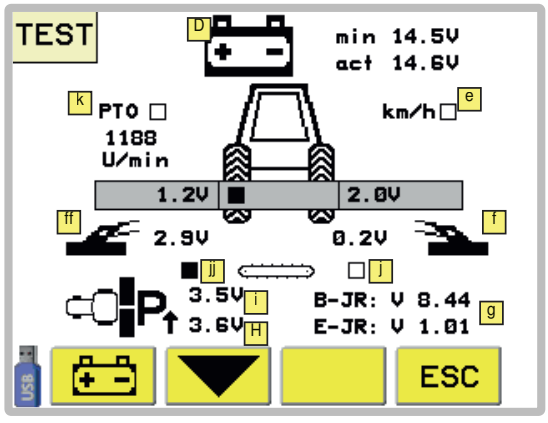
b ... B7

Field transport and working positions for front mower

C ... B3

Tension value on the angle sensor of the right mower unit

Value:



D ... Voltage indicator:

The top voltage display (min) shows the lowest measured power supply value since the operation started. This value is stored until the next new start.

The lower voltage display (act) shows the current measured power supply value.

E ... B2 (Speed)

Speed sensor active. To check the signal, compare the kph displayed in the Work menu with the tractor's tachometer display.

f ...B12

Lateral displacement: Voltage of the angle sensor right, in Volt

ff ...B11

Lateral displacement: Left angle sensor power, in volts

g ... Software versions

shows the software versions used for the base board (B) and the expansion board (E).

h ... B6 (Left pressure transducer voltage indicator)

Shows the current value of the left pressure transducer. So the function can be checked using the data sheet.

i ...B4 (voltage indicator of the right pressure transducer)

Shows the current value of the right pressure transducer. So the function can be checked using the data sheet.

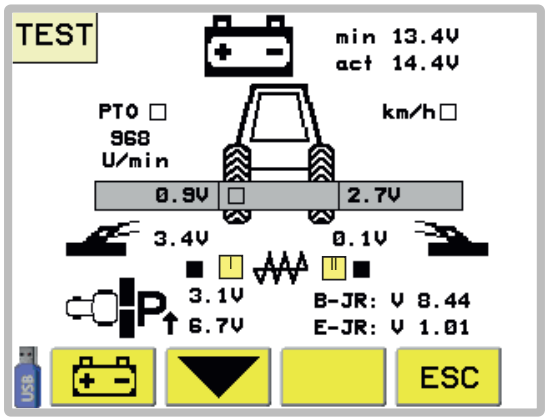
j ... B21 Collector right, swivelled in ■/ swivelled out □

jj ... B20 Collector left, swivelled in■/ swivelled out □

k ... B10 (P.T.O. cardan shaft)

Sensor function is checked while cardan shaft is turning. At approx. 10 rpm the field will be shaded black.

Display for Cross flow



l ...B24 Back cover left, opened ■/ closed □

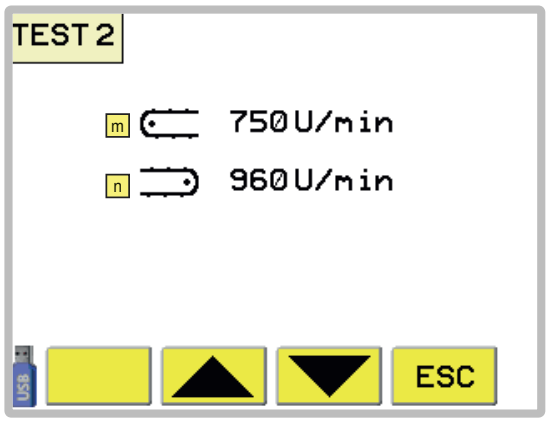
ll ...B25 Back cover right, opened ■/ closed □

Function keys

... Reset the minimum voltage prompt (to the current value)

ESC ... change to higher menu (here: Start menu)

Sensor test menu 2



m ...B22
current speed cross conveyor left

n ...B23
current speed cross conveyor right

Data menu

M5

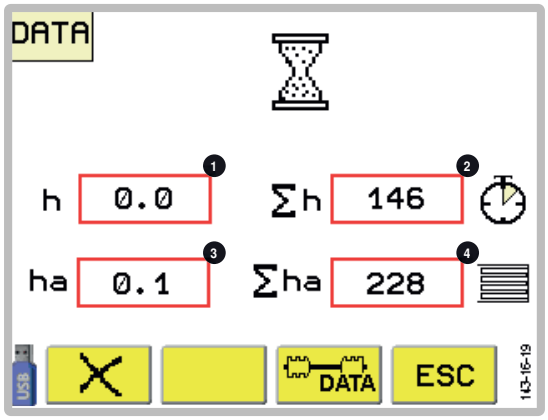
Press function key F4 in the Start menu to open the Data menu.

Press function key F4, to return to the Start menu.

Note

The hectare counter only functions when the "kph" has been selected in the configurations menu and the cable to the tractor's signal socket is fitted.

Data-Menu 1



Display:

1 ... Partial hours counter
2 ... Total hours counter
3 ... Partial ha. counter
4 ... Total ha. counter

Function keys:

... resetting both partial counters

... Change to data menu 2

... go to overriding menu (here: Start menu)

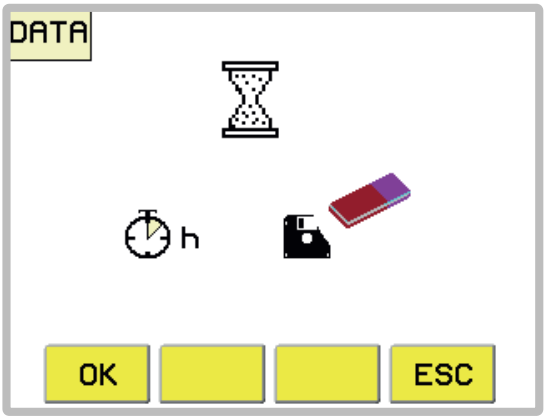
Note:

It is not possible to reset one partial counter without the other. Partial counters can only be reset together.

Resetting partial counters:

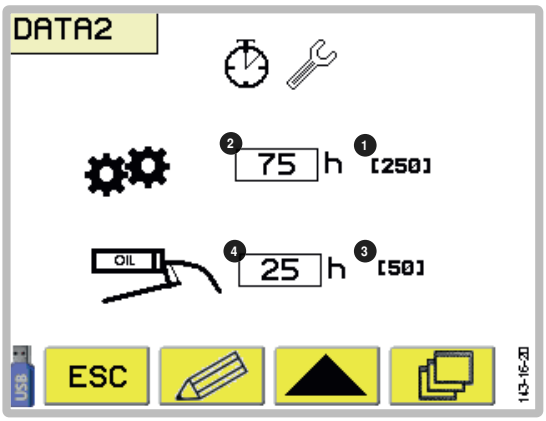
1. Press function key [X] to reset partial counter to nil.

   A new screen appears.



2. Press function key [OK] to confirm the procedure or press function key [ESC] to interrupt the procedure and return to the previous menu.

Data-Menu 2



Display:

1… Interval for oil change (Start interval: 75h afterwards 250h)

2...Counter until the next oil change

3...Interval for the grease lubrication (Start interval: 25h afterwards 50h)

4...Counter until the next grease lubrication

If a counter has expired, then the corresponding service message appears the next time the device is turned on. (see service notifications).

Carry out the maintenance and reset the respective counter.

Refer to chapter "Maintenance" before lubricating or changing the oil.

Function keys:

... Edit menu entry

... scroll down

ESC ... go to overriding menu (here: Start menu)

...browse to other function keys

RESET ...press the key, in order to reset the counter for the interval for grease lubrication to the initial value

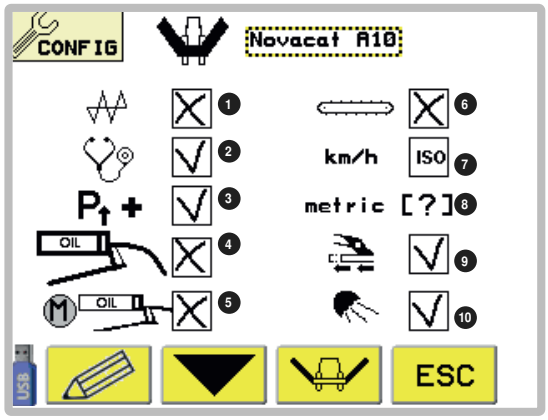
RESET ...press the key, in order to reset the counter for the interval for oil change to the initial value

Configuration menu

M6

While in the Start Menu, press the function key F2 for 10 seconds to call up the Configuration Menu.

Press function key F4, to return to the Start menu.

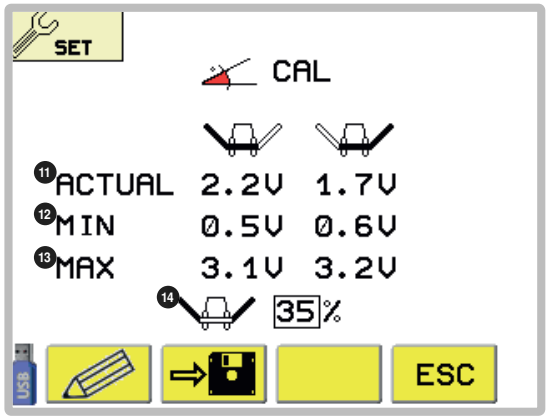


Display:

1.... Cross flow
2 ... Inputs/Outputs diagnosis function
3 ... Hydraulic relief
4... Service interval indicator
5... electric grease pump
6 ... Cross conveyor (only with collector)
7 ... Speed signal from tractor available
8 ... Measuring units metric or imperial
9 ... hydraulic lateral movement
10 ... Working lights

(Tick = active / cross = inactive / ISO)

Calibrate the angle sensors for the mowing bar:



11. Current voltage display
12. Minimum tension of the angle sensor (calibration)
13. Maximum tension of the angle sensor (calibration)
14.

Note!

Überschreiten sie bei der Einstellung der Vorgewendehöhe nicht den Maximalwinkel von 40%, ansonsten ist Sachschaden möglich, da die Gelenkwelle mit dem Eingangsgetriebe kollidieren kann.

Headland height as deviation from the working position in %. The higher the percentage, the higher the headland position.

Calibrate (working and transport) positions:

Note!

Bevor sie mit dem Kalibrieren der Winkelsensoren beginnen:

Stellen sie sicher, dass die Seitenverschiebung in Minimalstellung steht, ansonsten ist Sachschaden möglich, da die Gelenkwelle mit dem Eingangsgetriebe kollidieren kann.

1. Hubwerk des Schleppers maximal ausheben.
2. Absenken der Mähbalken in tiefstmögliche Position.
3. Oberlenker des Schleppers soweit verlängern, dass die Mähbalken waagerecht stehen.
4. Lift the mowing bars to transport position.
5. Press the "Save" key.

Note!

The "Save" key only becomes active after the mower units have been moved about 45 ° away from the working position. Before that, the key is greyed out and cannot be selected.

Function keys:

... Edit menu entry

... scroll down

... scroll up

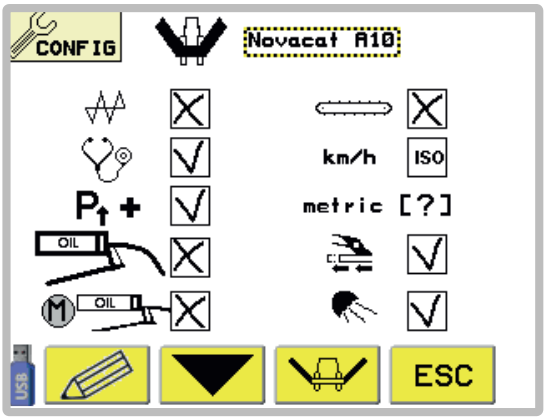
ESC ... go to overriding menu (here: Start menu)

...the angle sensors for the mower units in the calibration menu:

Save the tension values for the working and transport positions. As long as the difference between the working and the transport position is too small, the key cannot be selected (greyed out).

The key becomes selectable after the mower units have been moved about 45°.

Changing a value



1. Press function key [ ] to change a value.
2. Press function key [OK] until the cursor reaches the value to be changed.
3. Change the value using key [−] and [+] until the required value is reached.
4. Press function key [OK] to save the value and to select the next value.
5. Press ESC to exit the change screen.

Function keys

OK ... save the current value and change to the next variable

− ... change the current variable value down

\+ ... change the current variable value up

ESC ... change to higher menu

(here: Set Menu)

System Menu M7

Briefly press key  to open System menu.

Press key  once again to return to previous menu.

Note:

A display brightness of less than 60% automatically switches on the Power Control Terminal keyboard lighting.

Function keys:

 ... only for service personnel

 ... Adjust screen brighter

 ... Adjust screen darker

 ... only for service personnel

Diagnosis function

In the event of a malfunction, the relevant alarm report is displayed and an acoustic alarm sounds.

Note!

When a malfunction occurs, every required function can be manually switched by using the emergency operation (see chapter "Electro-hydraulics")

Function keys:

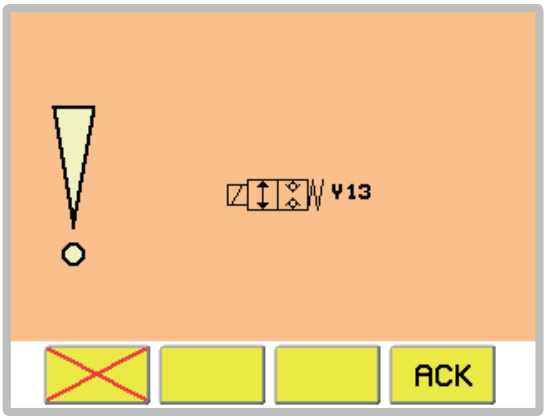
... the particular alarm is suppressed until the next system start.

The alarms for the power supply cannot be switched off!

ACK ... Confirm the defect. If the fault repeats itself, another alarm will be set off.

Alarm reports:

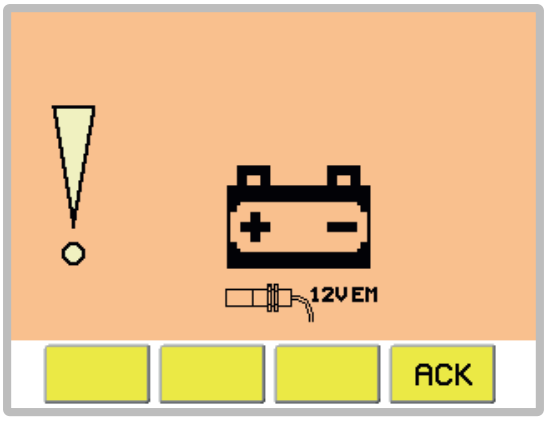
Switching output malfunction (Example: Y13)



Causes:

- Short circuit
- Insufficient power
- Valve not plugged in

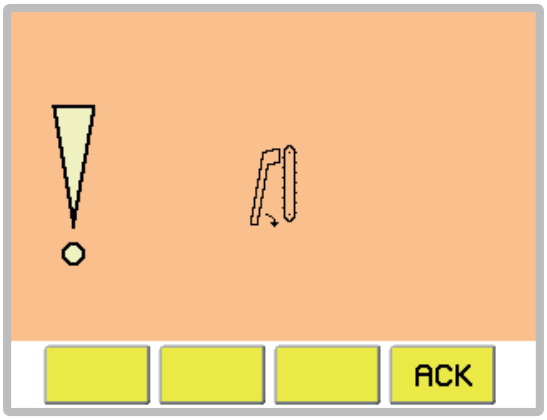
Sensor power malfunction (Example: Sensor power supply < 12V)



Causes:

- Insufficient power at the job calculator
- defective job calculator

Cross conveyor not in working position!



Therefore impossible to fold mower together.

Remedy:

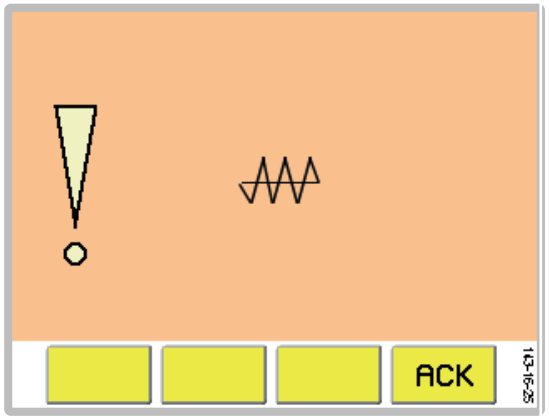
Bring cross conveyor into working position and then fold mower together.

If warning still shows:

Causes:

- Sensor (B20, B21) defective
- Defective line
- Hydraulics leaking

Cross flow is not in the working position!



Therefore impossible to fold mower together.

Remedy:

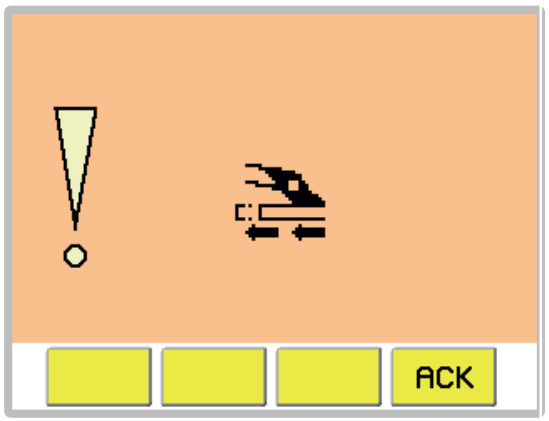
Bring the cross flow to the working position and fold the mower afterwards.

If warning still shows:

Causes:

- Sensor (B24, B25) failure
- Defective line
- Hydraulics leaking

Lateral movement angle sensor malfunction:



There is no automatic guarantee that the machine does not exceed the max. transport height of 4m.

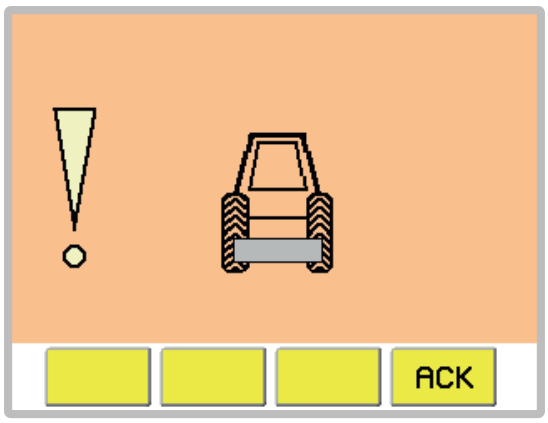
Countermeasures:

Minimize sideways movement using emergency activation on hydraulic block.

Causes:

- Angle sensor (B11, B12) defective
- Defective power line to angle sensor

Front mower sensor malfunction:



The front mower sensor does not send a response to the job calculator within 6 seconds of pressing the key [Raise front mower] or [Raise all mowing units].

Causes:

- Defective sensor
- Defective line

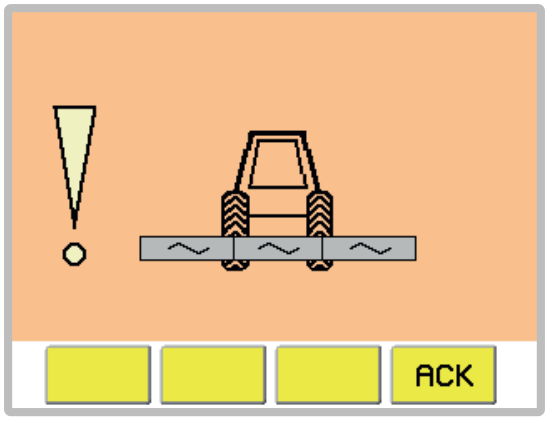
Checking the sensor setting:

When the front mower is in transport position, the sensor (B7) must be covered.

Immediate measures:

- Check in the menu M2 if the front mower has been activated
- Check the sensor lines.

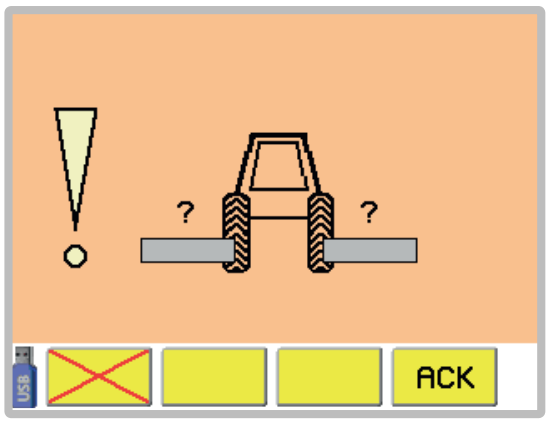
Mower units not in neutral position



There are two possible causes for this warning to occur:

1. The mower units are not in the neutral position and therefore filling the hydraulic relief is impossible.
2. The cardan shaft is still turning and mower is in working position, but not in the neutral position, and the tractor speed is greater than 0 kph.

Undefined position of the rear mower units



No response from the angle sensors for the rear mower units (B3, B5) .

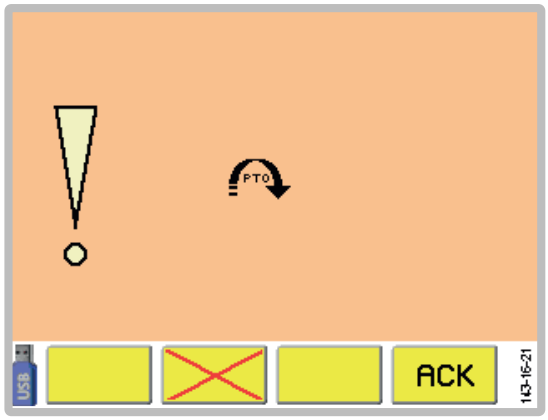
Causes:

- Defective sensor
- Defective line

Immediate measures:

- Check the tension values of the angle sensors for the rear mower units in the menu M4 Sensor test.
- Check the sensor lines.

Swivelling in the transport position is not possible

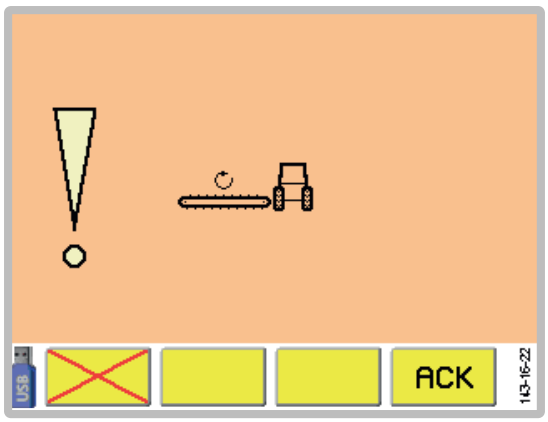


You would like to go into the working position, but the cardan shaft is running.

Immediate measures:

- Deactivate the cardan shaft.

Cross conveyor is not running



At least one of the cross conveyors is not running, although the cardan shaft is spinning.

Causes:

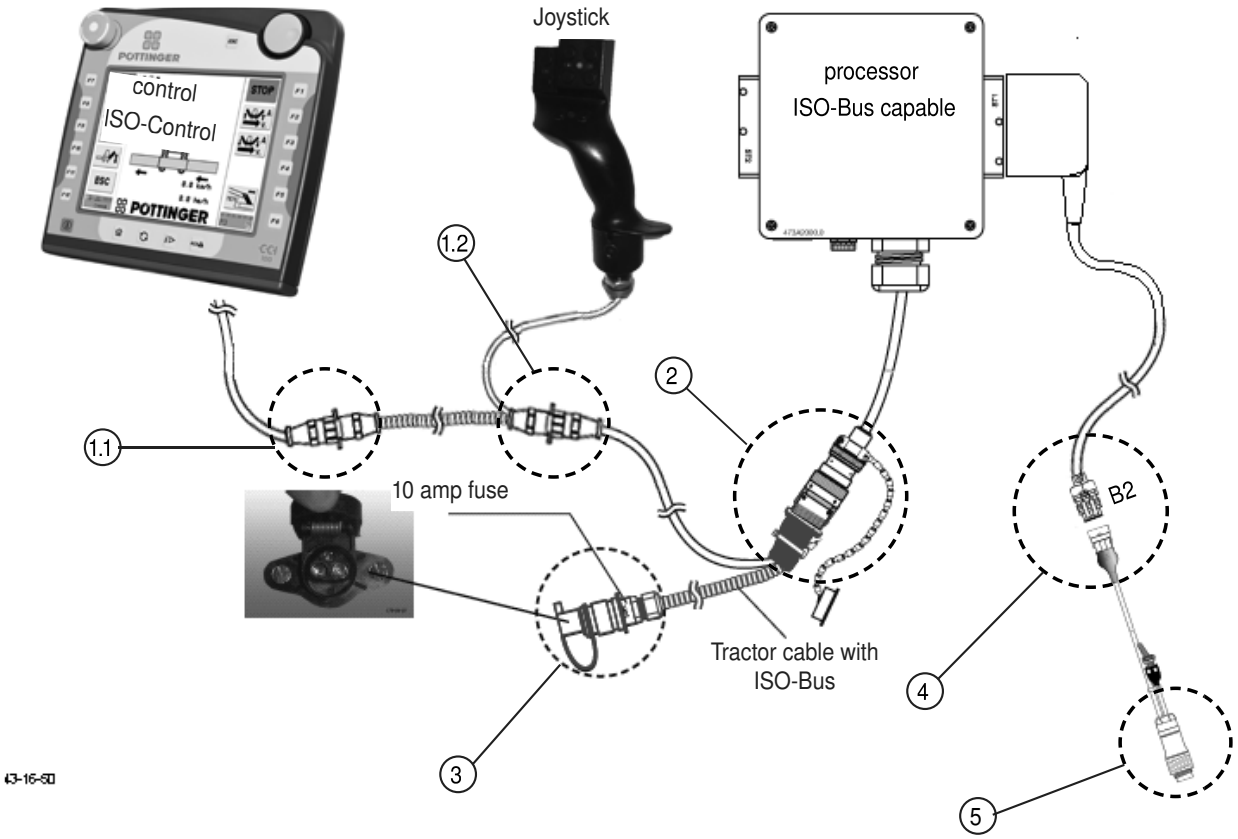
- The belt is deactivated
- Defective speed sensor
- Defective line

Immediate measures:

- Activate the belt
- Control the speed sensor.
- Check the sensor lines.

Variant

Operation with ISO Control Terminal



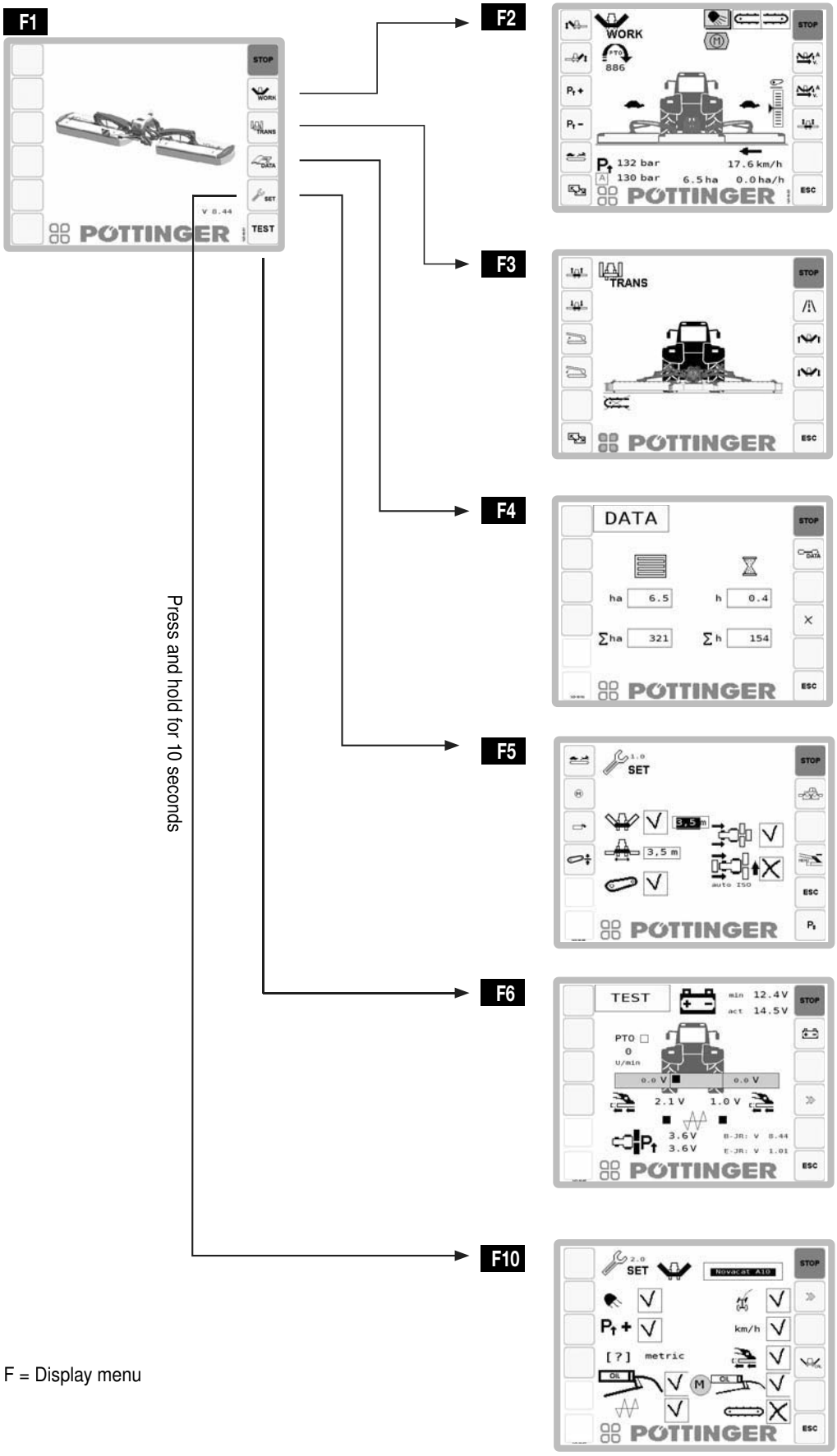
1. Position Power Control Terminal in tractor cabin where it is clearly visible. (To secure the terminal there is a holder on the reverse side.
2. Connect the terminal with the tractor cable though the plug (1.1).
3. Optional, connect the joystick between the plugs (1.1) and (1.2).
4. Lead the cable of the job computer from the accessory equipment (2) into the tractor cab and connect it with the tractor cable through the ISOBUS plug (1.2). (Make sure that the cables are properly arranged!)

   For the integrated terminal: Connect the ISOBUS plug (2) directly with the ISOBUS socket of the tractor.
5. Connect the plug (3) of the tractor cable with the 12 V power supply of the tractor.
6. If the area metering is desired, connect the cable (Pöttinger No. 487.575) through the plug (4) at position B2 with the harness of the job computer.
7. Connect the cable with the plug (5) with the tractor signal socket (according to DIN 9684.1 / ISO 11786).

To activate terminal, press key "I/O"  .

To deactivate terminal, press key "I/O"  for three seconds.

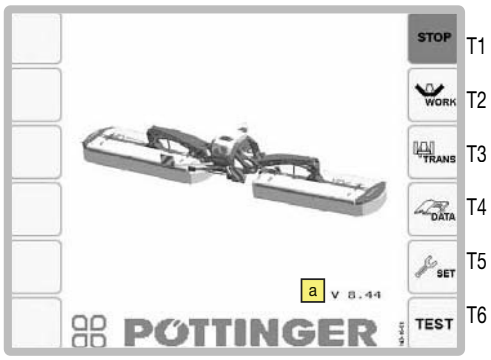
Operation structure - mower with ISObus solution



F = Display menu

Start menu

F1



Display:

a...Machine

a...Software version

Keys:

T1 STOP

T2 Work menu

T3 Transport menu

T4 Data menu

T5 Set menu

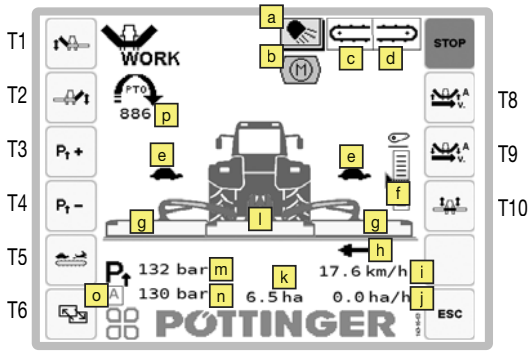
T6 Test menu

STOP-key function To stop all procedures currently running.	STOP
ESC key function To return to previous menu.	ESC

The function of the keys [STOP] and [ESC] are identical on all interfaces. Hence they will be not illustrated any more.

Work menu

F2



Display:

a...Work lights on/off

only if the working light has been configured in the configuration menu.

When folding into the transport position, the work light will be automatically turned off

b....Automatic lubrication pump (optional)

grey... The lubrication pump is not running

green... The lubrication pump is running

c/d...Indication cross conveyor (optional):

As long as a cross conveyor is crossed out, it means that is has not reached the working position, and the cross conveyor is not activated. Press the key "Cross conveyor speed" to activate the cross conveyor.

e...Cross conveyor speed (left or right)

fast (rabbit)/slow (turtle) (optional)/ A (Automatic)

f...Display of the lift

g...Operating status of the rear mower units:

Work, field transport (Fig. 2), street transport

h...lateral displacement

both arrows point outward = max. width

both arrows point inward = min. width

both arrows point in the same direction = slope travel

i...Tractor speed: (only if selected in the configuration menu)

j ...ha per h: only when the tractor speed is selected in the configuration menu.

k...Total area counter

l...Front mower status: Working or field transport position. When this symbol is not displayed, it means that either there is no front mower unit available or it cannot be controlled via this computer.

m...relief pressure of the left mower unit.

n...relief pressure of the right mower unit

o...Automatic relief adjustment active (it is active only when the mower units are in working position.)

p...current drive shaft speed

Keys:

T1 Lift / Lower left mower unit

T2 Lift / Lower right mower unit

T3 Increase relief pressure*

T4 Decrease relief pressure*

T5 Change the cross conveyor speed

T6 Change to interface F3 - transport menu

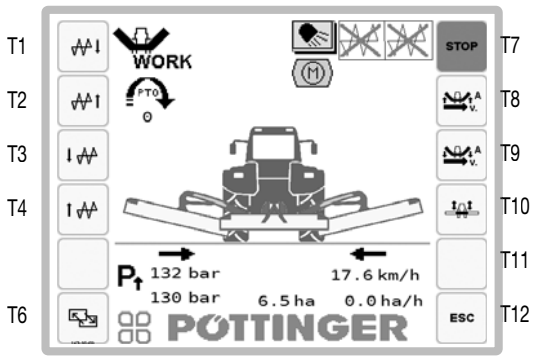
T8 Automatic function "Raise mower units" In the set menu you can configure the delay time between the front and the rear mower. (see the set menu)

T9 Automatic function "Lower mower units" In the set menu you can configure the delay time between the front and the rear mower. (see the set menu)

T10 Lift/Lower the front mower

*Momentary pressure differences could arise between left and right rear mower units. These are automatically equalized after the filling process.

F2.1



Keys:

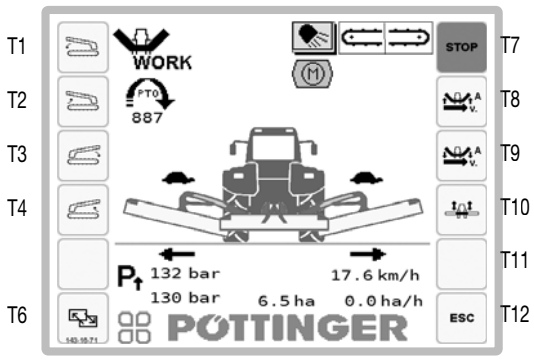
T1 Lower Cross flow right

T2 Raise Cross flow right

T3 Lower Cross flow left

T4 Raise Cross flow left

F2.2



Keys:

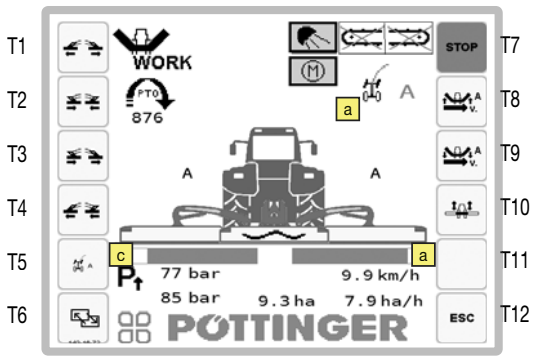
T1 Lower cross conveyor right

T2 Raise cross conveyor right

T3 Lower cross conveyor left

T4 Raise cross conveyor left

F2.3



Display:

a...Status of the automatic curves optimization

	When the icon is hidden, it means that the automatic curves optimization is deactivated.
	The automatic curve optimization is activated but not ready to use. Conditions for operational readiness: • Mower units are in working position (for at least as long as configured in the Set-Menu) • Drive shaft is activated • Speed>1km/h
A	The automatic curve optimization is activated and ready to use.

a...Position of the right cutter bar

a...Position of the left cutter bar

The green field of the cutter bar shows the current position of the cutter bar.

If the steering lock angle is so big, that the curve optimization is not able to compensate the gap, then a part of the bar is displayed on a red background and an audible signal will be emitted.

Keys:

T1 Increase working width

T2 Decrease working width

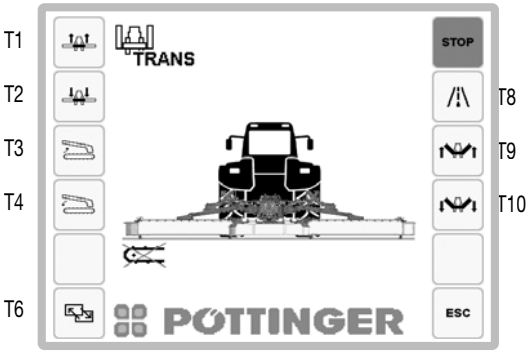
T3 Lateral traversing left

T4 Lateral traversing right

T5 Activate/deactivate the automatic curve optimization

Transport menu

F3



Keys:

T1 Lift the front mower

T2 Lower the front mower

T3 Swivel selected cross conveyor out

T4 Swivel selected cross conveyors in

T6 Change to interface F3.1 - individual lifting

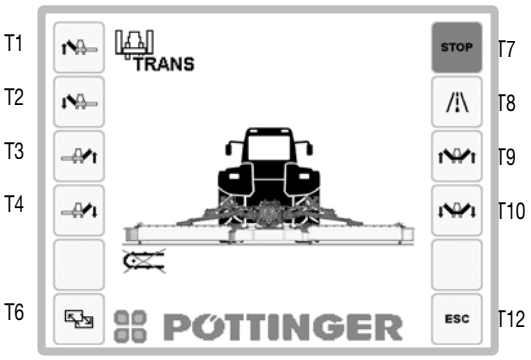
T8 Preselection street transport

Press key T7 for 3 secs. -> the side protection hydraulic hoses are depressurized (e.g. before uncoupling)

T9 Raise the mower units in the street transport position

T10 Lower the mower units in the working position

F3.1



Keys:

T1 Raise left mower unit

T2 Lower left mower unit

T3 Raise right mower unit

T4 Lower the right mower unit

T6 Change to interface F3 - transport menu

T8 Road transport

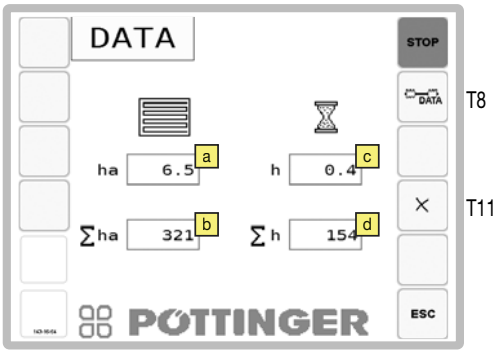
T9 Raise rear mower to transport position

T10 Lower rear mower to working position

In order to get to the street transport position, drive shaft must be stationary.

Data menu

F4



Display:

a... ha partial counter

a... ha total counter

c... Partial hours counter

d... Total hours counter

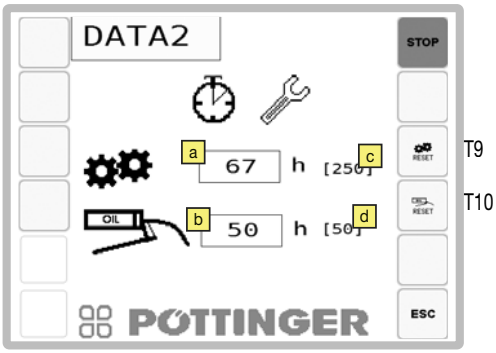
Keys:

T8 Change to Data-Menu 2

T11 Reset the partial counter (ha, h)

Data Menu 2 - Service counter lubrication

F4.1



Display:

a...Interval for the oil change (Start interval: 75h afterwards 250h)

a...Counter until the next oil change

c...Interval for the grease lubrication (Start interval: 25h afterwards 50h)

d...Counter until the next grease lubrication

Keys:

T9 Reset the counter of the grease lubrication interval to the initial value (=interval)

T10 Reset the counter of the oil change interval to the initial value (=interval)

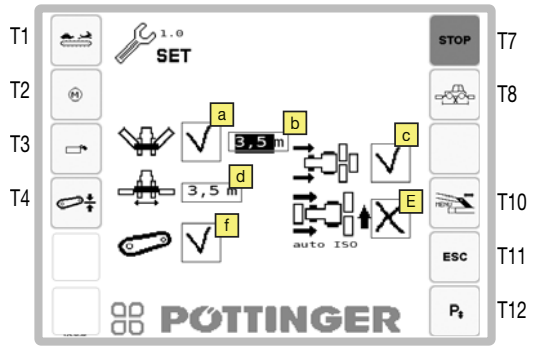
If a counter has expired, then the corresponding service message appears the next time the device is turned on. (see Service message)

Carry out the lubrication process and reset the respective counter.

For carrying out the lubrication process or the oil change process, please see chapter Maintenance.

SET menu

F5



Display:

a ...activate/deactivate front mower

b ...Working width - front mower

C ...activate/deactivate reverse driving

D ...Width of the headstock - rear mower

E ...automatic raise of the mower units when reversing.

f ...Activate/Deactivate displaying the lift in work menu

Keys:

T1 Change the speed of the cross conveyor

T2 Switch to interface 5.5 -"Manual activation of the lubrication pump"

Do not forget to deactivate the lubrication pump!

T3 Flaps of the side protection

T4 Calibrating the display of the lift

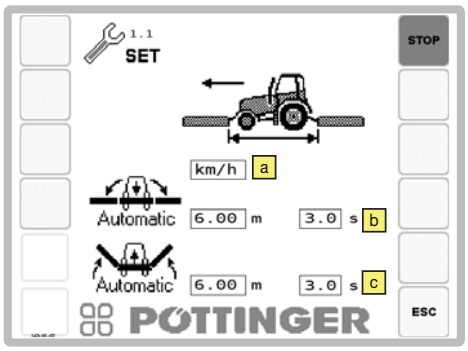
T8 Switch to interface F5.1 - "Lifting/Lowering that depends on time-path"

T10 Change to interface F5.3 - "Calibrate the lateral displacement"

T12 Switch to interface 5.4 - "Adjust the system pressure"

Selection and modification of these values with the help of the external keys (for example on, from +) on your terminal or with the help of the touch screen function of your terminal. For further information regarding this subject, please read the operating instructions of your terminal.

F5.1



Display:

a Configure lowering/raising that depends on time or on the path

Kph = Distance-/speed dependent

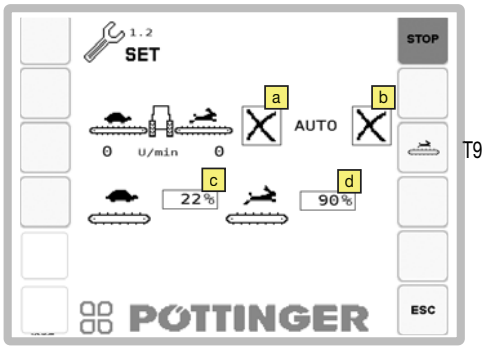
sec = Time dependent

b Configure the values for the lowering process

C Configure the values for the raising process

Display (meter (m) or seconds (secs.))

F5.2



Display:

a ...Tick = varying speed between the left and the right cross conveyor (for mowing in lineal contours)

Cross = same speed of both cross conveyors with possibility of switching between two speed levels.

b ...Automatic speed adjustment

C ...Configure the speed

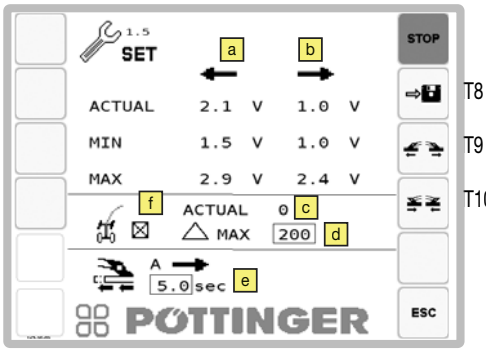
Two speed levels can be set for the cross conveyor belts.

Setting: in 5% steps, setting range: 5 – 100%

Keys:

T9...Manual activation of the cross conveyor as long as the key is pressed.

F5.3



Display:

a ...voltage for the left angle sensor

ACTUAL = real

MIN = minimal

MAX = maximal

b ...voltage for the right angle sensor

ACTUAL = real

MIN = minimal

MAX = maximal

c ...current steering lock angle of the tractor (value when driving straight ahead: 32128) For controlling the sensor: The value is changed when taking a curve.

d ...Delta of the steering lock angle, from which the lateral displacement cannot compensate the turning manoeuvre any more.

e ...Delay time, after which the curve optimization starts. The delay starts after lowering the rear mower unit.

f ...ISOBUS steering-angle signal of the tractor

Tick: Signal exists

Cross no signal

Key:

T8 Save

T9 Start the inner position

T10 Start the outer position

Calibration of the angular sensor for the lateral displacement:

Mortal danger due to objects being ejected.

Fold the side protection down, before reactivating the mower.

Fold the side protection up, when the drive shaft is not running.

Fold the side protection up only during maintenance or service. Afterwards please fold the side protection down!

A sensor swap is necessary to calibrate the angle sensors. The function serves to memorize the voltage level at end positions.

- Starting the minimum or maximum width is activated by keys

  (The function is active as long as the key [ ] or [ ] is pressed).

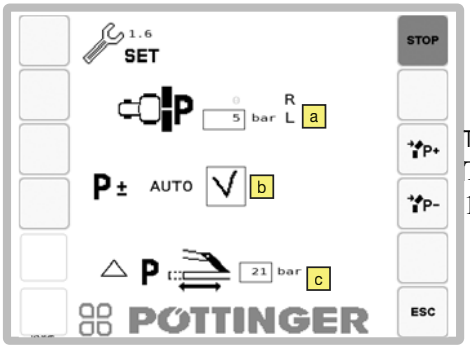
  The mower units must be in the field transport position for this.

- Calibration procedure

  - Press key until both mower units are against the inner stop.
  - Press key until both mower units are against the outer stop.
  - Press and hold key [ ].

    Saving is confirmed by an audible signal.

Saving is possible only at a difference of >1V. Before that the key is greyed out.



F5.4

Display:

a Configuration of the discharge pressure difference between the left and the right mower unit. Set here the deviation of the left mower unit from the right mower unit. A negative value means, that the relief pressure of the right mower unit is bigger than the relief pressure of the left mower unit. For a positive value it is reversed.

b Automatic discharge pressure adjustment

If the automatic discharge pressure adjustment is activated (green display in work menu), then the following pressure limits are to be monitored:

In the case of a shortfall of 5 bars or more, the pressure will be increased.

In the case of an excess of 1 bar or more, the pressure will be decreased.

c Adjustment of the discharge pressure in case of a position change of the lateral displacement (configuration interval: both mower units inside: 15 bars - both mower units outside: 50 bars).

Keys:

T9 Increase the system pressure of the collision safety device

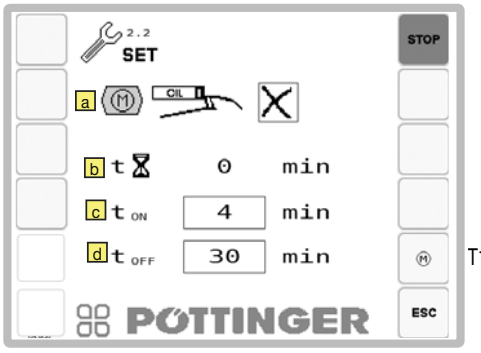
T10 Decrease the system pressure of the collision safety device

Set relief pressure for hydraulics

Adapt the relief pressure to the ground conditions.

1. Ensure that both mower units are in the neutral position. Otherwise the relief pressure cannot be adjusted.
2. Raise an outside rear unit. If this is even possible, this is equivalent to a relief pressure of approx. 70kg.
3. Press the function keys P_t- or P_t+ to adapt the relief pressure to the ground conditions.

F5.5



T11

Display:

a...Automatic grease lubrication active

b...Time counter per lubrication cycle

c...Run time of the lubrication pump per lubrication cycle

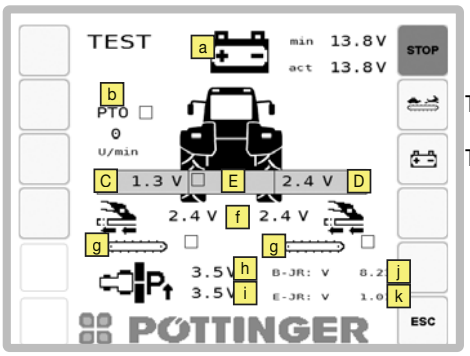
d...Waiting time of the lubrication pump per lubrication cycle

Keys:

T11 Change to interface 5.x -"Manual activation of the lubrication pump"

Test menu

F6



Display:

a Voltage indicator

The top voltage indicator (min) shows the lowest measured distribution voltage value since the operation has started. This value is stored until the next new start.

The lower voltage display (act) shows the current measured power supply value.

b **B10** PTO (drive shaft)

In the right field, the function of the sensors are checked during drive shaft spinning; this field will have a black background, when the drive shaft rotates at a speed higher than 10 U/min.

C **B3** Voltage indicator for the left rear mower unit angle sensor

D **B5**Voltage indicator for the right rear mower unit angle sensor

E **B7** Display front mower active■/ inactive □

A black square indicates an active sensor. When activating and not activating the sensors, the square must alternate between black and white.

f **B11/B12** Current voltage of the side shift angle sensors (left and right)

g **B20/B21 Position of the** cross conveyors (left and right) Working position■/ not in working position □

h **B4** Right pressure transducer voltage indicator

Shows the current value of the right pressure transducer. So the function can be checked using the data sheet.

i **B6** Left pressure transducer voltage indicator

Shows the current value of the left pressure transducer. So the function can be checked using the data sheet.

j Job calculator software version

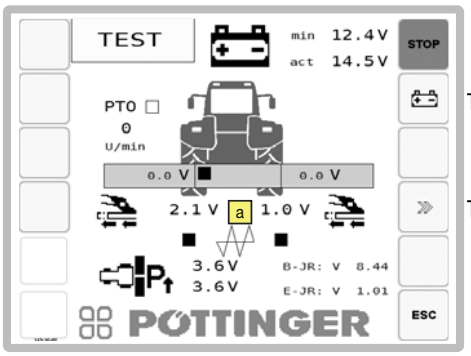
k Extension module software version

Keys:

T9 Change the speed of the cross conveyor

T10 Reset the display for the minimum voltage (to the current value

F6.1



Display:

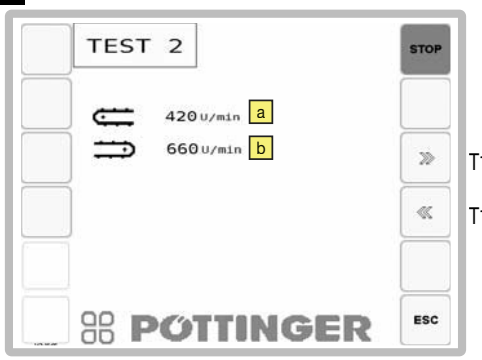
a ...B20/B21 Cross Flow (left and right) rear wall open■/ closed □

Keys:

T9 Reset the display for the minimum voltage (to the current value

T11 Next page

F6.2



Display:

a ...B22 - current speed left cross conveyor

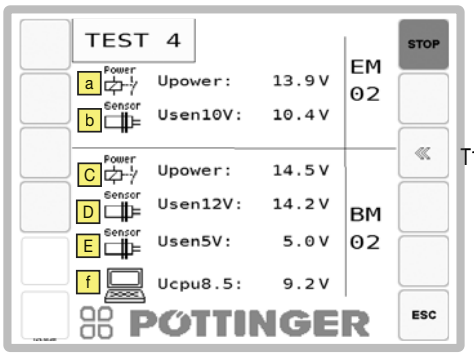
b ...B23 - current speed right cross conveyor

Key:

T9 Next page

T11 Previous page

F6.4



T10

Display:

Extension module:

a...supply voltage

b...Sensor supply voltage Set point 10V

Basic module:

C...supply voltage

D...Sensor supply voltage Set point 12V

E...Sensor supply voltage Set point 5V

f...Supply voltage Set point 8,5V

Key:

T10 Previous Page

Diagnosing function

Monitoring the job calculator for

Operating voltage	
Power supply sensor	
Short circuit to earth or 12 V Broken cable Overload	

With fault recognition

- The alarm mask is superimposed and an alarm tone sounds
- The relevant symbol and the fault is displayed

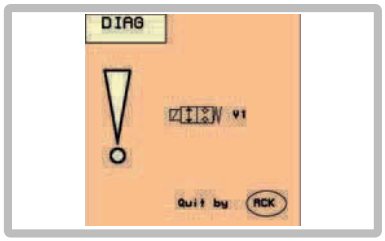
Confirm a fault with the "ACK" key.

The diagnosing function can be switched off for each individual channel until the next system start by using the key**"T9"**.

Switching outputs

(Example: Y1 = Raise way valve)

Diag



T9

Causes:

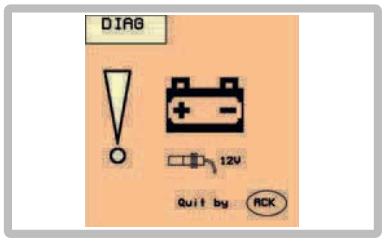
- Short circuit
- Insufficient power
- Valve not plugged in

When a malfunction occurs, every required function can be manually switched by using the emergency operation (see chapter "Electro-hydraulics")

Sensor Inputs

(Example: Sensor power supply < 10V

Diag



Causes:

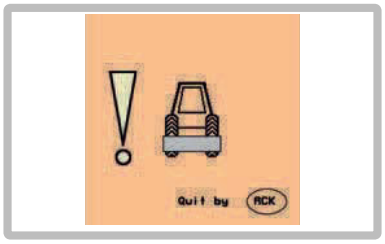
- Insufficient power at the job calculator
- defective job calculator

The alarms for the power supply cannot be switched off!

Time out - Monitoring

If the front mower sensor is not reached within 6 seconds after pressing the “Raise front mower or all mowers” key.

Diag



Causes:

- Defective sensor
- Defective line

When this message appears, the front mower sensor B7 is not active.

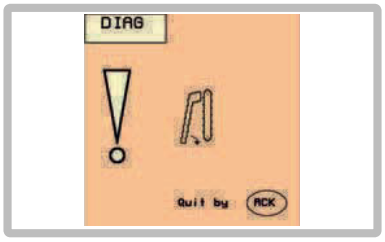
Immediate measures:

- Check if the front mower has been activated in the SET menu!
- Check sensor lines!

Warning: Cross conveyor not in working position!

Therefore impossible to fold mower together.

Diag



Remedy:

Bring cross conveyor into working position and then fold mower together.

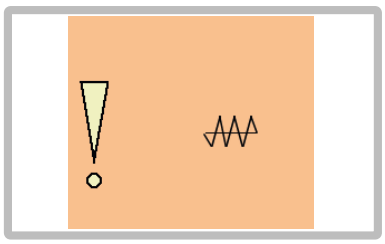
If warning still shows:

Causes:

- Sensor (B20, B21) defective
- Defective line
- Hydraulics are leaking

Cross flow is not in working position!

Diag



Therefore impossible to fold mower together.

Remedy:

Bring the cross flow in the working position and then fold the mower.

If warning still shows:

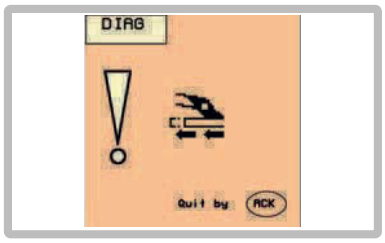
Causes:

- Sensor (B20, B21) defective
- Defective line
- Hydraulics leaking

Angle sensor malfunction:

There is no automatic guarantee that the machine does not exceed the max. transport height of 4m.

Diag



Remedy:

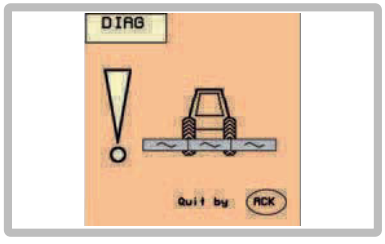
Minimize sideways movement using emergency activation on hydraulic block.

Causes:

- Angle sensor (B11, B12) defective
- Defective supply line to angle sensor

Warning: Mower units not in neutral position

Diag

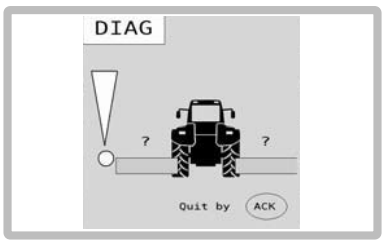


There are two possible causes for this warning to occur:

1. The mower units are not in the neutral position and therefore filling the hydraulic relief is impossible.
2. The cardan shaft is still turning and mower is in working position, but not in the neutral position, and the tractor speed is greater than 0 kph.

Undefined position of the rear mower units

Diag



No response from the angle sensors for the rear mower units (B3, B5) .

Causes:

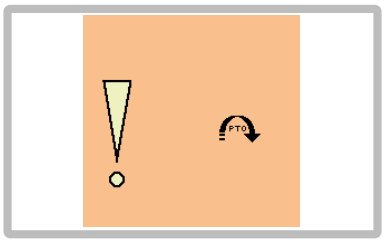
- Defective sensor
- Defective line

Immediate measures:

- Check the tension values of the angle sensors for the rear mower units in the menu M4 Sensor test.
- Check the sensor lines.

Swivel in transport position is not possible

Diag



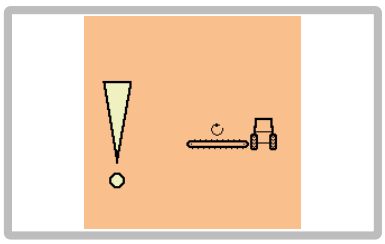
You would like to switch to transport position, but the drive shaft is still running.

Immediate measures:

- Turn off the drive shaft.

The cross conveyor is not running

Diag



At least one of the cross conveyors is not running, although the drive shaft is.

Causes:

- Deactivated belt
- Defective speed sensor
- Defective line

Immediate measures:

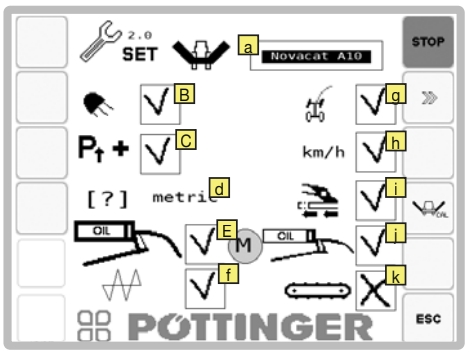
- Activate the belt
- Check the speed sensor.
- Check the sensor lines.

Configuration

Press the function key  in the Start menu for 10 seconds to open the Configuration Menu.

(Tick = active / cross = inactive / ISO)

F10



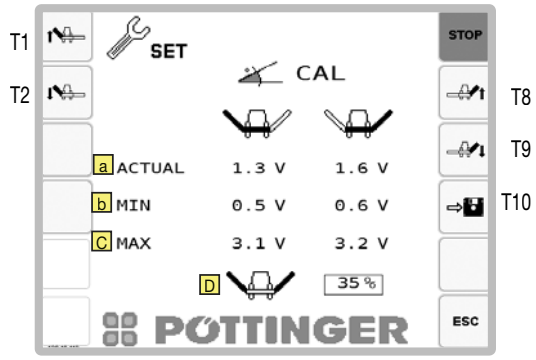
Display:

- a...machine type
- b...work lights
- C...Hydraulic relief
- D...Units of measure metric or imperial
- E...Display service intervals
- f...Cross flow unit
- g...Optimizing the curve overlapping
- h...Speed signal of the tractor available
- i...hydraulic lateral displacement
- j...electric lubrication pump
- k...cross conveyors

Keys:

Calibrate the angle sensors for the mowing bar:

F10.1



Display:

a...Displaying the current voltage.

b...Minimum voltage of the angular sensor (Calibration)

C...Maximum voltage of the angular sensor (Calibration)

D...Height of the headland as deviation in % from the working position. The higher the percentage, the higher the headland position.

Keys:

T1 Bring the mower unit left in transport position

T2 Bring the mower unit left in working position

T8 Bring the mower unit right in transport position

T9 Bring the mower unit right in working position

T10 Save Min and Max sensor values

Calibrate (working and transport) positions:

1. Lowering of the cutter bar in the working position (T2, T9)
2. Raising the cutter bar in the transport position (T1, T8)
3. Press the "Save" Key (T10)

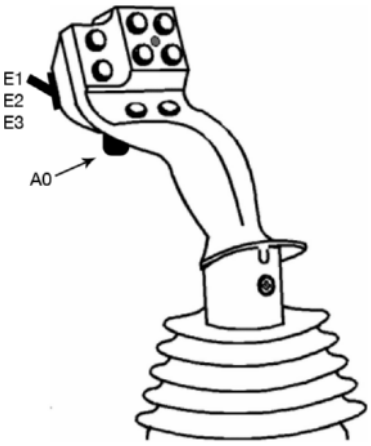
The "Save" key only becomes active after the mower units have been moved about 45° away from the working position. Before that, the key is greyed out and cannot be selected.

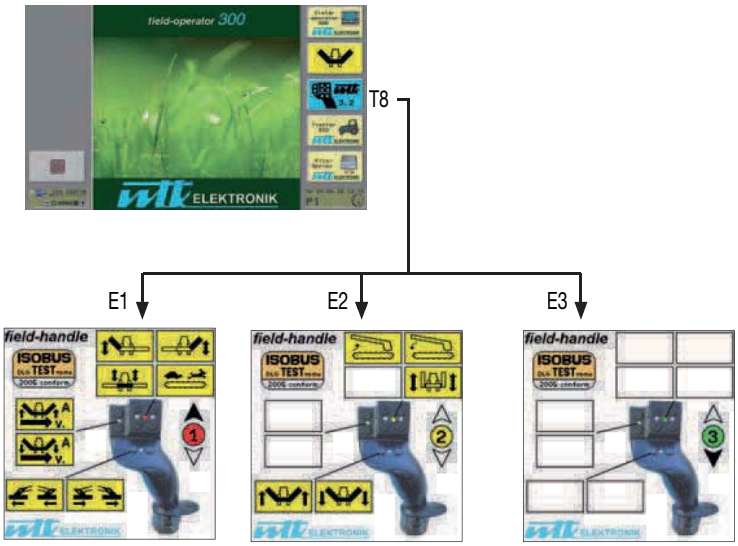
Joystick - Mower configuration

On the joystick there are 8 equivalent function keys (1 – 8), a green clearing key (A0) and a level switch (E1/E2/E3). The keys enable 8 different functions to be allocated per level (E1/E2/E3) = max. 24 different functions can be performed with the joystick.

Joystick configuration - check function keys

Press T8 in the Start menu. With the level switch (E1/E2/E3) change to the respective overview. The allocated function keys are distinguished by the function symbol.





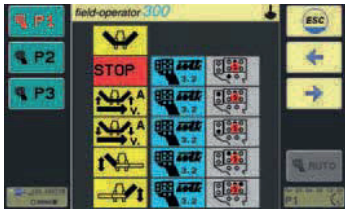
Setting the joystick

Set joystick function keys allocation

1. Press key [T6] in the Start menu. “Field operator 300” menu appears.
2. Press key [T9] in "Field operator 300" menu to open the "Joystick setting menu".

3. With the terminal keypad select the function symbol.
4. Select level on the joystick using the level switch (E1/E2/E3).
5. Press the green clearing key (A0) on the joystick while simultaneously selecting the required function key (1-8).
6. As a check, the following symbols appear on the display: 

   In this case it means: The "STOP" function has been assigned to function key 7 of level 1 on the joystick.



   Important: The number on the joystick symbol (1/2/3) shows the level selected for the function!
   - 1 - Level 1 - "Switch up" and LED glows red on joystick
   - 2 - Level - 2 "Switch middle" and LED glows yellow on joystick
   - 3 - Level 3 - "Switch down" and LED glows green on joystick

To assign further function keys, repeat steps 3 to 6.

Working on slopes

Take care when turning on slopes!

The tractor's travelling characteristics are influenced by the weight (G) of the mower unit. This can lead to dangerous situations, especially on slopes.

Safety information

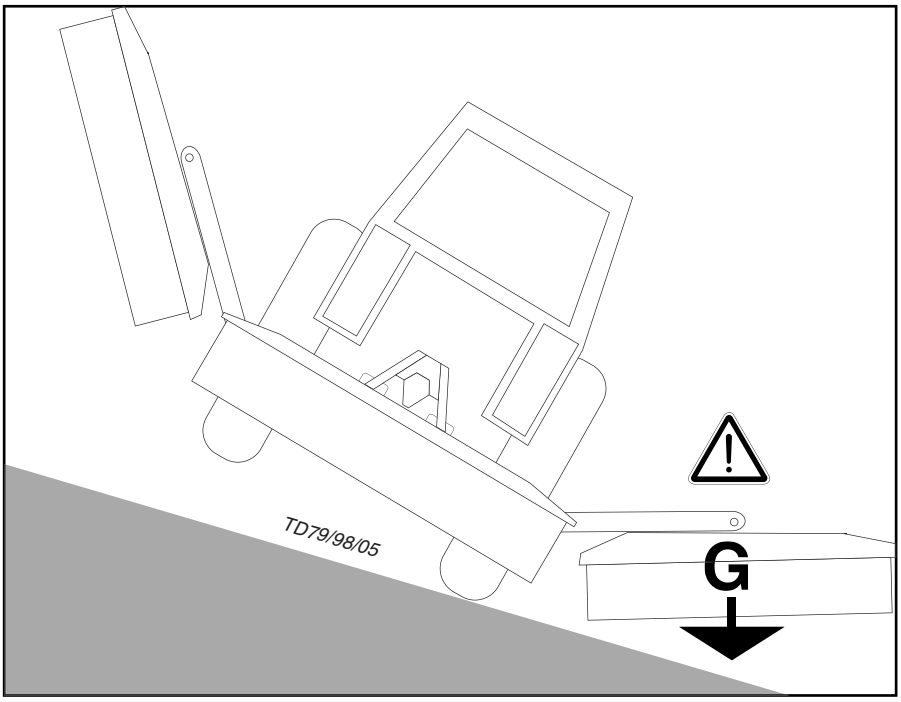
- Reduce speed when bending accordingly.
- It is better to travel in reverse on a slope than to carry out a risky turning manoeuvre.

Danger of tipping occurs

- when the mowing units are lifted hydraulically
- when bending with lifted mowing unit

Note:

Raise the mower when reversing!



Safety advice

Safety hints:

See Supplement A, pt. 1. - 7.)

Be warned!

After the first operating hours: Re-tighten all blade screw fittings.

Be advised!

Check all safety equipment before starting work. In particular, ensure that the side protection devices are folded down correctly in the off-road transport position!

Important notes prior to starting work

1. Check

- Check the condition of blades and the blade holder.
- Check mowing discs for damage (see chapter "Maintenance and Service")

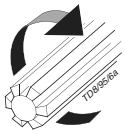
2. Only switch the machine on when in the working position and do not exceed the stipulated p.t.o. speed!

1000 Upm

A transfer located near the transmission advises which p.t.o. speed your mower unit is equipped for.

- Always, and only, switch the p.t.o.drive on when all safety devices (covers, protective aprons, casings, etc.) are in proper condition and are attached to the machine in their safety positions.

3. Pay attention to correct p.t.o. direction of rotation!

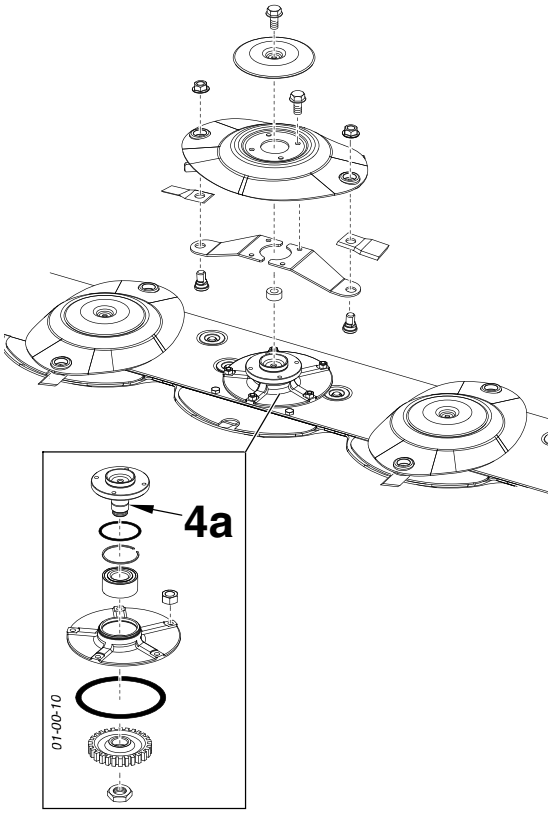


4. Avoid any damage!

The area to be mowed must be free of obstacles or foreign objects. Such objects (e.g. large stones, pieces of wood, boundary stones, etc.) can damage the mower unit.

If, nevertheless, a collision occurs,

- Stop immediately and switch off the drive.
- Check the implement carefully for any damage In particular check the mowing discs and their drive shafts (4a).

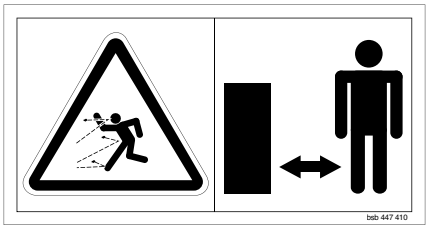


- If necessary have it checked over in the work shop as well.

After contact with a foreign object

- Check the condition of knives and the knife holder (see chapter "Maintenance and Service").
- Retighten all blade screw fittings.

5. Keep away from the engine when it's running.



- Guide people out of the danger area as they may become injured by foreign objects being ejected by the mower.

  Special care is necessary on stony ground and near roads and paths.

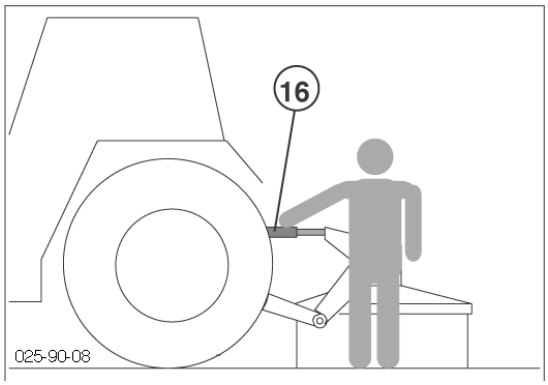
6. Wear hearing protection

The noise level in the workplace can deviate from the measured value (see Technical Data) particularly through the differing types of tractor cabins.

- If an 85 dB(A) noise level is reached or exceeded, then the farmer (or contractor) must provide appropriate hearing protection (UVV 1.1 § 2).
- If a noise level of 90 dB (A) is reached or exceeded, then hearing protection must be worn (UVV 1.1 § 16).

Mowing

1. Set mowing height by turning the upper link spindle (max. 5° mowing disc incline).



2. For mowing, slowly engage the p.t.o. shaft away from the crop and bring the mower rotor up to full speed.

Smoothly increasing the p.t.o. speed will avoid system-related noises from the p.t.o. free-wheel.

- The driving speed depends on the ground conditions and the crop to be mown.

Reversing

Raise the machine when reversing!

Anti-collision device

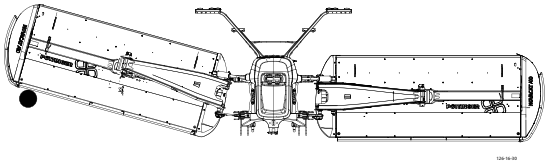
When mowing around trees, fences, boundary stones etc., collisions between the cutter bar and obstacles can occur despite careful and slow driving. So in order to prevent such damage, an anti-collision device has been provided for the mower.

Be advised!

It is not the purpose of the collision safety device to prevent damage to the machine when working at full speed.

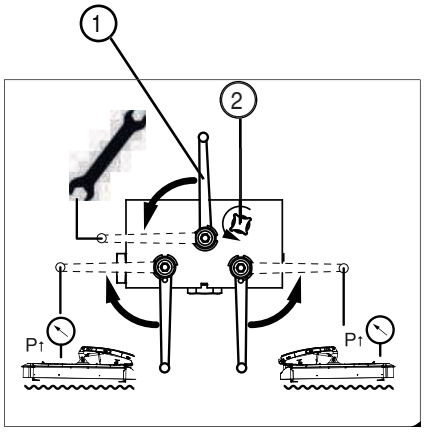
The function of the hydraulic anti-collision device:

The accumulator pressure will then swing the cutter bar automatically back to the starting position.



Set accumulator pressure to 80 bar:

- **Select Control**



Bring the maintenance ball cock (1) in tool position.

Unscrew screw (2) completely

Set accumulator pressure with the help of the tractor control unit

Tighten screw (2)

Bring the maintenance ball cock (1) in initial position.

- **Power Control**

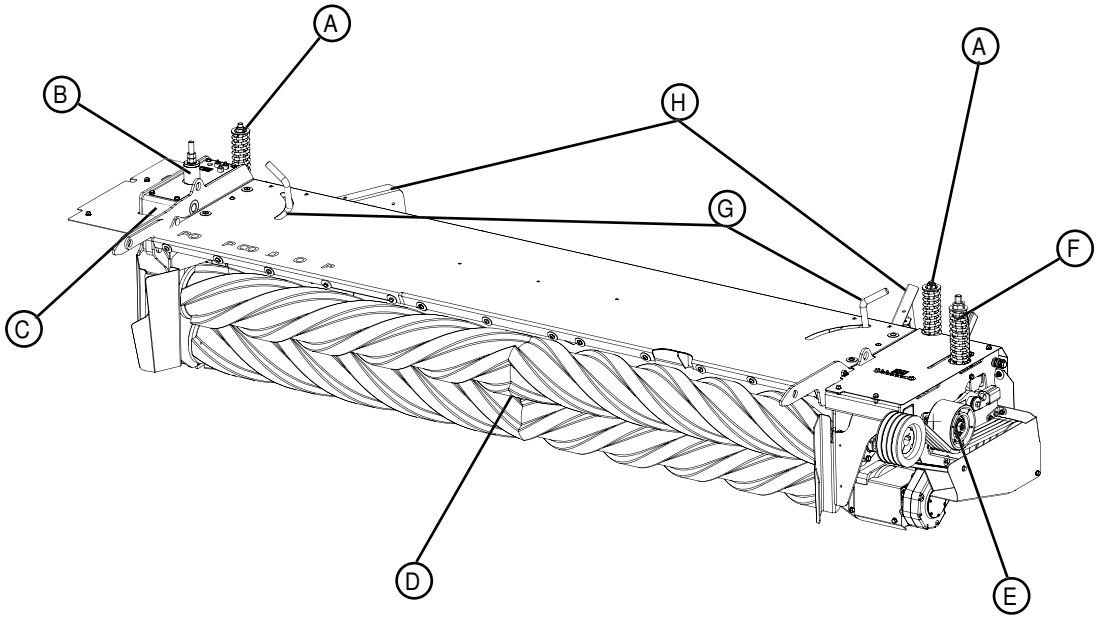
Set the system pressure of the start-up safety device with the help of the keys in the Set menu.

- **ISOBUS**

Set the system pressure of the start-up safety device with the help of the keys.

Operation mode

The roller conditioner is suitable for lucerne and clover types. Two power-driven interlocking rollers crush the fodder. This damages the plant's natural wax coating and the drying time is accelerated.



(Diag.: Roller conditioner – type 3850 (mirrored right to left roller conditioner)

126-16-100

Designations:

(A) Adjustment spring for conditioning intensity
(B) Adjusting screw for toothed belt drive
(C) Unit: Toothed belt drive
(D) Rubber rollers
(E) Belt drive tensioning pulley
(F) Adjusting spring for belt tension drive
(G) Swath width adjusting lever
(H) Swath plate

Possible settings

Safety information

Read and observe the operating instructions and in particular the safety information prior to taking into service.

Warning!

Rotating components, draw-in hazard. Do not open or remove protective devices with the engine running.

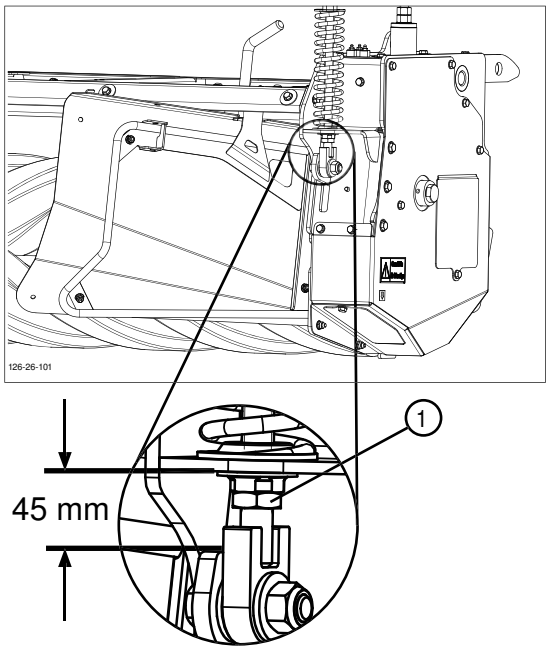
When delivered, the roller conditioner is preset for medium intensity. For optimum adaptation to the surrounding conditions the following adjustments can be made:

Distance between rollers: (A)

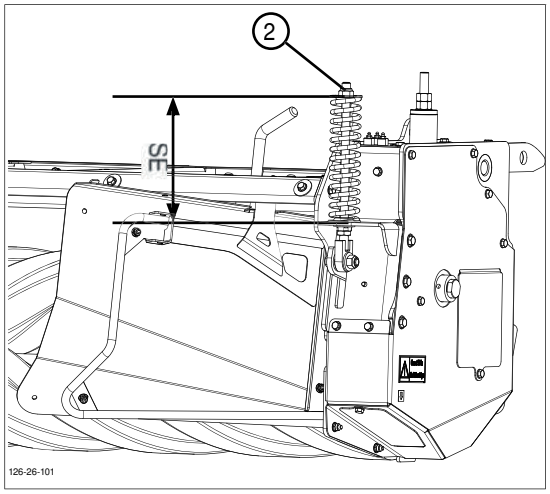
The gap between rollers is set using the adjusting screw (1) The procedure on the left and right sides is identical.

Basic setting: (X) = 45 mm

Despite the basic setting, component tolerances can cause an uneven roll slit. Check the gap on both sides and adjust the adjusting screw (1) unilaterally if necessary.



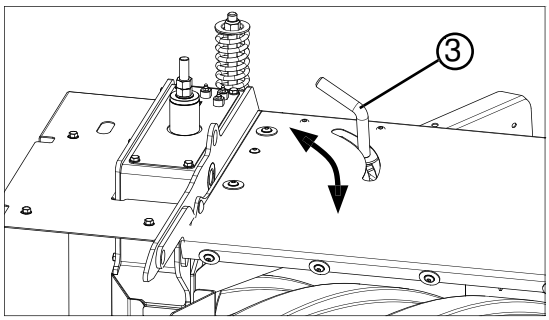
Conditioning intensity: A



The upper roller is moveable and is tensioned left and right with a spring. The spring preload intensity is set on both sides using the nut (2).

Standard setting (SE): 210 mm

Set swath width: (G)



The swath boards shape the cut and conditioned fodder to the desired swath width. Adjusting the swath boards is carried out identically, left and right, by unscrewing and adjusting the setting screw (3)

Operation

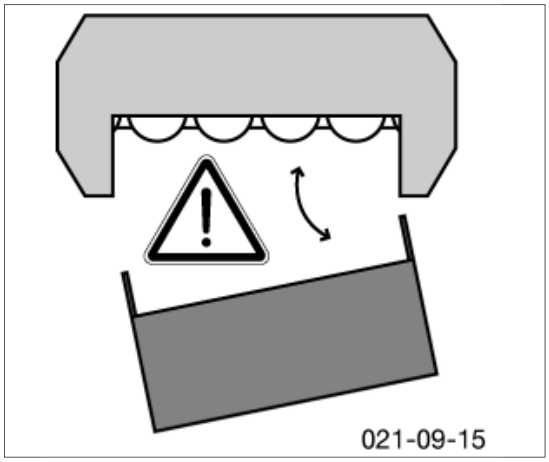
Caution!

Injury hazard from parts flung out. Keep persons at a sufficiently safe distance during mowing.

Driving speed:

Adapt the speed to fodder consistency. Travelling too fast reduces conditioning quality and evenness.

Working without roller conditioning:



If required the roller conditioner can also be removed and replaced with a tine conditioner or swath former. (Contact sales department for more information.)

A machine with a conditioner as a complete unit is fitted with the proper protective devices. Should the conditioner be removed then the mower unit is no longer completely encased. In this case, mowing must not take place without fitting additional protective devices!

Be advised!

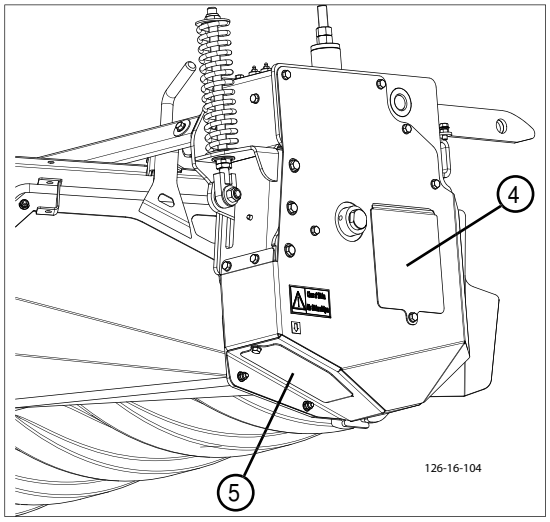
The disc mower cutter blades are freely accessible if the roller conditioner is removed. Maximum danger of injury exists. When mowing without a conditioner, protection elements especially designed for this operating mode, must be installed on cutter bar . These safety elements are not included in the scope of delivery for a new machine with conditioner. The parts must be ordered additionally (see spare parts list, component: "REAR PROTECTION").

Maintenance

Caution!

Shut off engine and remove key before performing maintenance or repair work.

Cleaning: (after every 50 hours in operation)

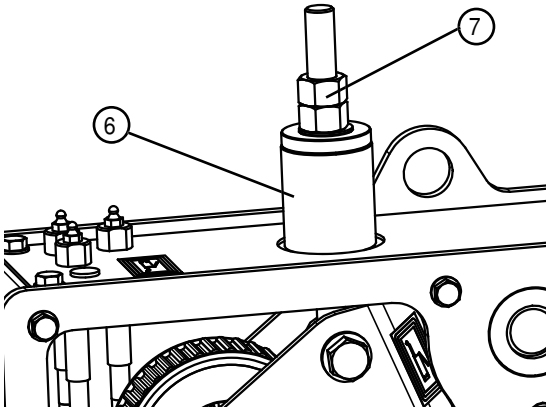


- Unscrew the coverings on the maintenance accesses (4;5) for the belt drive.
- Remove dirt deposits
- Clean rubber rollers

Grime can affect the toothed belt and subsequently cause property damage!

Toothed belt: outer (B)

longer belt:



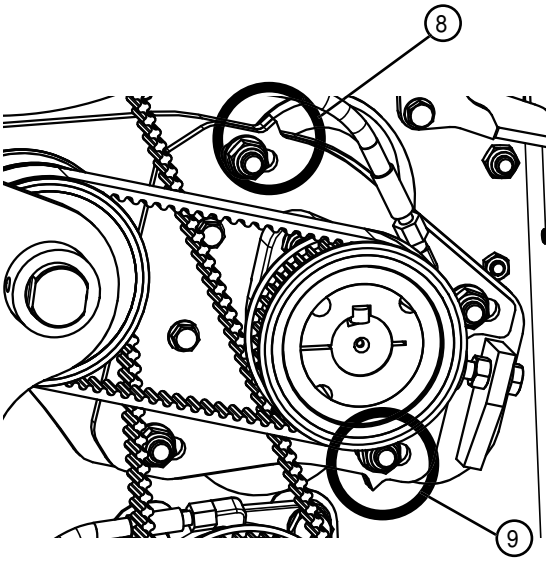
Check belt tension for longer belts

- Basic setting: The sleeve (6) is can be easily turned and has no free-play.

Change belt tension for longer belts.

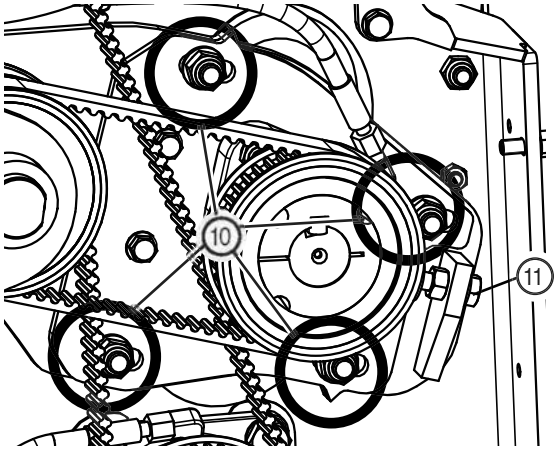
- Adjust using nut (7)

shorter belts: (C)



Check belt tension for shorter belts

- Basic setting: Both arrow pairs (8.9) are aligned.



Change belt tension for shorter belts

- Loosen screws (10)
- Adjust using screw (11)
- When assembling, tighten screws (10) with 85 Nm

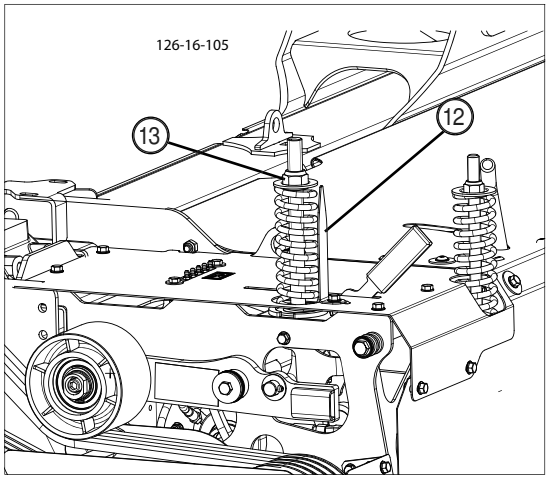
Drive belts: inner (F)

Check belt tension:

- Basic setting: The spring is at the same height as the pointer (12).

Changing belt tension:

- Adjust using nut (13)

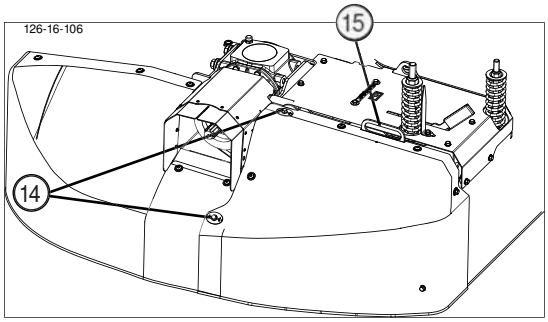


Replacing belts:

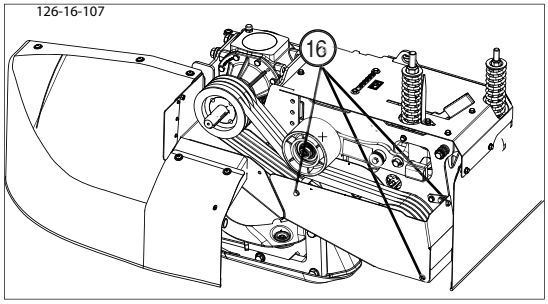
When the driving belts show signs of damage or wear, they must be replaced.

Caution: Always replace the complete belt set!

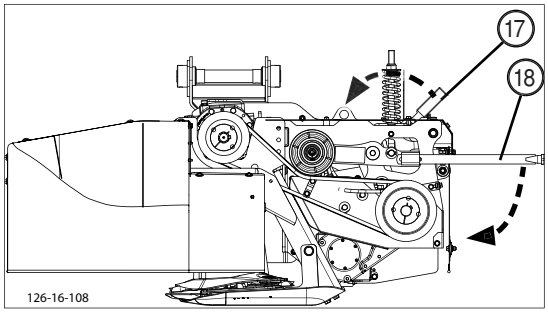
- Remove side protection: Remove 2 screws (14)
  Lift side protection up and away using the grip (15)



- Remove inner covering, 3 screws (16)



- Push lever (17) forward to activate the lock
- Push blade spanner (18) down until the lever engages.



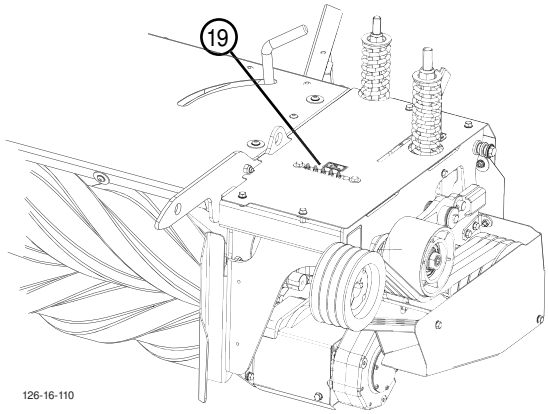
- Replace belt

Reinstallation: Complete the steps in logically reverse order.

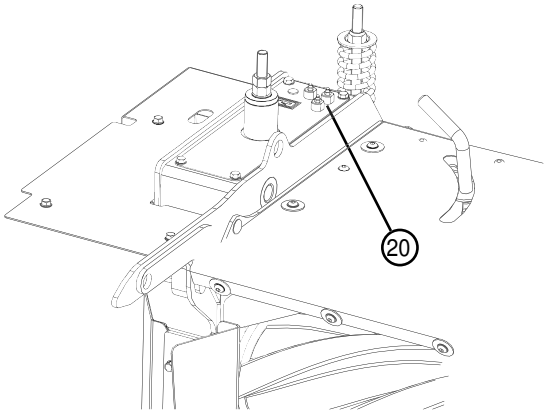
Lubrication:

(Every 50 operating hours)

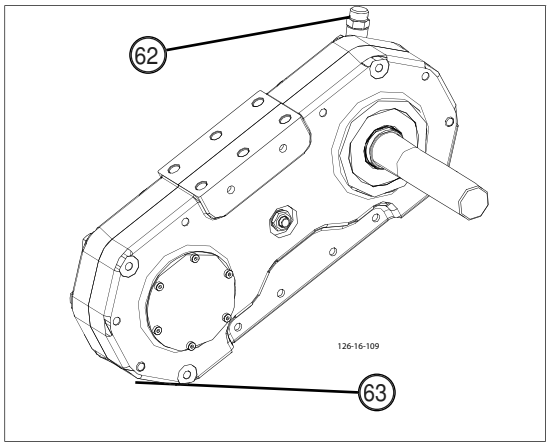
- Grease nipple (19)



- Grease nipple (20)



Gear oil:



(Every 100 operating hours)

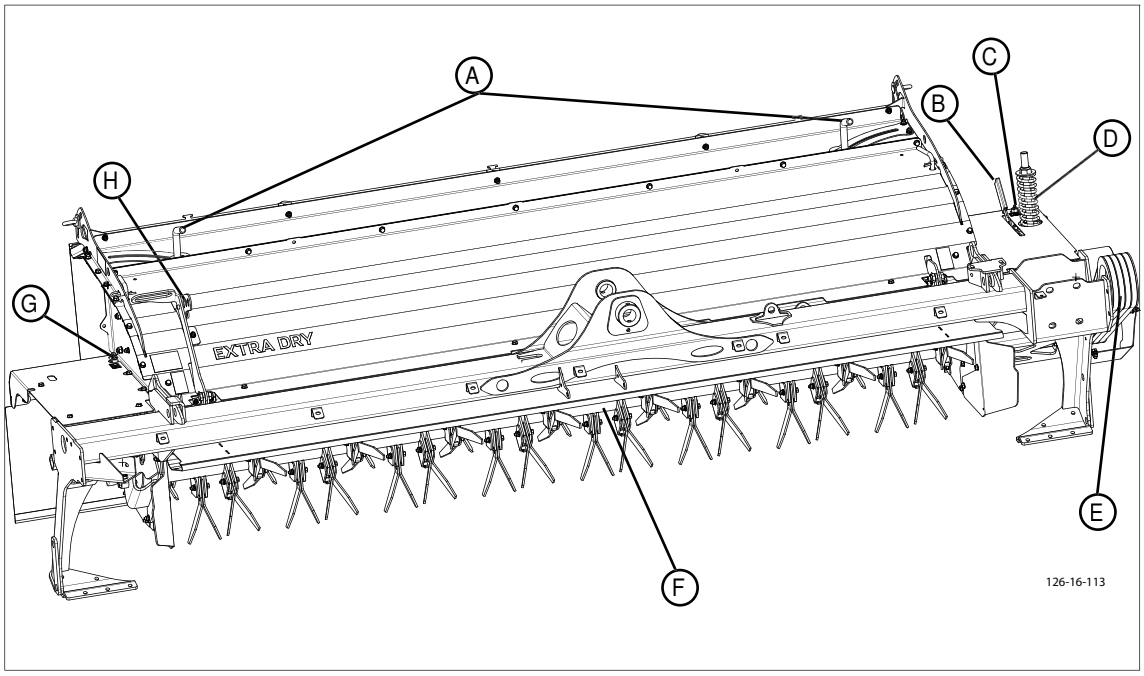
Gearing is always located on the inner side of the conditioner.

- • Open drain plug (63) and drain oil.
- Fill with gear oil (700 ml) through the refill screw (62)

(Fully synthetic lubricating oil for high-temperature lubrication, ISO-VG class 220)

Operation mode

The aim of conditioning is to ream the wax layer (protection layer) from the blade of grass. Consequently, the fodder looses moisture more easily and dries more quickly. Conditioning is carried out using V-shaped tines, placed in a spiral on the conditioner shaft. The intensity is adjusted via an impact plate with conditioner rails.



Designations:

A	Adjustment lever for swath width	B	Lock-activation lever
(C)	Inner grease nipple	(D)	V-belt tensioner
(E)	V-belt	(F)	Tine conditioner
(G)	Outer grease nipple	(H)	Adjustment lever for conditioning effect

Safety information

Read and observe the operating instructions, and in particular the safety information, prior to putting into service.

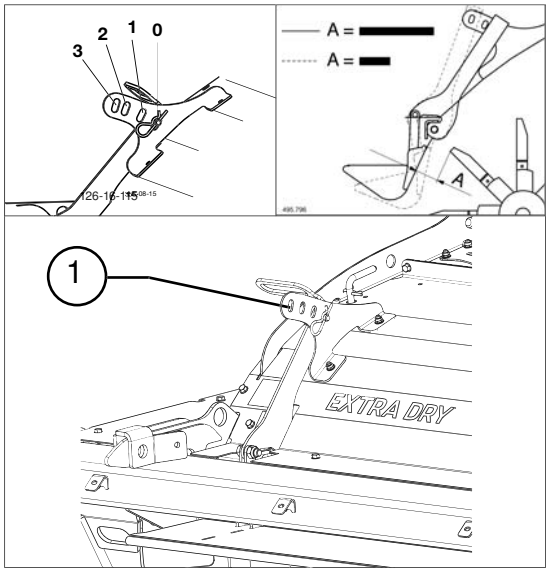
Possible settings

For optimal adaptation to the surrounding conditions, make the following adjustments to the tine conditioner:

Set conditioning effectiveness: (H)

The distance between the adjusting strip and the rotor is set using lever (1).

- Position (3): the most effective conditioning. The fodder surface is strongly reamed. However, the fodder must not be beaten.
- Position (0): the fodder surface is reamed only slightly.



The right setting depends on the quantity of the cuttings, driving speed and tractor capacity, among other things. Therefore, a binding recommendation cannot be provided regarding the correct lever setting.

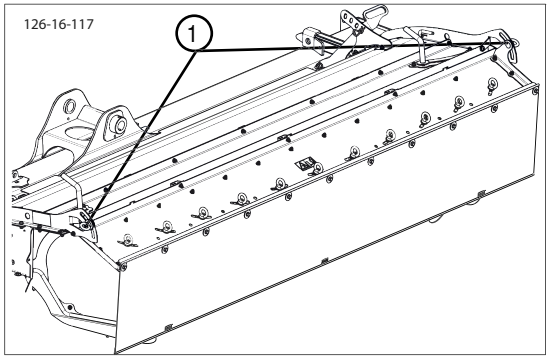
Warning!

Danger of being drawn-in when components are still rotating. Do not open or remove protective devices while the engine is running.

Impact plate:

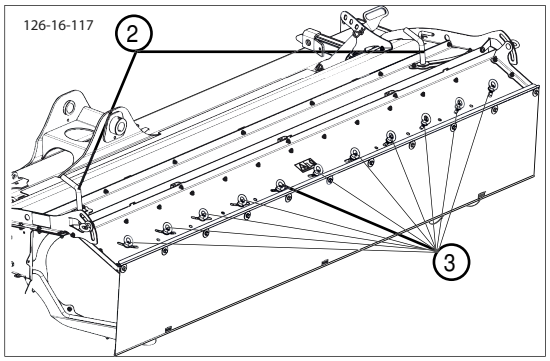
The angle of the impact plate can be adjusted for the desired throw distance for cuttings:

- Loosen clamping screw (1)
- Set impact plate
- Tighten clamping screw (1)



Adjust the swath width:(A)

The swath boards form the cut and conditioned fodder into the desired swath width. Adjust the left and right swath plates identically by unscrewing and adjusting the setting screw (S)



Crop spreader:

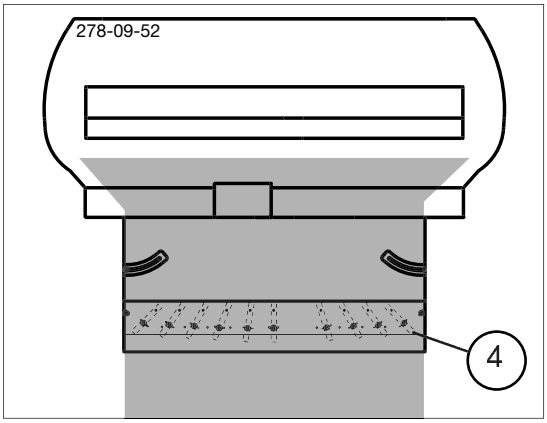
individually adjustable guide plates (3) help to form the desired shape of the deposited swath.

Setting the position of swath and guide plates

The settings listed below should be taken as basic settings. Due to the different types of forage, an optimum setting of the guide plates can possibly only be determined during practical application.

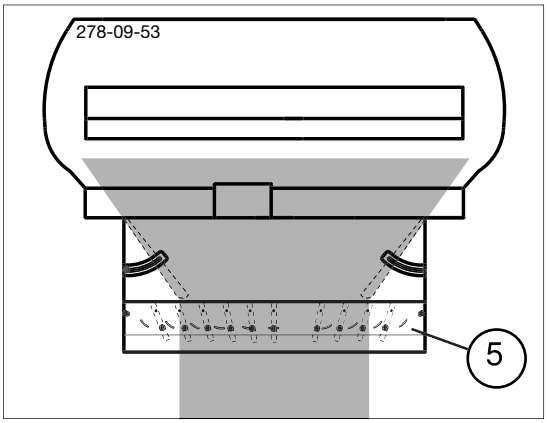
Crop spreading

- Swing swath discs (2) completely out
- Adjust the position of the guide plates (see image (4))



Swathes

- Swing swath plates (2) in
- Adjust the position of the guide plates (see image (5))



Note!

Incorrectly setting the swath plates and guide plates may lead to:

- **increased power requirements**
- **machine clogging**
- **V-belt damages**

Operation

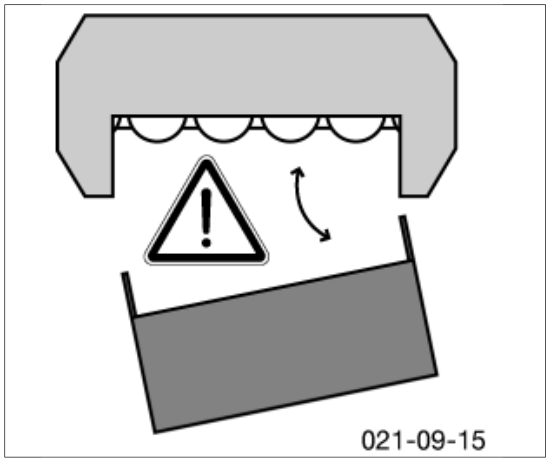
Driving speed:

Adapt the speed to fodder consistency. Travelling too fast reduces conditioning quality and evenness.

Working without conditioner:

If necessary, the tine conditioner can also be detached and replaced with a roller conditioner or a swath former. (Contact your sales partner for more information.)

A machine with a conditioner as a complete unit is fitted with the proper protective devices. Should the conditioner be removed then the mower unit is no longer a completely protected unit. In this case, mowing must not take place without fitting additional protective devices!



Be advised!

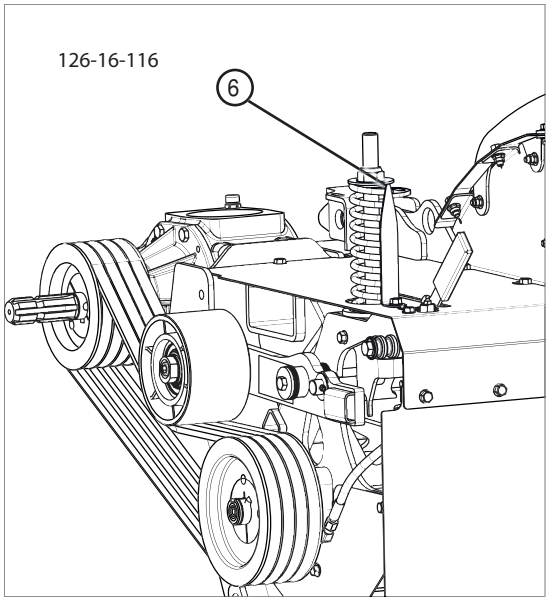
If the conditioner is detached, the cutting blades of the disc mower are freely accessible. The greatest risk of injury exists. For mowing without a conditioner, specially designed protective devices for this type of operation must be fitted to the mower bar.

These safety elements are not included in the scope of delivery for a new machine with conditioner. The parts must be ordered additionally (see spare parts list, component: "REAR PROTECTION").

Maintenance

Correct belt tension: (D)

The marker point (6) must be flush with the shim, then the belt tension is correct.



Caution!

Danger of injury from ejecting parts. Keep persons at a sufficiently safe distance during mowing.

Rotor tines: (F)

1. Replacing tine fixings

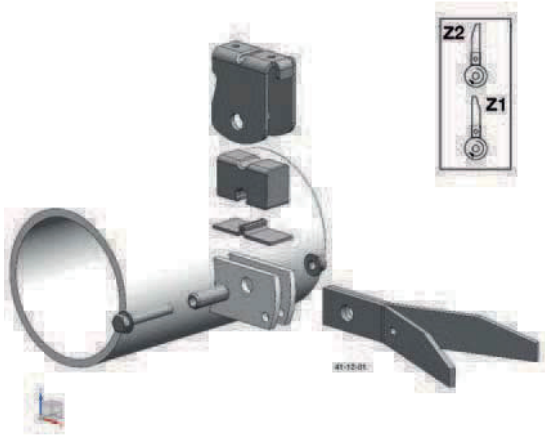
If signs of wear are found on the tine fixings, then the affected component(s) must be replaced. (tines, bolt, slotted spring pin ...)

2. Rotor tines position

Pos. Z1: Rotor tines position for normal conditions of use.

Pos. Z2: For difficult operating conditions, e.g. when the fodder winds around the rotor.

Turn the rotor prongs 180° (pos. Z2). This prong position solves the problem in most cases. However, this reduces the conditioning effect to a certain extent.



Caution!

Shut off engine and remove key before performing maintenance or repair work.

Detaching and attaching the conditioner

The mower unit is compatible for the optional attachment of a tine, roller conditioner or swath former. Special work steps are necessary for the conversion depending on the unit to be attached.

For details see the Section “REPLACE CONDITIONER”

NOVACAT A10 (Type 3850)

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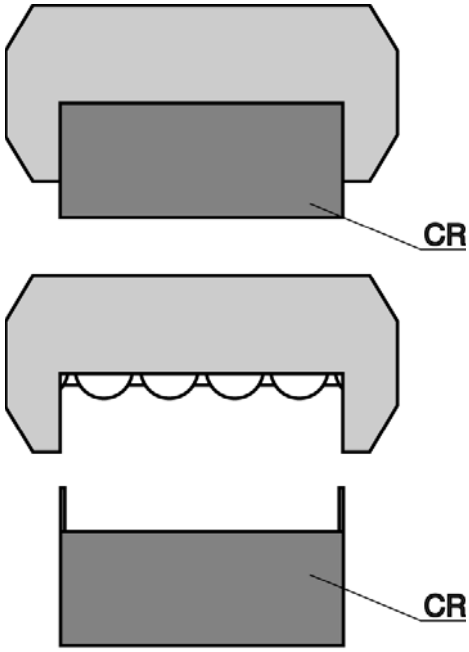
Mowing without Conditioner

Take particular notice when the conditioner is detached rom the cutter bar



Safety hint

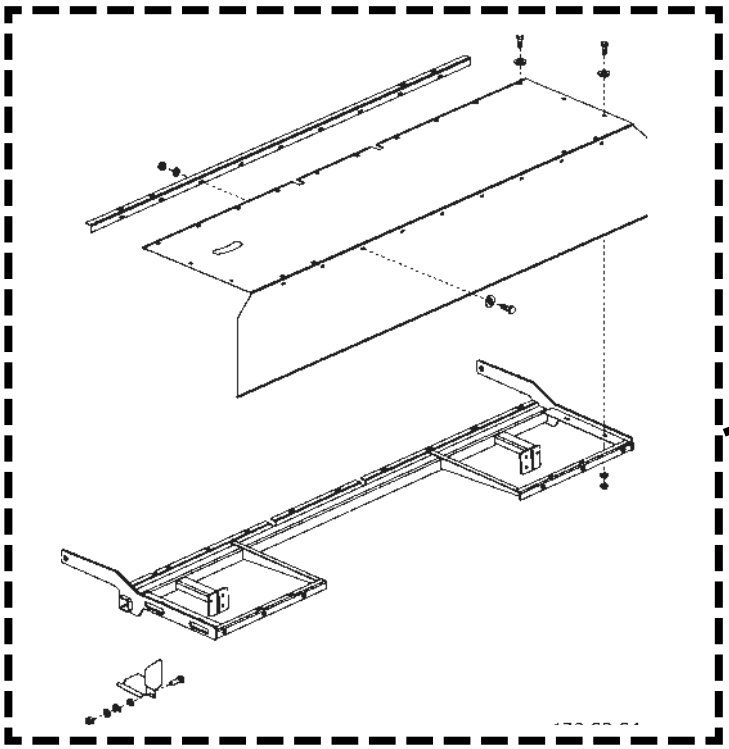
A machine with a conditioner (CR) as a complete unit is fitted with proper protection elements.

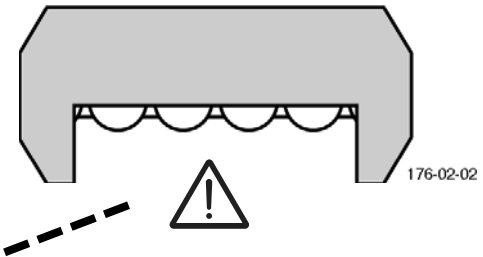
Should the conditioner be detached however, the mowing unit no longer has complete protection covering. In this situation mowing may not take place without additional protection elements!

Beware!

Protection elements, especially intended for this mode of mowing, must be fitted to the mowing unit.

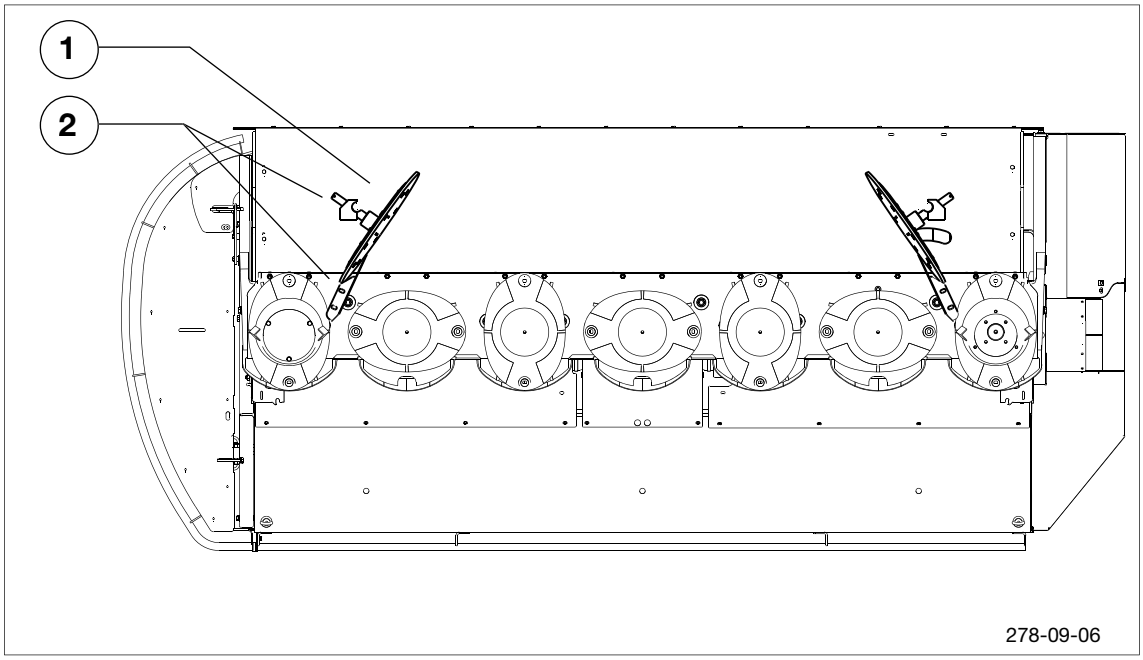
These protection elements are not included in the delivery of a new machine with a conditioner, the parts must be additionally ordered (see Spare Parts List, component group "REAR PROTECTION").





Operating Principle

A narrow swath is formed when using the swath plates while mowing. This avoids driving over the crop with wide tractor tyres.



Designations:

(1) Swath plates

(2) Swath plate mounting

Safety note:

Read and comply with the Operating Instructions and particularly the safety notes prior to commissioning.

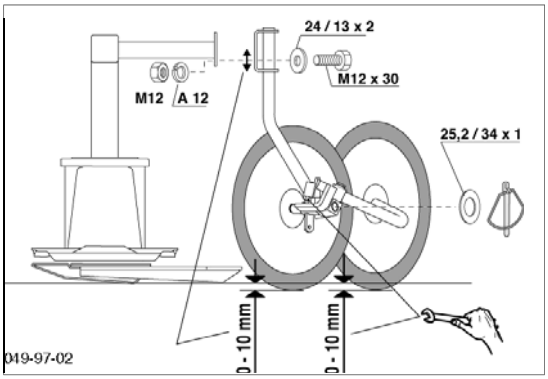
Adjustment Possibilities

Working range:

The horizontal working range of the swath former is adjustable via the slots (L).

Optimum adjustment:

The discs are mounted 0-10 mm lower than the bottom edge of the cutter bar.



Warning!

Rotating parts, danger of being pulled in. Never open or remove protective devices when engine is running.

Non-standard equipment

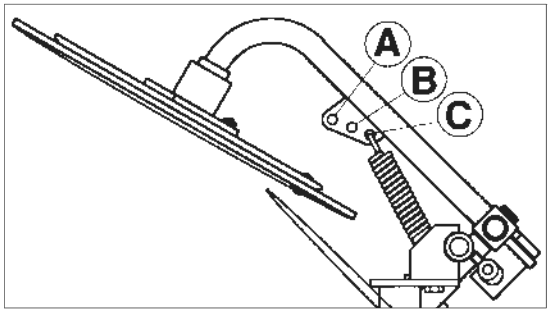
Additional swath plate

Adjusting the two tension springs:

A = For tall, dense fodder crops.

B = Basic setting.

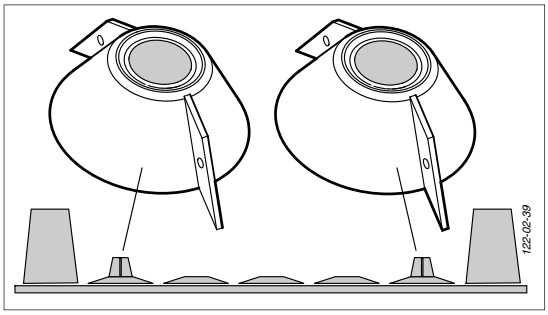
C= For short fodder crops.



Conveying cone

The conveying cones are recommended:

- To improve the output for the swath deposit, particularly with heavy, dense fodder crops.
- See Spare Parts List for spare parts



Maintenance

The swath former is maintenance-free with the exception of cleaning activities.

Removal and installation of the swath former

The mower unit is compatible for optional hitching of a tine conditioner, roller conditioner or swath former. Special work steps are necessary for the conversion depending on the attachment unit.

For details see the Section “REPLACE CONDITIONER”

Caution!

Switch off the engine before carrying out maintenance and repair work and remove the ignition key.

General safety information

Safety information

Before initial operation, read and observe the operating instructions, particularly the safety information,

Warning!

Danger of being drawn-in when components are still rotating. Do not open or remove protective devices with the engine running.

Caution!

Injury hazard from parts flung out. Keep persons at a sufficiently safe distance during mowing.

Beware!

After the assembly or removal of the cross conveyors or after another weight change you must check the relief pressure of the mower unit and adjust it accordingly.

Mode of operation

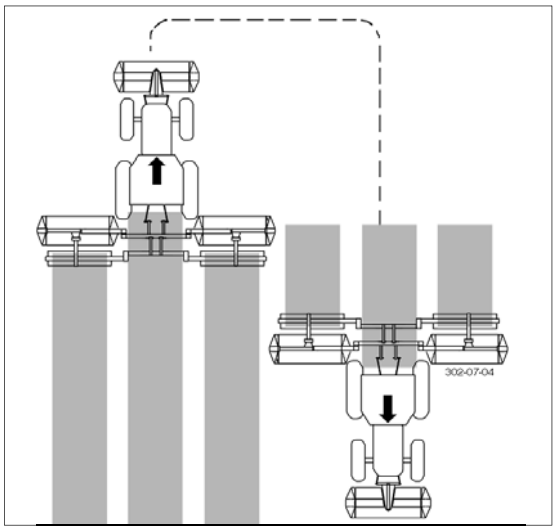
A variable swath deposit is possible using a cross conveyor belt (single swath, broad deposit or triple swath). With the help of the operator terminal, the cross conveyor will be swivelled out or in, and the belt speed per unit infinitely adjusted.

Swath deposit

A variable swath deposit is possible using a cross conveyor belt (single swath, broad deposit or triple swath). Using the operating terminal, the cross conveyor belt is swung out or in and the belt speed per unit infinitely adjusted.

Cutting without a cross conveyor

- The mowed material is deposited in the swath width of the conditioner (= single swath).



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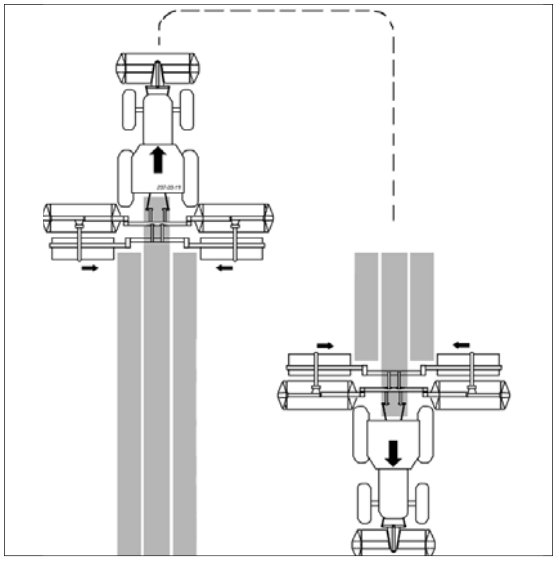
Cutting with a cross conveyor

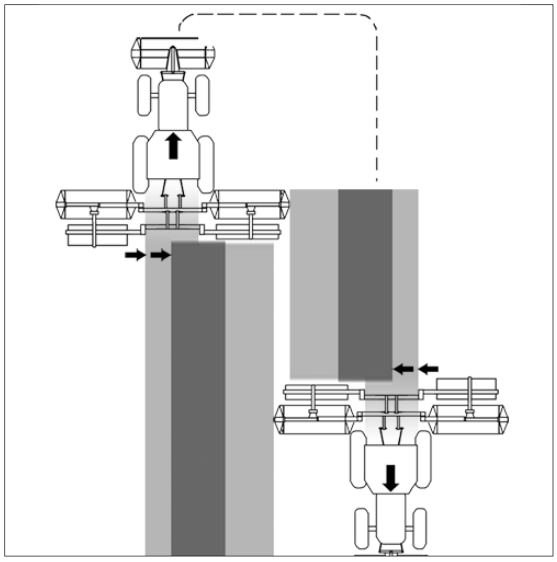
- Both cross conveyors are transporting the mowed material in the middle and generate a "3rd swath".

  The swath width can be narrowed using the additional roller.



Cutting with only one cross conveyor

- If operating with only one cross conveyor, there is a chance of laying a swath row over the other two swath rows.



Advantage:

The total swath width is optimally prepared for a windrow with a minimum working width of 10m.

Note!

Remove the pass partition plate for this operating method.

Operation

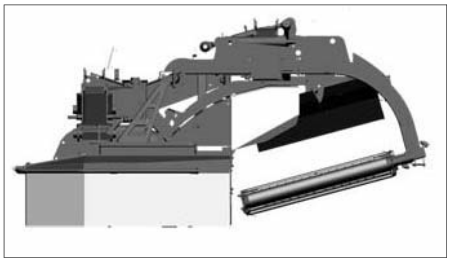
Beware!

When swivelling the back mower units from the working position into the transport position, the cross conveyors must be swivelled (risk of collision).

Note!

Check and clean belt run regularly to prevent premature wear and tear (see chapter "Maintenance").

Swinging in the cross conveyor:



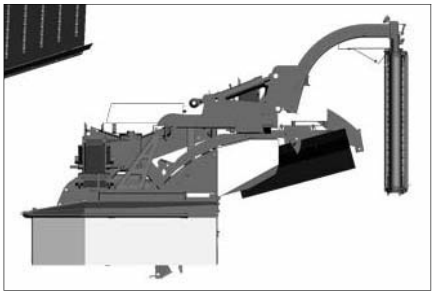
When swinging the rear mower units from transport to working position, the cross conveyors are always to be found in this position (risk of collision).

- Swinging cross conveyor belts in and out takes place via the operating console.

Note!

The cross conveyor belts are fixed to the mower units and therefore always swing with them when switching from transport to working position.

Swinging out the cross conveyors:



If the swath is not to be manipulated, the cross conveyor belts can be swivelled out.

- Swinging cross conveyor belts in and out takes place via the operating console.

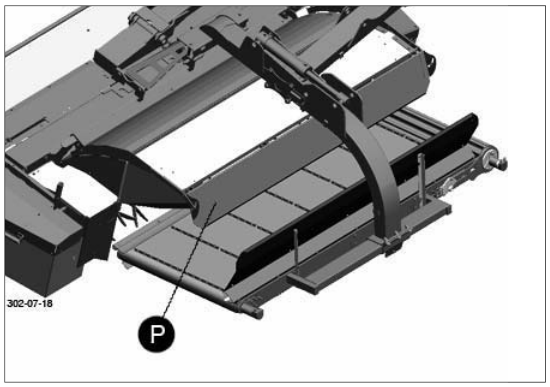
Note!

If you don't use the cross conveyor belts for a longer period of time, you can disassemble them. The tractor will therefore have less load.

Possible settings

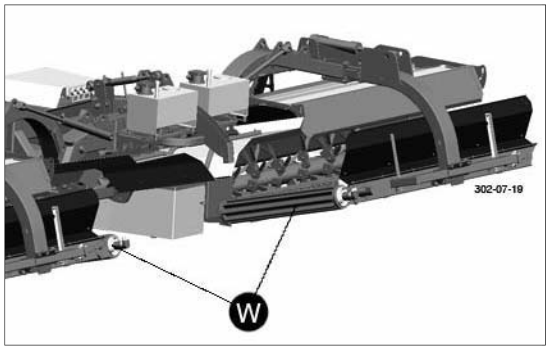
Baffle plate (P):

Configure the baffle plate (P), so that the cut forage can be thrown in the middle of the cross conveyor belt.



Accelerating roller (Optional):

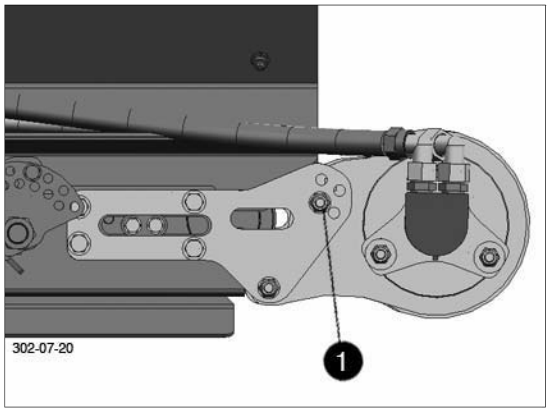
Accelerator rollers (W) are used to transfer the cut forage further into the middle.



Setting:

The height of accelerating rollers can be adjusted to alter the throw distance.

- Remove screw (1) (front and rear)
- Move roller to the desired position
- Re-fit screw (1) in the appropriate slot and tighten.



Note!

The roller must be pinned equally at all points.

Cross conveyor belt maintenance

Caution!

Shut engine off and remove key before carrying out maintenance or repair work.

Important!

• Check belt run after 5, 10, 20 hours and then every 20 hours.

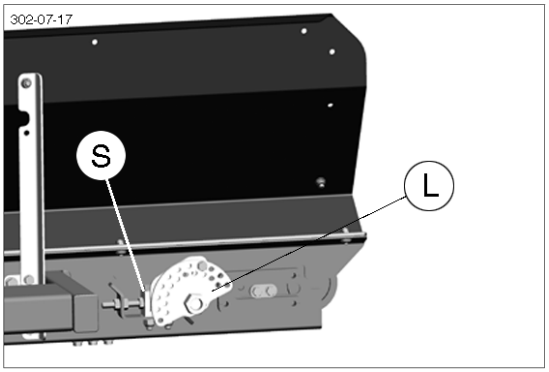
• The belt may not deviate to the side.

• The belt must be centred on both rollers

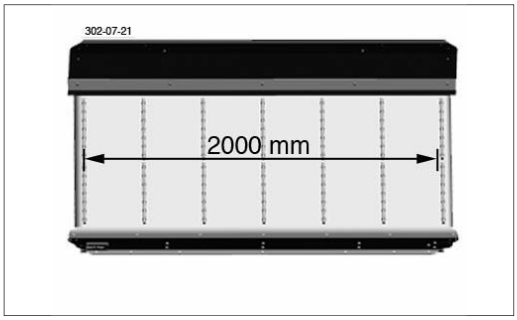
Possible causes for high belt wearing:

- Belt tension to loose
- Belt not running in the middle

Setting belt tension



1. Pretension the belt, so that it does not slide down in the disengaged position.
2. Tension the belt at approximately 0.4 - 0.5 %.
   a. Mark on the belt 2000 mm (see the sketch)



   b. Tension the belt through the perforated disc (L) until the drawn distance of 2008 - 2010 mm is reached.

Configure the belt length

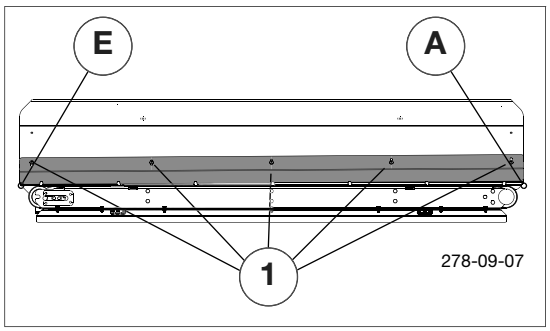
Set the position of the rollers by moving the tensioning block (S).

- Set the roller so that the belt runs in the middle of the rollers.

Carry out a 5 minutes trial run

In doing so you should control the belt tension and the belt position.

Configure the feed plate

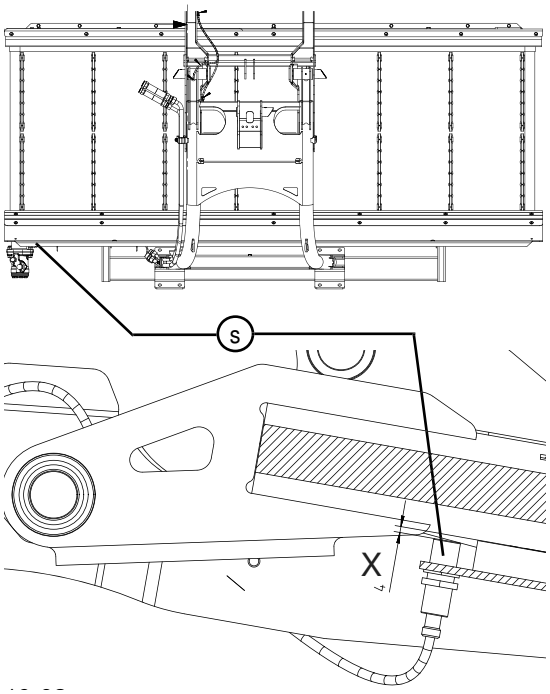


Always set the distance between feed plate and conveyor belt with screws (1) so that gap on conveyor belt ejector side (A) is greater than gap on feed-in side (E). Minimum distance: 5mm

Note:

A correctly set feed plate prevents blockages and/or minimizes cleaning.

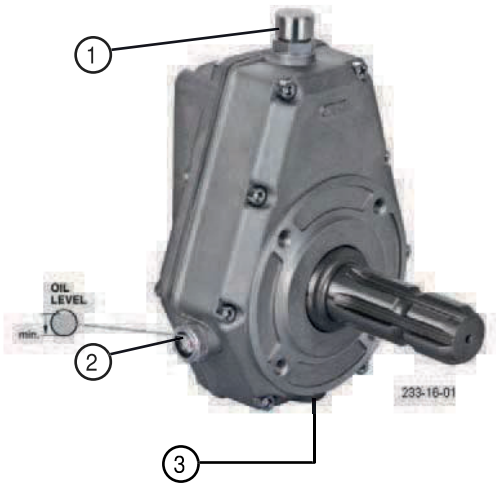
Adjust sensor



The cross conveyor belt sensor (S) advises the swinging status of the belt. The sensor distance (x) must be configured between 3.5 mm.

Oil change

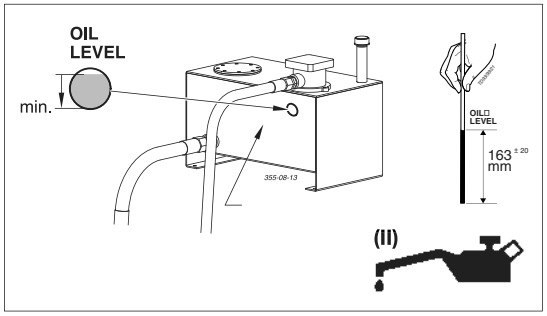
Interval: 1x annually
Quantity: 0.3 litres
Type: SAE 90



1… Filling screw
2...Sight glass for oil level
3… Drain bolt

Oil change

Interval: every 2 years / max. 4,000 ha)
Quantity: 26 litres
Type: SAE 10W-30



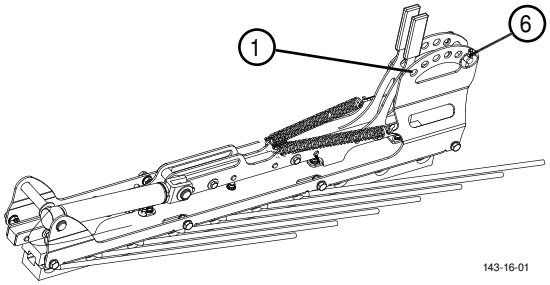
Swath comb

The Swath comb prevents throwing of the swath and assures a safe deposit.

It is hydraulically lowered together with the cross conveyor and also hydraulically raised as soon as the cross conveyor comes into the headland position.

Configuration of the tine height

The tine height can be configured with the help of the hole pattern, so that the tine does not tear the swath that comes from the front mower.

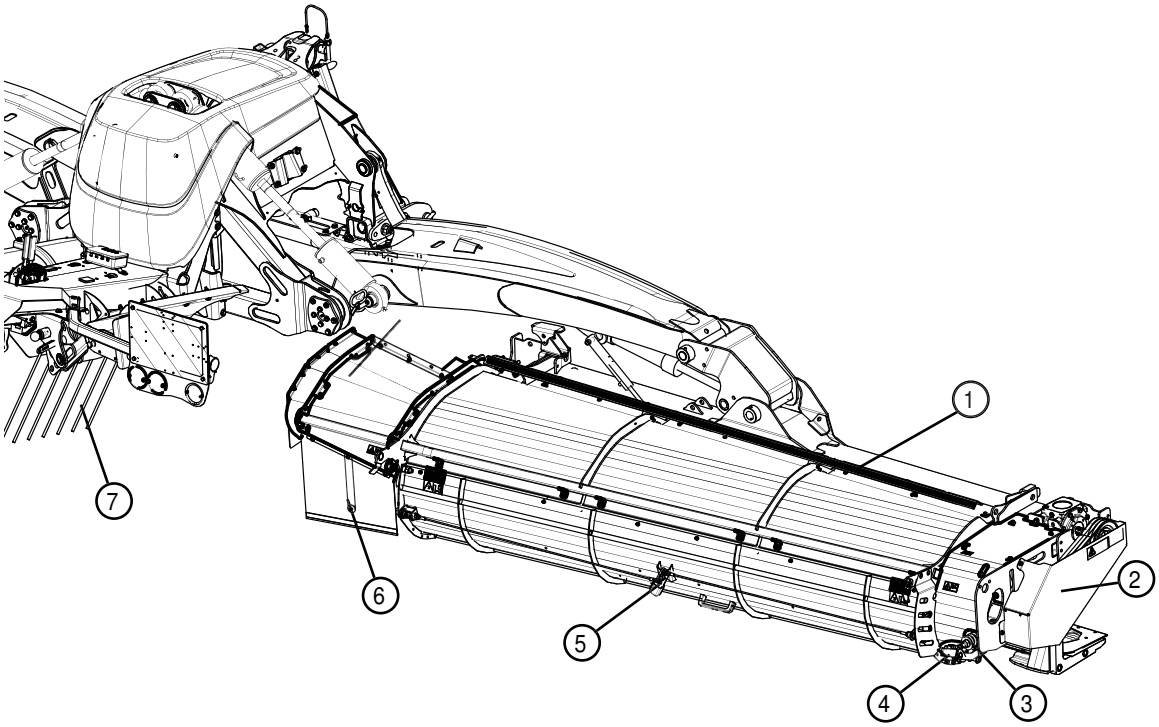


Hole 1 - the highest position

Hole 6 - the lowest position

1. Insert the bolts in the desired hole and secure with a spring pin.

Overview



Designations:

(1) Additional wiping strip (parking position)
(2) Propeller unit
(3) V-belt tensioner
(4) Locking lever rear wall (Position open)
(5) Locking lever rear wall (Position closed)
(6) Protective apron ejector
(7) Swath comb

Safety advice

WARNING

Danger of injury through ejected stones and other foreign bodies. Particularly at the the ejector end of the cross-feeding auger (6) and when tailgate is open.

Keep a distance from the machine when motor is running.

Refer people out of the danger areas.

Take extra care when the fields are stony or when working near roads and paths.

Immediately replace damaged equipment parts which limit the throw distance. (e.g.: Rear guard ejector (6))

Warning!

Danger of being drawn-in when components are still rotating. Do not open or remove protective devices with the engine running.

WARNING

Danger of injury to bodily parts from moving parts through cutting, amputation and crushing. Particularly at the the ejector end of the cross-feeding auger (6) and when tailgate is open.

Always operate this machine from the tractor seat.

Keep a distance from the machine when motor is running.

Refer people out of the danger areas.

WARNING

Danger of injury to bodily parts from the V-belt drives through cutting and amputation.

Keep a distance from the V-belts when motor is running. (2).

Refer people out of the danger area.

Mode of operation

The silage is deposited in a swath immediately after mowing via the Cross-Flow (CF) unit (option).

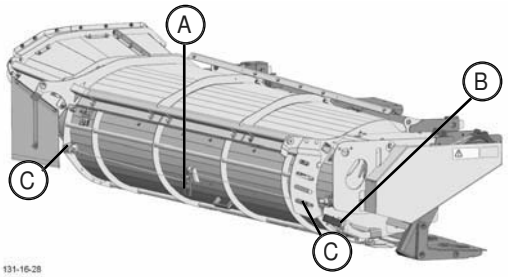
CF unit operation

The CF unit runs fully automatically and requires no operating elements.

Tailgate

If it is not desired for the mowed material to be laid out as swath, then you can open the rear wall, in order to put it over the whole width.

Overview:



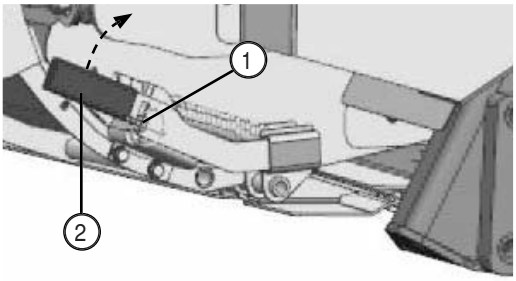
(A)...Middle position for the lever for unlocking the bolts (C)

(B)...Lateral position for the lever for opening the rear wall

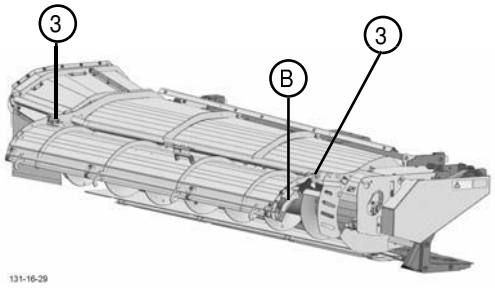
(C)...Unlocking bolt for the rear wall

Rear wall open:

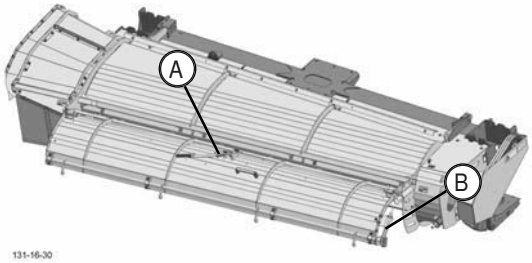
1. Unlock the rear wall on the lateral lever position (B)
   1. Pull off the spring cotter (1)
   2. Push the lever outwards (2), in order to unlock the lever
   3. Push the lever (2) up, in order to unlock the rear wall.



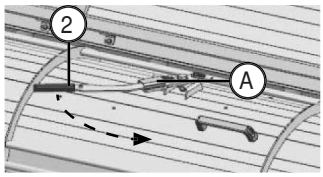
2. Opening the rear wall
   1. Hold the rear wall by the lever
   2. Pull the rear wall up, until the lateral locking bolts (3) are engaged.
3. Stow the lever:
   1. Put the lever (2) in the lateral position (B)
   2. Lock the lever (2) with the spring cotter (1).



Closing the rear wall:

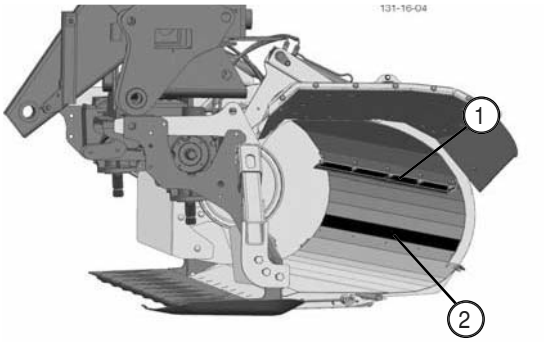


1. Unlock the rear wall
   1. Pull off the spring cotter (1)
   2. Remove the lever (2) from the lateral position (B)
   3. Lead the lever (2) in the central position (A)



   4. Press the lever (2) to the right in order to unlock the lock of the rear wall.
2. Closing rear wall
   1. Close the rear wall
3. Stow the lever
   1. Put the lever (2) in the lateral position (B)
   2. Lock the lever (2) with the spring cotter (1)

Scraper



- Set the wiping strip (1) over the slots, so that the wiping strip does not touch the transverse auger and so that it can remove a maximum quantity of feed through a minimum gap.
- In case of short feed, you can mount another wiping strip on the position (2).

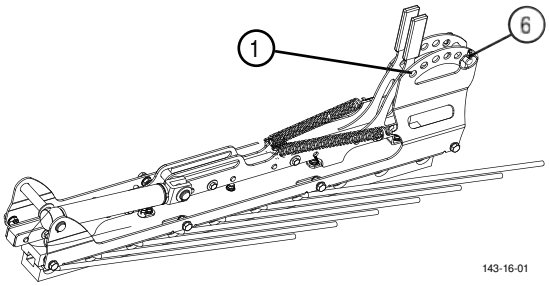
Swath comb

The swath comb prevents throwing of swath and guarantees a neat filling.

It is hydraulically swivelled up and down together with the mower unit, as soon as both mower units reach the headland position.

Configuring the tine height:

With the help of the hole pattern configure the tine height, so that the tines of the swath that come from the front mower do not tear.



Hole 1 - highest position

Hole 6 - lowest position

1. Insert the bolts in the desired hole and secure with spring pin.

Maintenance

For any cleaning or servicing activities, park the tractor on firm, level ground and secure against rolling.

Put the machine in the working position.

Turn off the engine and remove the ignition key.

Wait until all moving parts have come to a complete standstill.

Clearing blockages

WARNING

Risk of death due to the machine's weight.

Lock the servo for the lifting cylinder.

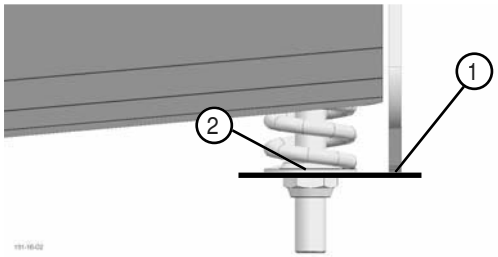
Do not crawl under the machine.

Generally, a blockage is probably found in the ejector.

Open the rear wall, in order to facilitate the clearing of the blockage.

Check V-belt tension (if necessary)

The tip of the bracket (1) must be flush with the washer (2) means the V-belt tension is correct.



Replacing driving belts:

When the driving belts show signs of damage or wear, they must be replaced. **(Note: Always replace the complete belt set!)**

• Relieve belt tension by loosening the nut.

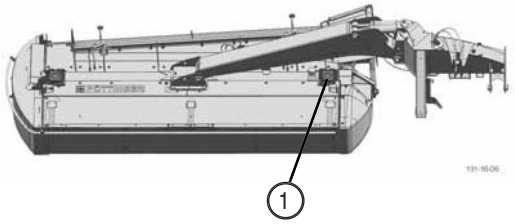
- Replace belt
- Restore belt tension

Cleaning (every 20 hrs)

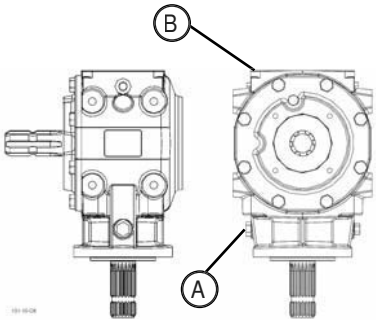
- Open the coverings and service accesses to the belt drive.
- Remove collected debris
- Clean cross-feeding auger.

Debris can affect lubrication which can lead to machine damage.

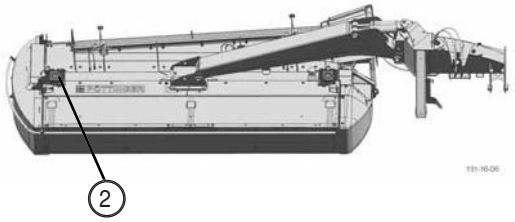
Lubricate angular gear (1)
after 50h, afterwards every 100 operating hours



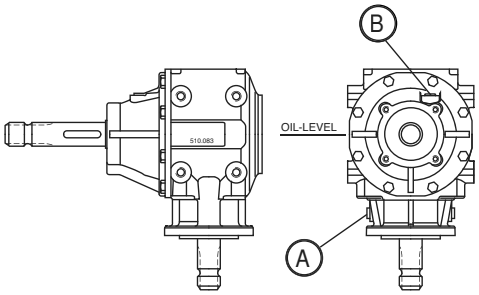
- Undo drain plug (A) and drain oil
- refill with 1.2 l gear oil75W-90 GL5 at the filling opening (B)
- Check oil quantity at oil level



Lubricate angular gear (2)
every 100 operating hours



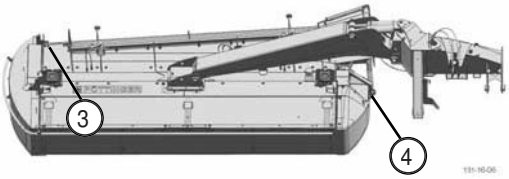
- Undo drain plug (A) and drain oil
- Pour 0.8 l SAE 90 into the fill opening (B)
- Check oil quantity at oil level

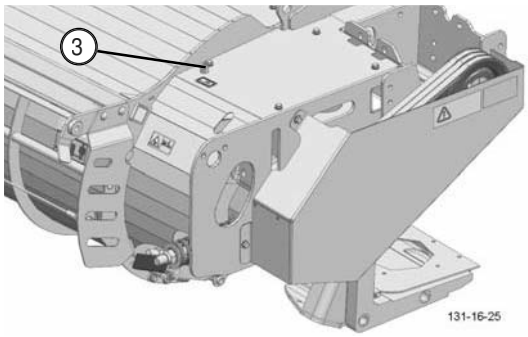


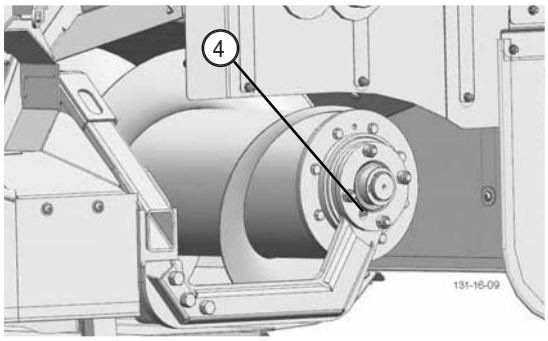
Lubricate cross-feeding auger

every 50 operating hours

Lubricate grease nipples (3) and (4) on the cross-feeding auger bearing with grease (IV) .

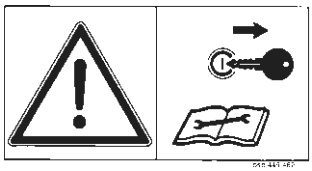






Safety advice

- Switch off engine prior to any adjustment, maintenance or repair work.



General maintenance information

Please observe the infiormation below to maintain the implement in good condition even after a long period in operation:

- Re-tighten all bolts after the first hours in operation.

The following should be checked in particular:

Blade bolt connections at mower

Tine bolt connections at rake and tedder

Spare parts

a. Original parts and accessories are specially designed for the implements.

b. We expressly point out that we have not tested or approved any original parts and accessories not supplied by us.

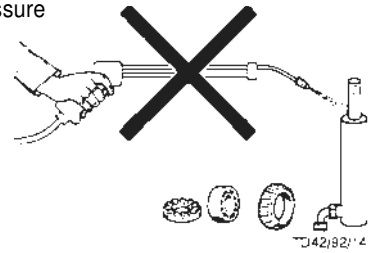
c. The installation and/or use of such products may under certain circumstances negatively modify or impair the propeties of the implement as specified in the design. Any liability on the part of the manufacturer is excluded in the event of any damage due to the use of non-original parts and accessories.

d. Any unauthorised modifications or the use of components and attachments at the implement rules out any liability on the part of the manufacturer.

Cleaning of machine parts

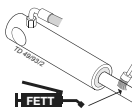
Be advised! Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

- Danger of rust!
- After cleaning, lubricate the implement according to the lubrication plan and perform a brief test run.
- Cleaning pressure being too high may damage the paint.



Parking in the open

Clean and protect the piston rods with grease prior to longer periods parked outside.



Winter storage

- Clean implement thoroughly prior to winter storage.
- Put up protection against weather.
- Change or top up gear oil.
- Protect exposed parts from rust.
- Lubricate all greasing points according to lubrication chart.
- Disconnect terminal, store dry and protected from frost.

Cardans

- See information in Attachment

Please observe the following for maintenance!

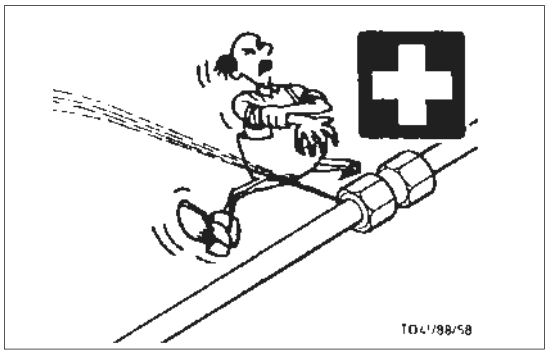
The instructions in these Operating Instructions apply.

If no particular instructions are available here, then the information in the instructions supplied by the respective cardan shaft manufacturer apply.

Hydraulic unit

Caution injury and infection hazard!

Liquids discharging at high pressure may penetrate the skin. Therefore seek immediate medical help!



Make sure that the hydraulic system is suitable for the tractor before connecting the hydraulic lines.

After the first 10 hours in operation and thereafter every 50 hours in operation

- Check hydraulic unit and piping for leaks and if necessary re-tighten bolt connections.

Prior to every taking into operation

- Check hydraulic hoses for wear.

  Replace any worn or damaged hydraulic hoses immediately. The replacement hoses must meet the manufacturer's technical requirements.

Hose lines are subject to natural ageing. The period of use should not exceed 5 – 6 years.

Safety advice

• Switch off engine and remove ignition key prior to any adjustment, maintenance or repair work.

• Only perform work underneath the implement with secure supports.

• Re-tighten all bolts after the first hours in operation.

• Only park implement on flat, firm ground.

Repair information

Please observe the repair information in the Attachment (If available).

Safety advice

Clean the coupling plug of the hydraulic hoses and the oil socket prior to each connection.

Note any abrasion and clamping points.

Oil change for cutter bar

• Change oil when at operating temperature.

• The oil is too viscous when cold. Too much old oil remains stuck to the gearwheels and prevents the removal of any suspended matter present in the gearbox.

• It can take some time until the used oil has completely drained.

Oil change

- Change oil after every 100hrs of operation and then annually, at least.
- Lift cutter bar on the outer side.
- Remove oil drain plug (62), let oil drain and then dispose of waste oil correctly.

Oil quantity: 3.5 litre SAE 90

Check cutter bar oil level

- Under normal operating conditions, oil should be replenished once a year.

Caution

Cleaning and maintenance works shall be performed only with the machine turned off and the mowing units lowered.

• Carry out oil level check at operating temperature.

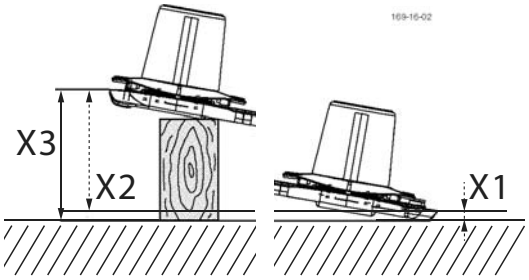
• The oil is too viscous when cold. Too much old oil sticks to the gearwheels which then gives a false reading.

1. Lift one side of the mower bar X3 and support it.

X3 = X2 + X1

X1 = Distance from ground to vats upper edge.

X2 = Distance from vats upper edge left to vats upper edge right.



X2 = 300 mm

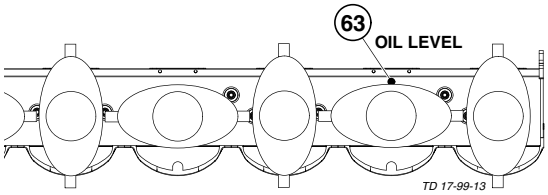
- The side where the oil refill screw is located remains on the ground.
- Lift the other side of the mower bar about X1 and support with a suitable prop.

2. Leave mower bar in this position for about 15 minutes.

- This time is necessary to allow the oil to collect in the lower area of the mower bar.

3. Remove oil fill screw (63).

Measure oil level through the opening (63).

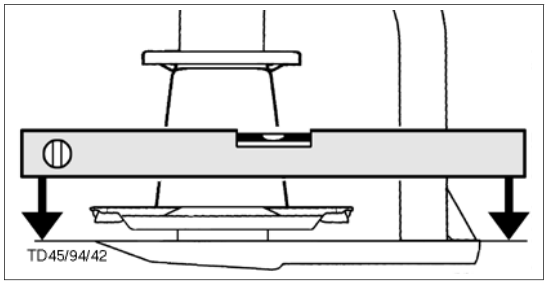


4. Oil level check

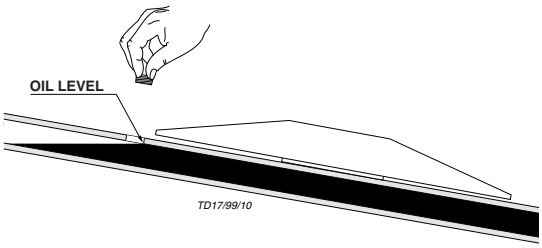
Important information when measuring the oil level:

You jack up the cutter bar depending on the length.

The cutter bar width must be adjusted in precise horizontal position. (see image).



The oil level is correct if the gear oil reaches the lower edge of the level opening (63) (OIL LEVEL).



5. Topping up oil

Complete with the missing oil quantity.

Note

- **Too much oil can cause the cutter bar to overheat during operation.**
- **Too little oil does not guarantee the necessary lubrication.**

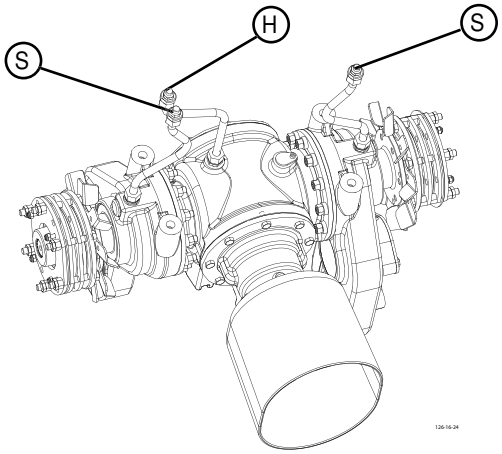
Maintaining the gearbox

Under normal operating conditions, oil is to be replenished annually (OIL LEVEL).

Input gearing (1)

- Change oil after the first 50 operating hours.
- Change oil after 100 operating hours, at the latest.

Oil quantity:
Main housing (H): 2.5l Liter
Side housing (S): 0.7 litres
Oil type: 75W-90 GL5



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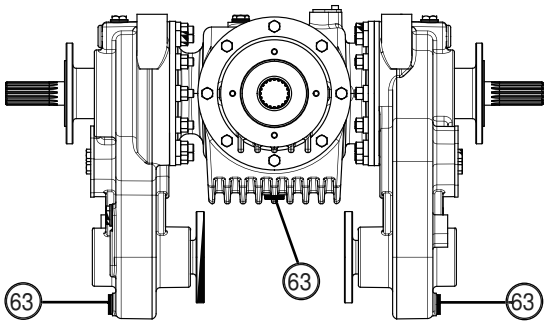
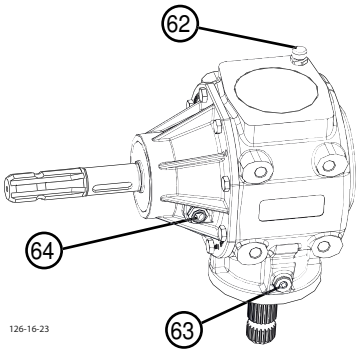


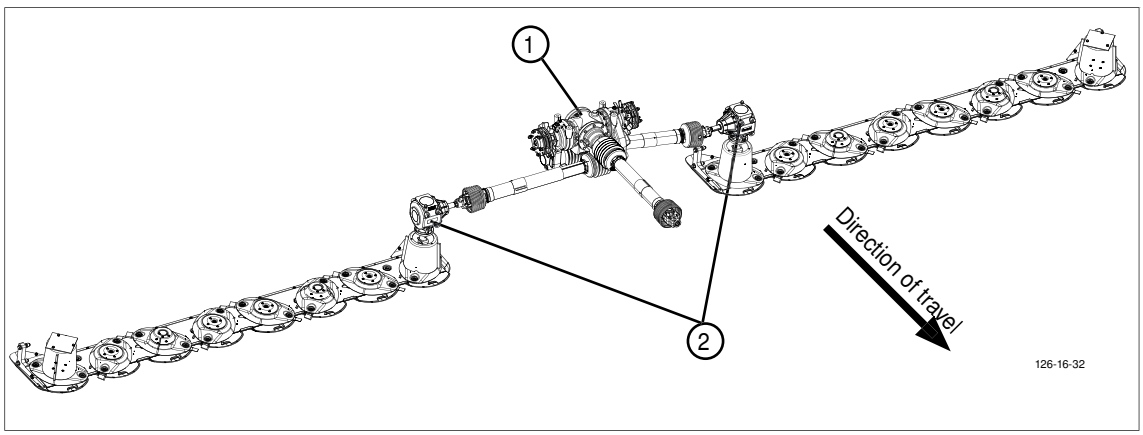
Angular gearing (2)

- Change oil after the first 50 operating hours.
- Change oil after 100 operating hours, at the latest.

Oil quantity: 1.2l Liter
Oil type: 75W-90 GL5



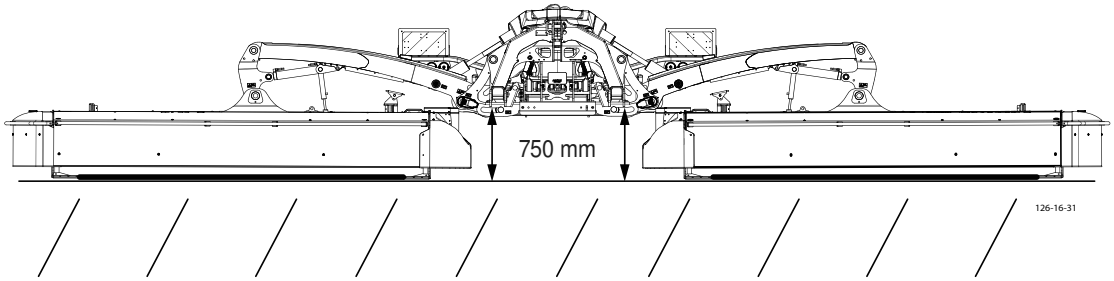
Fill opening (62)
Drain opening (63)
Oil level check (OIL LEVEL) (64)



Maintenance of the mower articulated shafts

For the maintenance of the two articulated shafts on the mower, select the following mower setting:

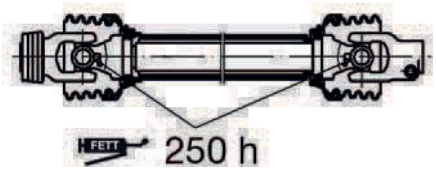
- Set lower link height at approx. 750 mm
- Set the mower units on "Working position, narrow"



Greasing points:

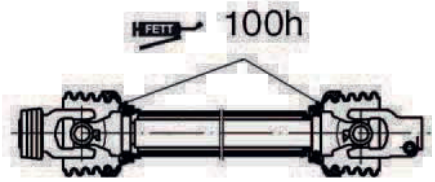
- Lubricate 2x the cardan joints in the cup bottom every 250 operating hours,

  Quantity of grease: until the grease escapes at the seals.



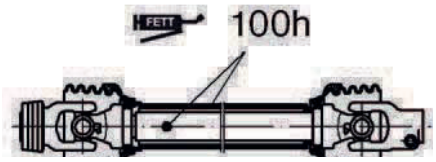
- Lubricate 2x the protective slide bearings (with the exception of the protective guards) every 100 operating hours

  Quantity of grease: 3 strokes



- Lubricate 2x the profile pipe lubrication nipples and the related inner protective slide bearings every 50 operating hours (180° opposite)

  Quantity of grease: Profile pipe lubrication nipples including the inner protective slide bearings: 5 strokes



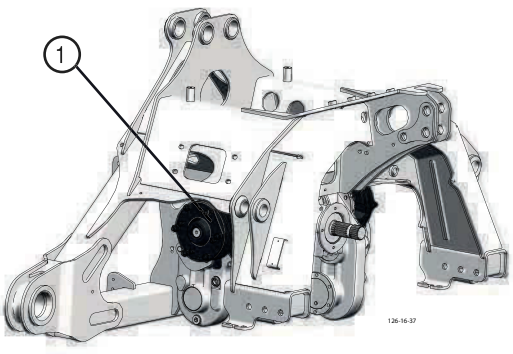
Note:

The lubrication nipples are 180° offset. Both must be lubricated!

Friction-free coupling (1)

Ventilate the clutch:

1. at least once a year (ideally after the winter break, before initial operation in spring)
2. after the machine has been at a standstill for longer intervals
3. after frequent washing of the machine

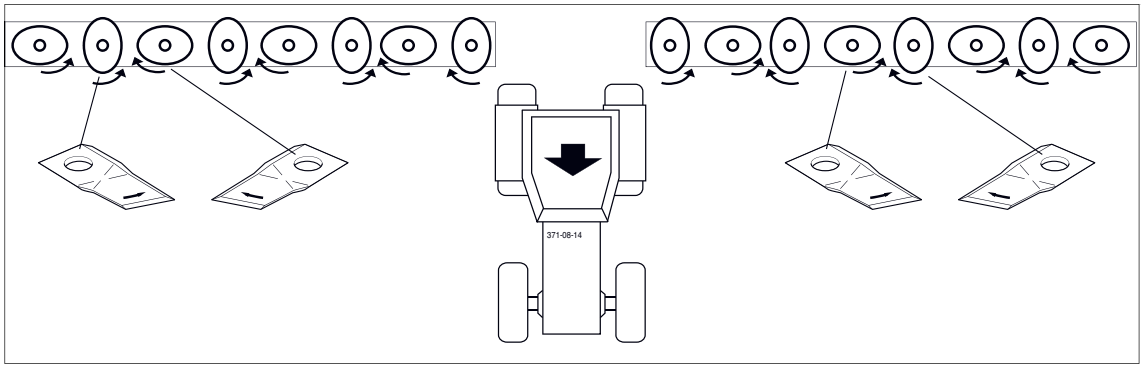


Installing cutter blades

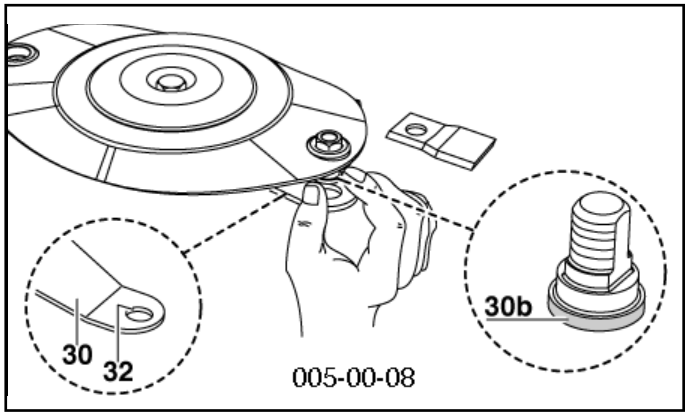
Be advised!

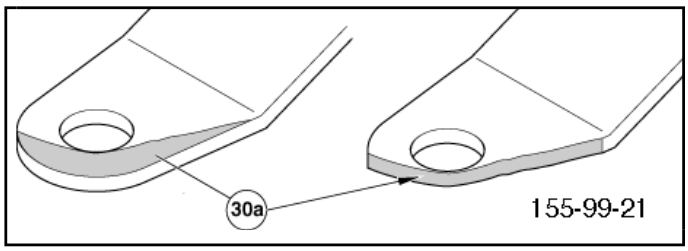
The arrow on the cutter blade shows the cutter disc's direction of turn.

- Before installing, clean the bolt fixing surfaces of paint.



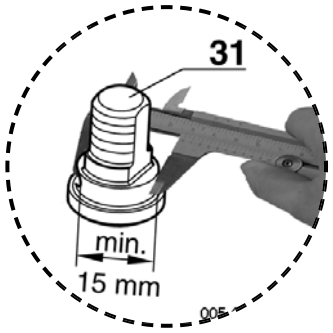
Checking wear on mowing blade holders





Wearing parts are:

- mounting of mowing blades (30)
- bolts of mowing blades (31)



Process of visual control:

1. remove mowing blades

2. remove grass and dirt

- around pin (31)

Attention !

Danger of accident if:

- the central part of pin of blade must have a minimum of 15 mm
- the wearing area (30a) has reached the edge of the boring
- the pin of the blade is worn in the lower part (30b)
- the pin of the blade is no longer firmly seated

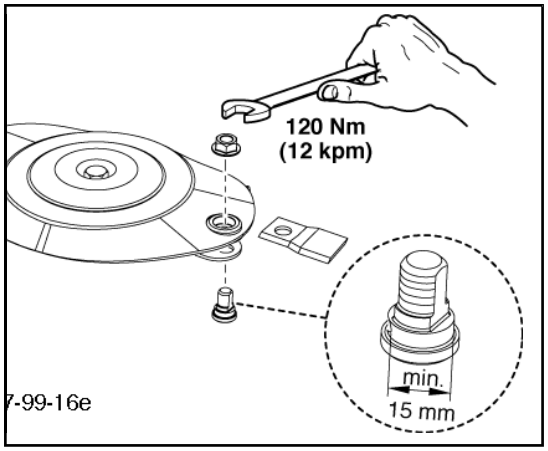
If you notice one or several of these characteristics of wear stop mowing at once!

Worn parts must be replaced by original parts made by Pöttinger immediately !

Screw down the pin of the blade with the nut with 120 Nm.

Check the suspension of mowing blades as to wear and other damage:

- every time before bringing the machine into operational use
- several times during use
- immediately after hitting an obstacle (e.g. a stone, piece of wood, metal,...)



Attention!

Danger of accident if wearing parts are worn

If such wearing parts are worn out they must not be used any longer.

Otherwise accidents may be caused through parts that are flinged away (e.g. mowing blades, fragments...)

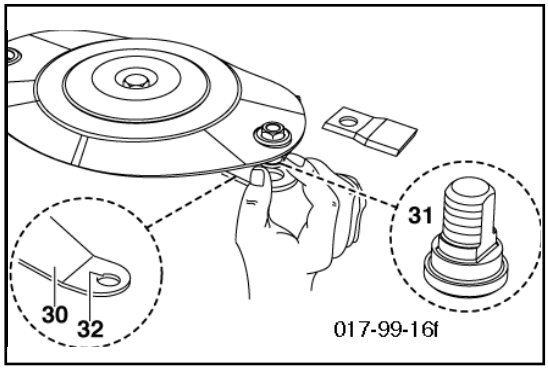
Holder for a quick change of cutter blades

Attention!

For Your Safety

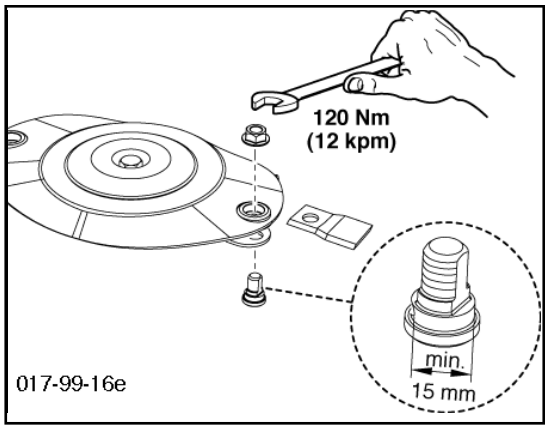
- Regularly check that cutter blades are tightened firmly!
  - Cutter blades on a cutter disc should wear out simultaneously (danger of imbalance).

    Otherwise they are to be replaced with new ones (replace in pairs).
  - Buckled or damaged cutter blades must not be used further.
- Buckled, damaged and/or worn cutter blade holders (30) should not be used further.



Checking the mowing blade suspension

- Normal check every 50 hours.
- Check more often when mowing on stony terrain or in other difficult operating conditions.
- Check immediately after driving over a hard obstacle (e.g. stones pieces of wood, ect).

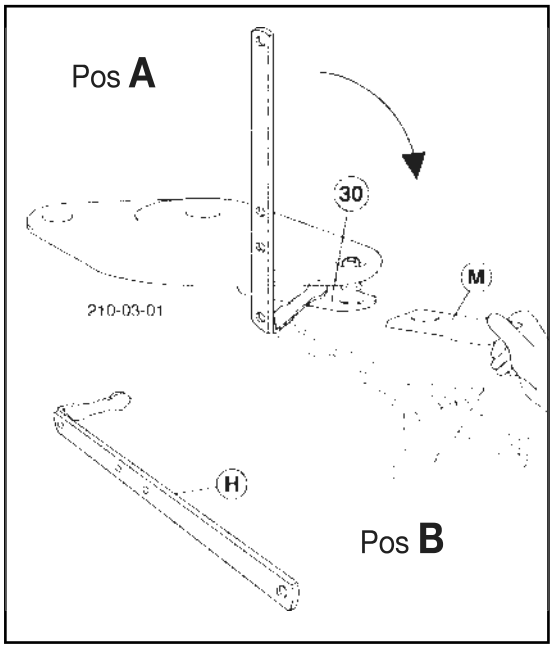


Carry out a check

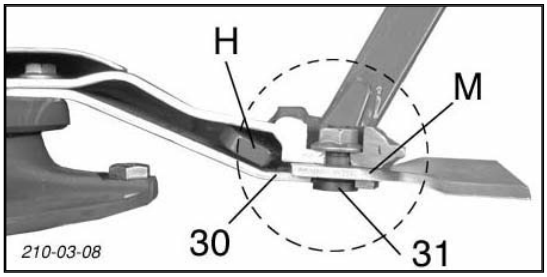
- as described in chapter „Changing the Cutter Blades“

Changing the Cutter Blades

1. Insert lever from left or right side on the cutter disc ”Pos A” until it stops.
2. Swing lever from ”pos. A” to ”pos. B” and push the movable holder (30) down.



3. Remove cutter blade (M)
4. Clean forage remains and dirt away.
   - around the bolts (31) and inside the borehole (32)
5. Check:
   - blade bolts (31) for damage, wear and fitting
   - holder (30) for damage, change in position and fitting
   - borehole (32) for damage.
   - Side surfaces must not show signs of deformation
6. Install cutter blades
7. Visual check! Check that blade (M) is correctly positioned between blade bolts (31) and holder (30) (see diagram).



8. Swivel lever (H) to ”A” again and remove.

Take note!

Damaged, buckled and worn out parts must not be used further (danger of accident).

Technical data

Description		NOVACAT A10 (Type 3850)	NOVACAT A10 ED (Type 3850)
3-point mount		Cat III	Cat III
No. of mowing discs		2 x 8	2 x 8
Number of blades per disc		2	2
Working width	[m]	8.76 - 9.98	8.76 - 9.98
Transport width with - 3.0 m frame - 3.5 m frame	[m] [m]	2.99 3.42	2.99 3.42
Ground clearance in transport position	[mm]	260	260
Transport height	m	3.99	3.99
Transport length	m	2.62	2.62
Power requirements	[kW/hp]	99 / 135	110 / 150
Coverage capacity	[ha/h]	12.0	12.0
p.t.o. speed	[rpm^{-1}]	1000	1000
Cardan shaft overload safeguard	[Nm]	1,100	1,100
Weight[1)]	[kg]	2300	2720
Continuous sound emission level	[db(A)]	93.6	93.6

All data subject to change without notice

Connections required

- Hydraulic plug connection
  - see chapter “Attaching to Tractor”
    Min. operating pressure: 160 bar
    Max. operating pressure: 200 bar
- 7-pin connection for the lighting (12 volt)
- 3-pin connection for electro-hydraulic control (12 volt)

Position of type plate

The chassis number is engraved on the type plate shown opposite. Guarantee claims, enquiries and spare parts orders cannot be processed without the chassis number.

Please enter the number on the title page of the Operating Instructions immediately upon taking delivery of the vehicle / equipment.

[1] Weight: Variations are possible depending on machine features.

The designated use of the mower unit

The mower "**NOVACAT S10 (Type 3850)**" is solely designated for customary use in agricultural work.

- The mowing of grassland and short stemmed fodder.

Any other use outside of this is regarded as not in accordance with the designated use.

The manufacturer accepts no liability for any damage arising as a result thereof; the user accepts sole responsibility.

- The observance of operating, service and maintenance requirements as stipulated by the manufacturer is also included in the designated use.

SUPPLEMENT

The original cannot be copied ...

GB

Things will run better with genuine Pöttinger parts

Original inside

- **Quality and precise fitting**
  - Operating safety.
- **Reliable operation**
- **Longer lasting**
  - Economy
- **Guaranteed availability** through your Pöttinger Sales Service.

The decision must be made, ”original” or ”imitation”? The decision is often governed by price and a ”cheap buy” can sometimes be very expensive.

Be sure you purchase the ”Original” with the cloverleaf symbol!

PÖTTINGER

Recommendations for work safety

All points refering to safety in this manual are indicated by this sign.

1. Operating instructions

a. The operating instructions are important for the correct operation of the machine. Make sure that the operating instructions are always on hand when operating the machine.

b. Keep the operating instructions as long as the machine is in your hands.

c. Pass the operating instructions on to the buyer when selling the machine.

d. Make sure that all safety and warning symbols remain attached on the machine and keep them readable. The hazard warnings provide important information for a safe operation and, thus, your safety.

2. Qualified personnel

a. Only persons of legal age, mentally and physically able and having been trained or familiarized accordingly must operate this machine.

b. Persons not yet trained or familiarized or under training must only operate this machine under the supervision of an experienced person.

c. Inspection, setting and repair work must only be performed by authorized persons.

3. Repair work

a. These instructions only refer to service, maintenance and repair operations the user is able to carry out without assistance. Any work beyond this scope has to be carried out at authorized workshops only.

b. Repairs on the electrical and hydraulic system, preloaded springs, pressure accumulators, etc. require sufficient knowledge, correct tools and protective clothing and, thus, must only be performed at authorized workshops.

4.) Defined use

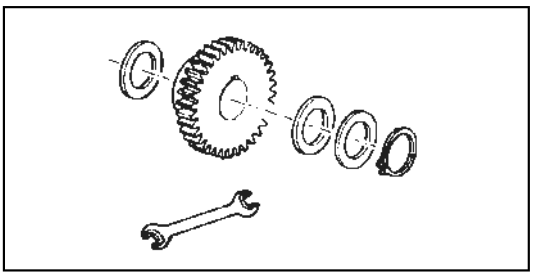
a. See "Technical Data".

b. The keeping of operating, service and maintenance requirements layed down by the manufacturer also come under the heading of "defined use".

5.) Spare parts

a. The **original components and accessories** have been designed especially for these machines and appliances.

b. We want to make it quite clear that components and accesories that have not been supplied by us have not been tested by us.



c. The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

d. Alterations and the use of auxiliary parts that are not permitted by the manufacturer render all liability invalid.

6.) Protection devices

a. All protection devices must remain on the machine and be maintained in proper condition. Punctual replacement of worn and damaged covers is essential.

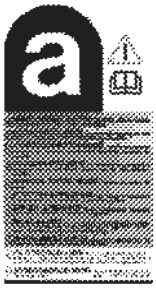
7.) Before starting work

a. Before commencing work, the operator must be aware of all operating devices and functions. The learning of these is too late after having already commenced operation!

b. The vehicle is to be tested for traffic and operating safety before each operation.

8.) Asbestos

a. Certain sub-supplied components of the vehicle may contain asbestos due to technical reasons. Observe the warning on spare parts.



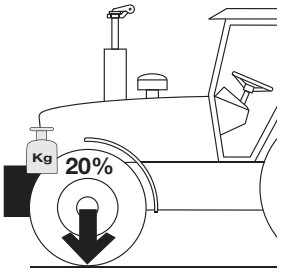
9.) Transport of persons prohibited

a. The transport of persons on the machine is not permitted.

b. The machine may only be driven on public roads when in the position stipulated for road transport.

10.) Driving ability with auxiliary equipment

a. The towing vehicle is to be sufficiently equiped with weights at the front or at the rear in order to guarantee the steering and braking capacity (a minimum of 20% of the vehicle's tare weight on the front axle).



b. The driving ability is influenced by ground conditions and by the auxiliary equipment. The driving must be adapted to the corresponding terrain and ground conditions.

c. When driving through curves with a connected appliance, observe the radius and swinging mass of the appliance.

d. When travelling in a curve with attached or semimounted implements, take into account the working range and swing mass of the implement!

11.) General

a. Before attaching implement to three-point linkage, move system lever into a position whereby unintentional raising or lowering is ruled out!

b. Danger of injury exists when coupling implement to tractor!

c. Danger of injury through crushing and cutting exists in the three-point linkage area!

d. Do not stand between tractor and implement when using three-point linkage external operation!

e. Attach and detach drive shaft only when motor has stopped.

f. When transporting with raised implement, secure operating lever against lowering!

g. Before leaving tractor, lower attached implement to the ground and remove ignition key!

h. Nobody is to stand between tractor and implement without tractor being secured against rolling using parking brake and/or wheel chocks!

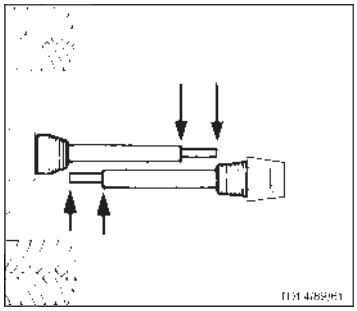
i. For all maintenance, service and modification work, turn driving motor off and remove universal drive.

12.) Cleaning the machine

a. Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

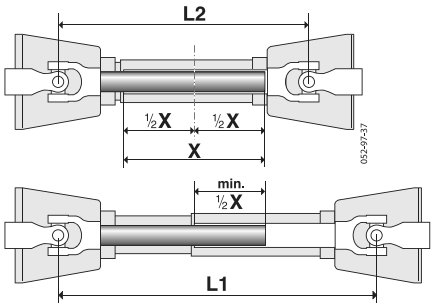
Matching driveshaft to tractor

To determine the actual length required, hold the two halves of the driveshaft side by side.



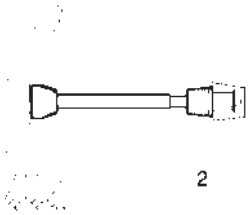
T rimming procedure

- To adjust the length, place the pto halves in the shortest operating position (L2) next to one another and mark.



Caution!

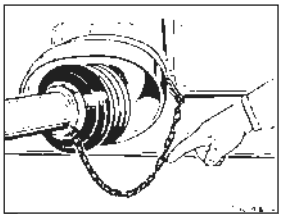
- Note the maximum operating length (L1)
  - Aim at the maximum possible tube superimposition (min. 1/2 X)
- Trim the inner and outer protective tube equally
- Attach overload fuse (2) at the implement!
- Always check that drive shaft locks are securely engaged before starting work.



Safety chain

- Use chain to prevent tube guard from rotating.

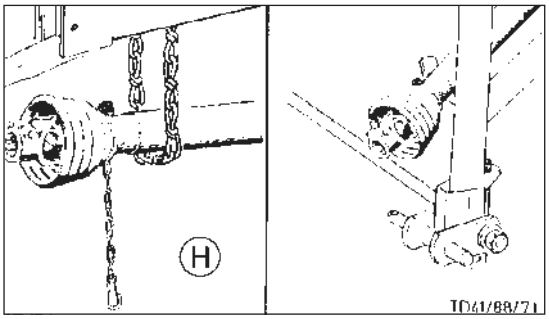
  Ensure sufficient swivel space for the cardan shaft!
- Trim the safety chain so that it cannot wind around the cardan shaft.



Instructions for working

The permissible pto speed may not be exceeded when using the implement.

- The hitched implement may continue to run after the pto is switched off. Work may only be performed once it has reached complete standstill.
- The cardan shaft must be put down or secured using a chain when the implment is parked. Do not use safety chain (H) to suspend the cardan shaft.



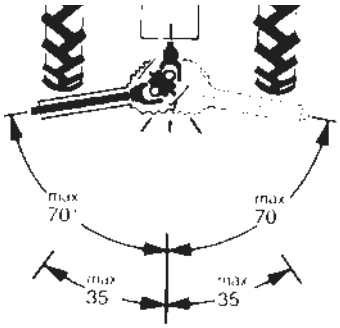
Wide-angle joint:

Maximum angle in operation and at standstill 70°.

Standard joint :

Maximum angle at standstill 90°.

Maximum angle in operation 35°.

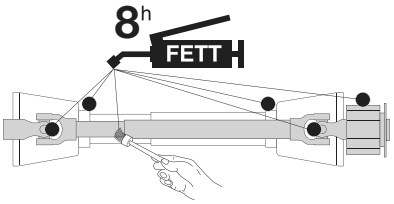


Maintenance

Replace work covers immediately.

- Lubricate with a brand-name grease before starting work and every 8 hours worked.
- Before any extended period of non-use, clean and lubricate driveshaft.

  For winter working, grease the tube guards, to avoid them freezing together.



Be advised!

Only use the cardan shaft supplied or stated; otherwise the warranty claims for any damage are not valid.

Important for driveshafts with friction clutch

Torque is limited with overloading and brief torque peaks and evenly transferred during slipping.

Prior to initial operation and after long periods out of use, check friction clutch for proper function.

a) Measure dimension „L“ at compression spring of K90, K90/4 and K94/1 or at set screw of K92E and K92/4E.

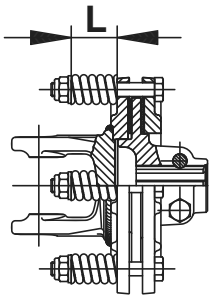
b.) Loosen screws to release the pressure on the friction disk.

Slip the clutch.

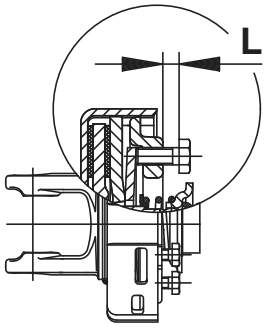
c.) Tighten set screws to dimension "L".

Clutch is ready for use.

K90,K90/4,K94/1

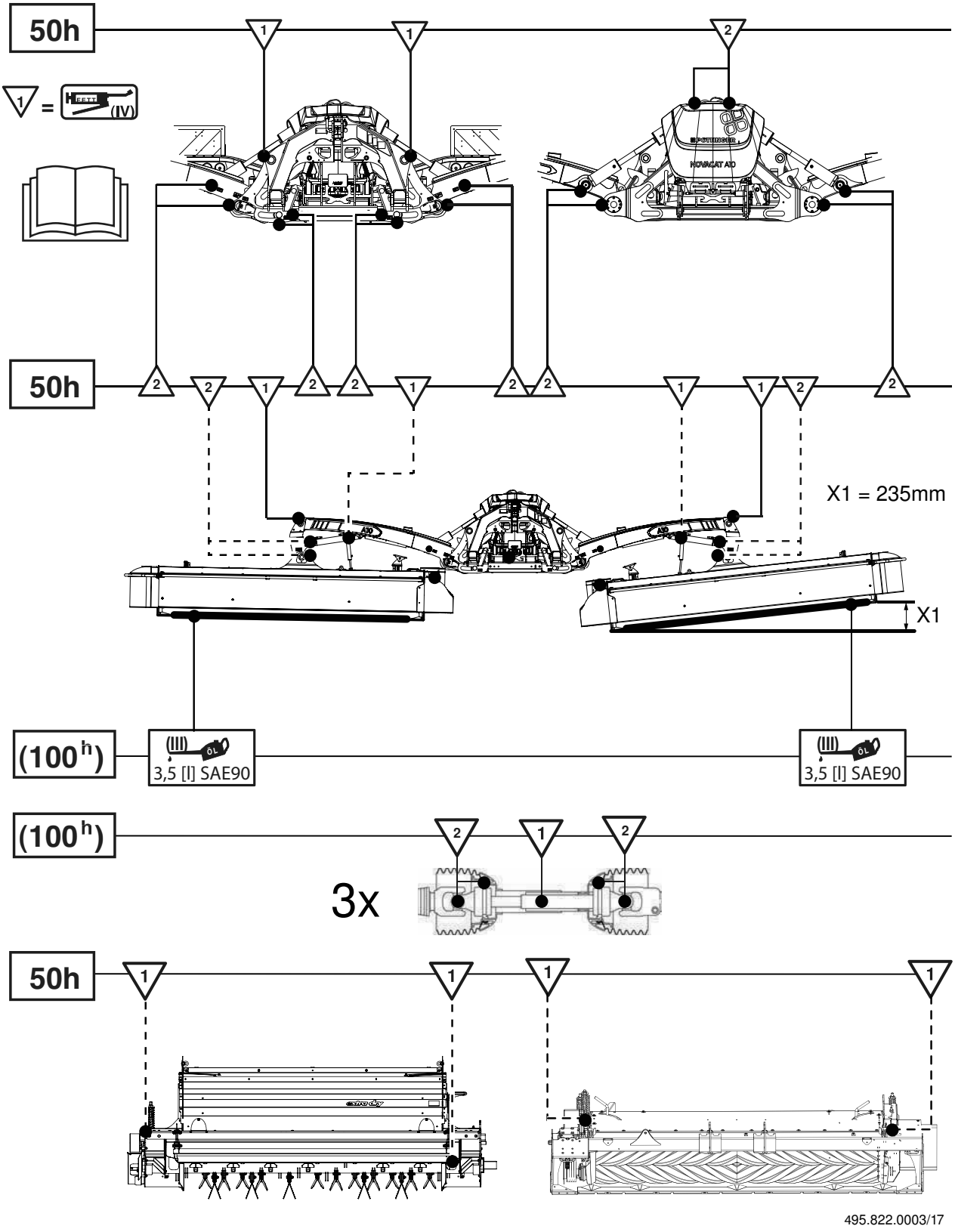


K92E,K92/4E



Lubrication chart

X^{h}	after every X hours operation
40 F	all 40 loads
80 F	all 80 loads
1 J	once a year
100 ha	every 100 hectares
BB	if necessary
	GREASE
	Oil
 =	Number of grease nipples
 =	Number of grease nipples
(III), (IV)	see supplement „Lubrificants“
[l]	Litre
– – – –	Variation
	See manufacturer’s instructions
↺	Rotations per minute
	Always screw in measuring stick up to stop.


50h
1 = (IV)
50h
X1 = 235mm
X1
(100h)
3,5 [l] SAE90
3,5 [l] SAE90
(100h)
3x
50h
495.822.0003/17

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Lubricants

Edition 2013

The performance and the lifetime of the farm machines are highly depending on a careful maintenance and application of correct lubricants. our schedule enables an easy selection of selected products.

The applicable lubricants are symbolized (eg. “III”). According to this lubricant product code number the specification, quality and brandname of oil companies may easily be determined. The listing of the oil companies is not said to be complete.

Gear oils according to operating instructions - however at least once a year.

- Take out oil drain plug, let run out and duly dispose waste oil.

Before garaging (winter season) an oil change and greasing of all lubricating points has to be done. Unprotected, blanc metal parts outside (joints, etc.) have to be protected against corrosion with a group "Iv" product as indicated on the reverse of this page.

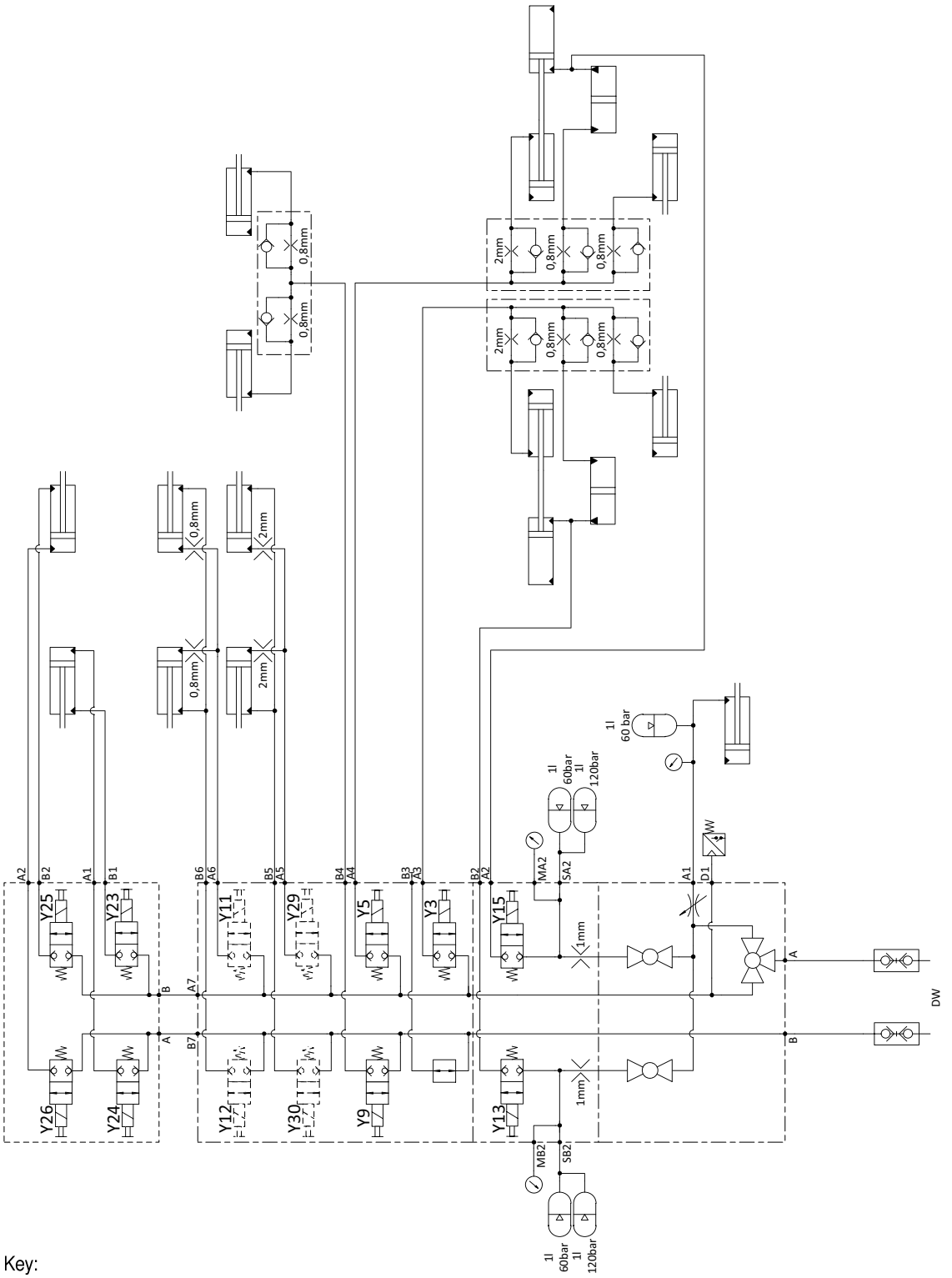
Corrosion protection: Fluid 466

Lubricant indicator	**I**		**III**		**V**	**VI**	**VII**
required quality level niveau	HYDRAULIKöL HLP DIN 51524 Teil 2 See notes: * ** ***	motor oil SAE 30 according to API CD/SF	gear oil, SAE 90 resp. SAE 85 W-140 according to API-GL 4 or API-GL 5	lithium grease	transmission grease	complex grease	gear oil SAE 90 resp. SAE 85 W-140 according to API-GL 5

Company	I	(II)	III	(IV)	V	VI	VIII	NOTATIONS
AGIP	OSO 32/46/68 ARNICA 22/46	MOTOROIL HD 30 SIGMA MULTI 15W-40 SUPER TRACTOROIL UNIVERS. 15W-30	ROTRA HY 80W-90/85W-140 ROTRA MP 80W-90/85W-140	GR MU 2	GR SLL GR LFO	-	ROTRA MP 80W-90 ROTRA MP 85W-140	* The international specification J 20 A is necessary for compound operation with wet brake tractors. ** HLP-(D) + HV hydraulic oils *** HLP + HV hydraulic oils with a vegetable oil basis, biodegradable and therefore environmentally friendly.
ARAL	VITAM GF 32/46/68 VITAM HF 32/46	SUPER KOWAL 30 MULTI TURBORAL SUPER TRAKTORAL 15W-30	GETRIEBEÖL EP 90 GETRIEBEÖL HYP 85W-90	ARALUB HL 2	ARALUB FDP 00	ARALUB FK 2	GETRIEBEÖL HYP 90	
AVIA	AVILUB RL 32/46 AVILUB VG 32/46	MOTOROIL HD 30 MULTIGRADE HDC 15W-40 TRACTAVIA HF SUPER 10 W-30	GETRIEBEÖL MZ 90 M MULTIHYP 85W-140	AVIA MEHRZWECKFETT AVIA ABSCHMIERFETT	AVIA GETRIEBEFLIESSFETT	AVIALUB SPEZIALFETT LD	GETRIEBEÖL HYP 90 EP MULTIHYP 85W-140 EP	
BAYWA	HYDRAULIKÖL HLP 32/46/68 SUPER 2000 CD-MC * HYDRA HYDR. FLUID * HYDRAULIKÖL MC 530 ** PLANTOHYD 40N ***	SUPER 2000 CD-MC SUPER 2000 CD HD SUPERIOR 20 W-30 HD SUPERIOR SAE 30	SUPER 8090 MC HYPOID 80W-90 HYPOID 85W-140	MULTI FETT 2 SPEZIALFETT FLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT NLGI 0 RENOLIT DURAPLEX EP 00 PLANTOGEL 00N	RENOPLEX EP 1	HYPOID 85W-140	
BP	ENERGOL SHF 32/46/68	VISCO 2000 ENERGOL HD 30 VANELLUS M 30	GEAR OIL 90 EP HYPOGEAR 90 EP	ENERGREASE LS-EP 2	FLIESSFETT NO ENERGREASE HTO	OLEX PR 9142	HYPOGEAR 90 EP HYPOGEAR 85W-140 EP	
CASTROL	HYSPIN AWS 32/46/68 HYSPIN AWH 32/46	RX SUPER DIESEL 15W-40 POWERTRANS	EPX 80W-90 HYPOY C 80W-140	CASTROLGREASE LM	IMPERVIA MMO	CASTROLGREASE LMX	EPX 80W-90 HYPOY C 80W-140	
ELAN	HLP 32/46/68 HLP-M M32/M46	MOTORÖL 100 MS SAE 30 MOTORÖL 104 CM 15W-40 AUSTROTRAC 15W-30	GETRIEBEÖL MP 85W-90 GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-90	LORENA 46 LITORA 27	RHENOX 34	-	GETRIEBEÖL B 85W-90 GETRIEBEÖL C 85W-140	
ELF	OLNA 32/46/68 HYDRELF 46/68	PERFORMANCE 2 B SAE 30 8000 TOURS 20W-30 TRACTORELF ST 15W-30	TRANSELF TYP B 90 85W-140 TRANSELF EP 90 85W-140	EPEXA 2 ROLEXA 2 MULTI 2	GA O EP POLY G O	MULTIMOTIVE 1	TRANSELF TYP B 90 85W-140 TRANSELF TYP BLS 80 W-90	
ESSO	NUTO H 32/46/68 NUTO HP 32/46/68	PLUS MOTORÖL 20W-30 UNIFARM 15W-30	GEAROIL GP 80W-90 GEAROIL GP 85W-140	MULTI PURPOSE GREASE H	FIBRAX EP 370	NEBULA EP 1 GP GREASE	GEAR OIL GX 80W-90 GEAR OIL GX 85W-140	
EVVA	ENAK HLP 32/46/68 ENAK MULTI 46/68	SUPER EVVAROL HD/B SAE 30 UNIVERSAL TRACTOROIL SUPER	HYPOID GA 90 HYPOID GB 90	HOCHDRUCKFETT LT/SC 280	GETRIEBEFETT MO 370	EVVA CA 300	HYPOID GB 90	
FINA	HYDRAN 32/46/68	DELTA PLUS SAE 30 SUPER UNIVERSAL OIL	PONTONIC N 85W-90 PONTONIC MP 85W-90 85W-140 SUPER UNIVERSAL OIL	MARSON EP L 2	NATRAN 00	MARSON AX 2	PONTONIC MP 85W-140	
FUCHS	• TITAN HYD 1030 • AGRIFARM STOU MC 10W-30 • AGRIFARM UTTO MP • PLANTOHYD 40N ***	• AGRIFARM STOU MC 10W-30 • TITAN UNIVERSAL HD	• AGRIFARM GEAR 80W90 • AGRIAFRM GEAR 85W-140 • AGRIFARM GEAR LS 90	• AGRIFARM HITEC 2 • AGRIFARM PROTEC 2 • RENOLIT MP • RENOLIT FLM 2 • PLANTOGEL 2-N	• AGRIFARM FLOWTEC 000 • RENOLIT SO-GFO 35 • RENOLIT DURAPLEX EP 00 • PLANTOGEL 00N	• RENOLIT DURAPLEX EP 1	• AGRIFARM GEAR 8090 • AGRIFARM GEAR 85W-140 • AGRIFARM GEAR LS90	
GENOL	HYDRAULIKÖL HLP/32/46/68 HYDRAMOT 1030 MC * HYDRAULIKÖL 520 ** PLANTOHYD 40N ***	MULTI 2030 2000 TC HYDRAMOT 15W-30 HYDRAMOT 1030 MC	GETRIEBEÖL MP 90 HYPOID EW 90 HYPOID 85W-140	MEHRZWECKFETT SPEZIALFETT GLM PLANTOGEL 2 N	GETRIEBEFLIESSFETT PLANTOGEL 00N	RENOPLEX EP 1	HYPOID EW 90 HYPOID 85W-140	
MOBIL	DTE 22/24/25 DTE 13/15	HD 20W-20 DELVAC 1230 SUPER UNIVERSAL 15W-30	MOBILUBE GX 90 MOBILUBE HD 90 MOBILUBE HD 85W-140	MOBILGREASE MP	MOBILUX EP 004	MOBILPLEX 47	MOBILUBE HD 90 MOBILUBE HD 85W-140	
RHG	RENOLIN B 10/15/20 RENOLIN B 32 HVI/46HVI	EXTRA HD 30 SUPER HD 20 W-30	MEHRZWECKGETRIEBEÖISAE90 HYPOID EW 90	MEHRZWECKFETT RENOLIT MP DURAPLEX EP	RENOSOD GFO 35	RENOPLEX EP 1	HYPOID EW 90	

Company	I	(II)	III	(IV)	V	VI	VIII	NOTATIONS
SHELL	TELLUS S32/S46/S68 TELLUS T 32/T46	AGROMA 15W-30 ROTELLA X 30 RIMULA X 15W-40	SPIRAX 90 EP SPIRAX HD 90 SPIRAX HD 85/140	RETINAX A ALVANIA EP 2	SPEZ. GETRIEBEFETT H SIMMNIA GREASE O	AEROSHELL GREASE 22 DOLIUM GREASE R	SPIRAX HD 90 SPIRAX HD 85W-140	* The international specification J 20 A is necessary for compound operation with wet brake tractors. ** HLP-(D) + HV hydraulic oils *** HLP + HV hydraulic oils with a vegetable oil basis, biodegradable and therefore environmentally friendly.
TOTAL	AZOLLA ZS 32, 46, 68 EQUIVIS ZS 32, 46, 68	RUBIA H 30 MULTAGRI TM 15W-20	TOTAL EP 85W-90 TOTAL EP B 85W-90	MULTIS EP 2	MULTIS EP 200	MULTIS HT 1	TOTAL EP B 85W-90	
VALVOLINE	ULTRAMAX HLP 32/46/68 SUPER TRAC FE 10W-30* ULTRAMAX HVLP 32 ** ULTRAPLANT 40 ***	SUPER HPO 30 STOU 15W-30 SUPER TRAC FE 10W-30 ALL FLEET PLUS 15W-40	HP GEAR OIL 90 oder 85W-140 TRANS GEAR OIL 80W-90	MULTILUBE EP 2 VAL-PLEX EP 2 PLANTOGEL 2 N	RENOLIT LZR 000 DEGRALUB ZSA 000	DURAPLEX EP 1	HP GEAR OIL 90 oder 85W-140	
VEEDOL	ANDARIN 32/46/68	HD PLUS SAE 30	MULTIGRADE SAE 80/90 MULTIGEAR B 90 MULTIGEAR C SAE 85W-140	MULTIPURPOSE	-	-	MULTIGEAR B 90 MULTI C SAE 85W-140	
WINTERSHALL	WIOLAN HS (HG) 32/46/68 WIOLAN HVG 46 ** WIOLAN HR 32/46 *** HYDROLFLUID *	MULTI-REKORD 15W-40 PRIMANOL REKORD 30	HYPOID-GETRIEBEÖL 80W-90, 85W-140 MEHRZWECKGETRIEBEÖL 80W-90	WIOLUB LFP 2	WIOLUB GFW	WIOLUB AFK 2	HYPOID-GETRIEBEÖL 80W-90, 85W-140	
MOTOREX	COREX HLP 32 46 68** COREX HLPD 32 46 68** COREX HV 32 46 68** OEKOSYNT 32 46 68***	EXTRA SAE 30 FARMER TRAC 10W/30	GEAR OIL UNIVERSAL 80W/90 GEAR OIL UNIVERSAL 85W/140	FETT 176 GP FETT 190 EP FETT 3000	FETT 174	FETT 189 EP FETT 190 EP FETT 3000	GEAR OIL UNIVERSAL 80W/90 GEAR OIL UNIVERSAL 85W/140	

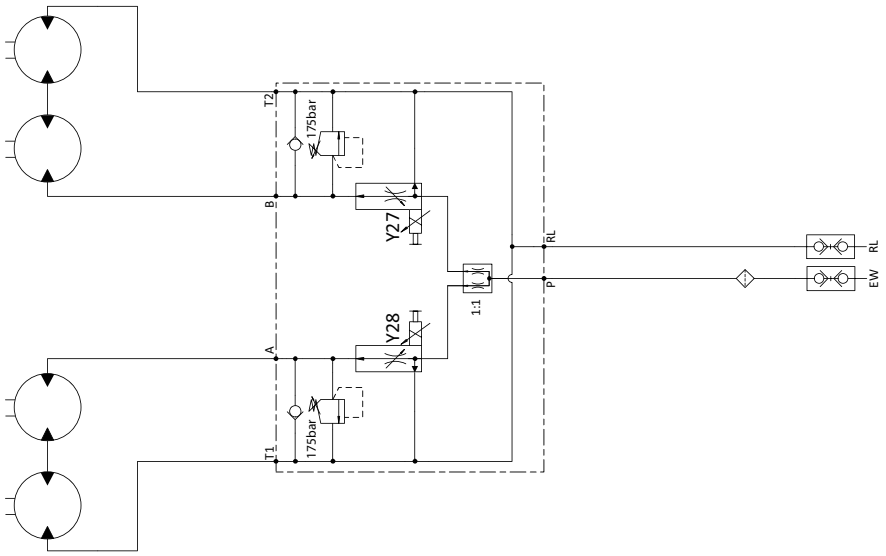
Select Control hydraulic diagram



Key:

Y3 Seat valve - Right mower unit
Y5 Seat valve - Left mower unit
Y9 Seat valve - Locking system
Y11 Seat valve - Side protection
Y12 Seat valve - Side protection
Y13 Seat valve - Right hydraulic relief
Y15 Seat valve - Left hydraulic relief
Y23 Seat valve - Right cross conveyor
Y24 Seat valve - Right cross conveyor
Y25 Seat valve - Left cross conveyor
Y26 Seat valve - Left cross conveyor
Y29 Seat valve - Side shifting
Y30 Seat valve - Side shifting

Cross conveyor hydraulic diagram (Select Control)



Key:

Y27 Current control valve - right cross conveyor

Y28 Current control valve - left cross conveyor

Select control - Emergency operation

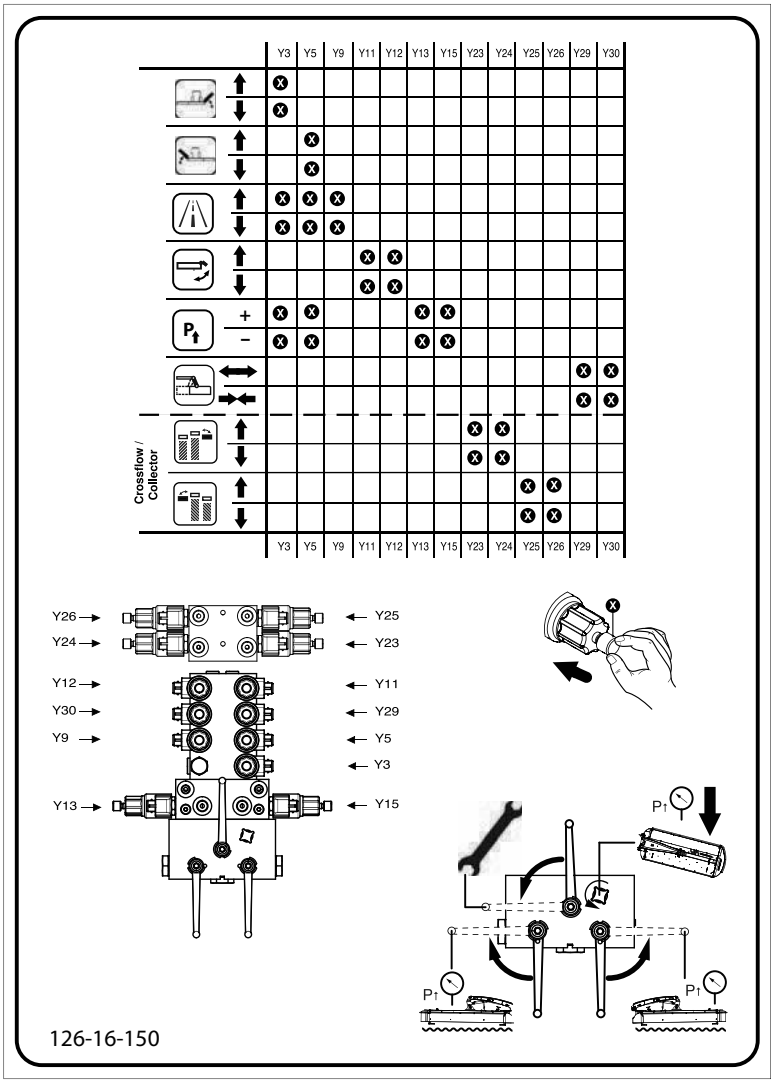
When a disturbance occurs in the electrical system then the desired hydraulic function can be carried out using an emergency action.

Be aware of the danger areas with lifting or switching on, lowering or switching off procedures!

The hydraulic block is located under the front protective cover.

To carry out the desired hydraulic function

- Screw the allocated valve button in
- Actuate servo-valve on tractor
- The hydraulic function is carried out
- Finally, screw the allocated valve button out.

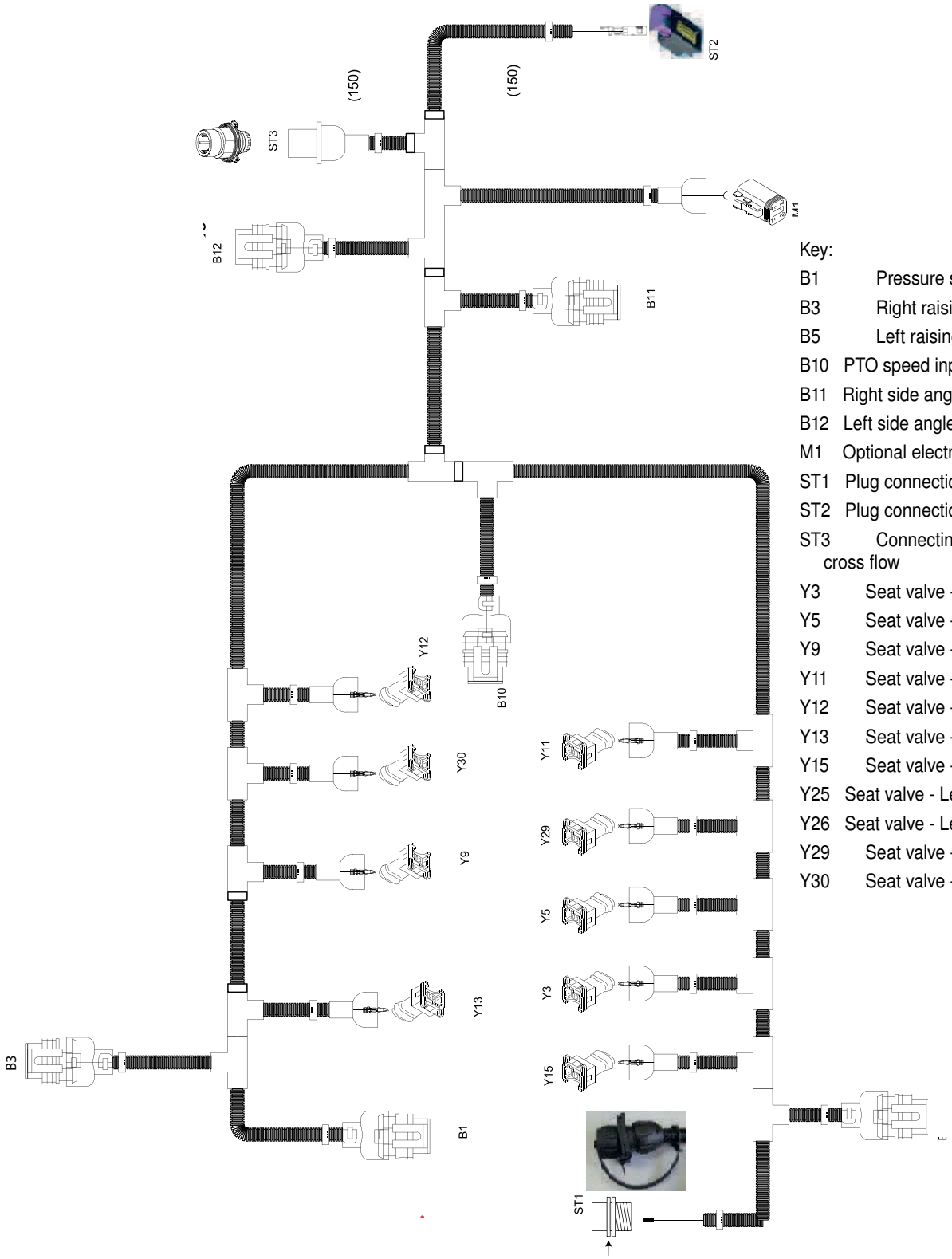


Key:

Y3	Seat valve - Right mower unit
Y5	Seat valve - Left mower unit
Y9	Seat valve - Locking system
Y11	Seat valve - Side protection
Y12	Seat valve - Side protection
Y13	Seat valve - Right hydraulic relief
Y15	Seat valve - Left hydraulic relief
Y23	Seat valve - Right cross conveyor
Y24	Seat valve - Right cross conveyor
Y25	Seat valve - Left cross conveyor
Y26	Seat valve - Left cross conveyor
Y29	Seat valve - Side shifting
Y30	Seat valve - Side shifting

Select control - Control panel

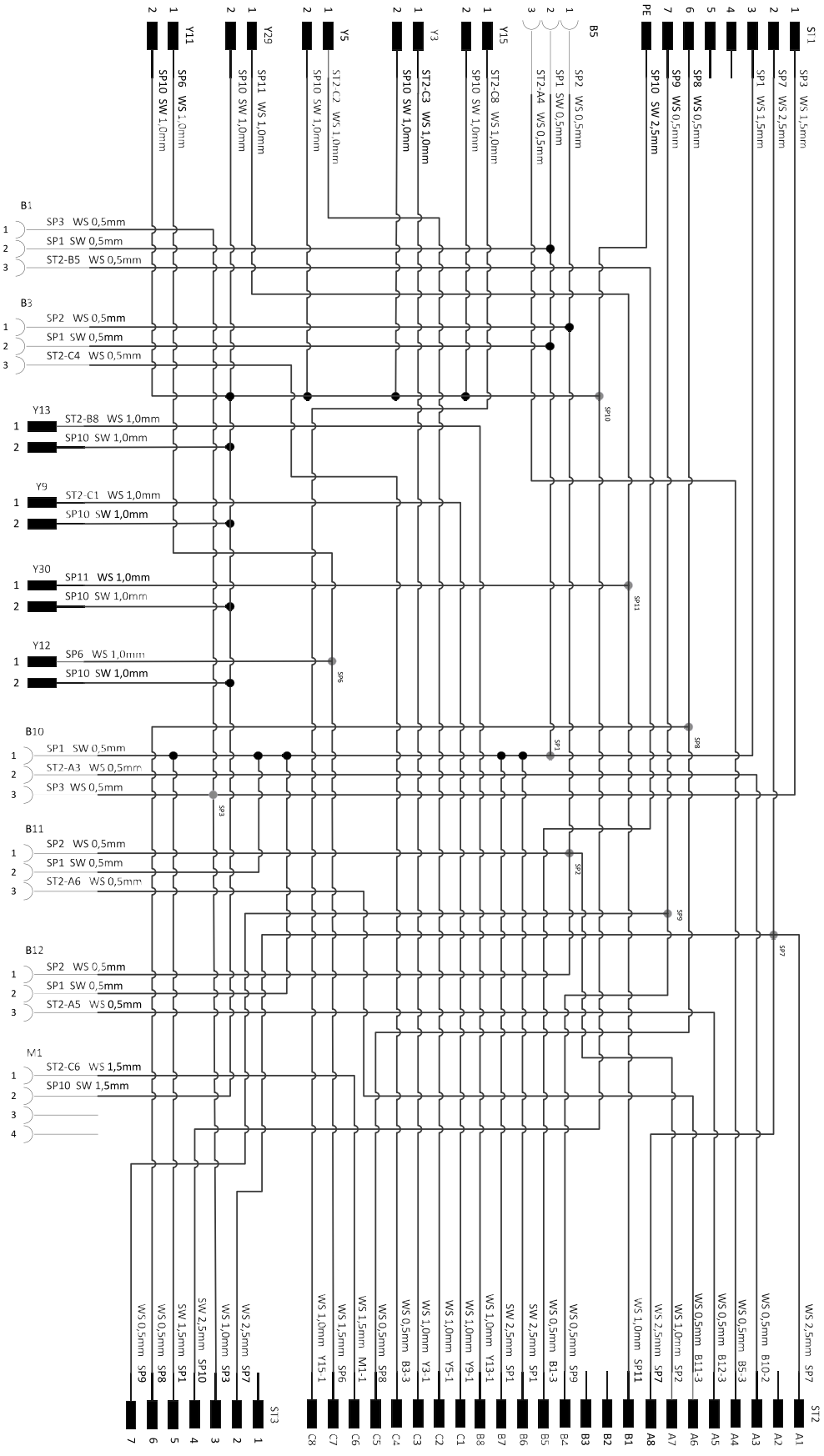
Select Control - Cable harness



Key:

B1 Pressure switch, auto
B3 Right raising angle
B5 Left raising angle
B10 PTO speed input
B11 Right side angle
B12 Left side angle
M1 Optional electric grease pump
ST1 Plug connection to operating panel
ST2 Plug connection to CAN/IO
ST3 Connecting plug to CC or cross flow
Y3 Seat valve - Right mower unit
Y5 Seat valve - Left mower unit
Y9 Seat valve - Locking system
Y11 Seat valve - Side protection
Y12 Seat valve - Side protection
Y13 Seat valve - Right hydraulic relief
Y15 Seat valve - Left hydraulic relief
Y25 Seat valve - Left cross conveyor
Y26 Seat valve - Left cross conveyor
Y29 Seat valve - Side shifting
Y30 Seat valve - Side shifting

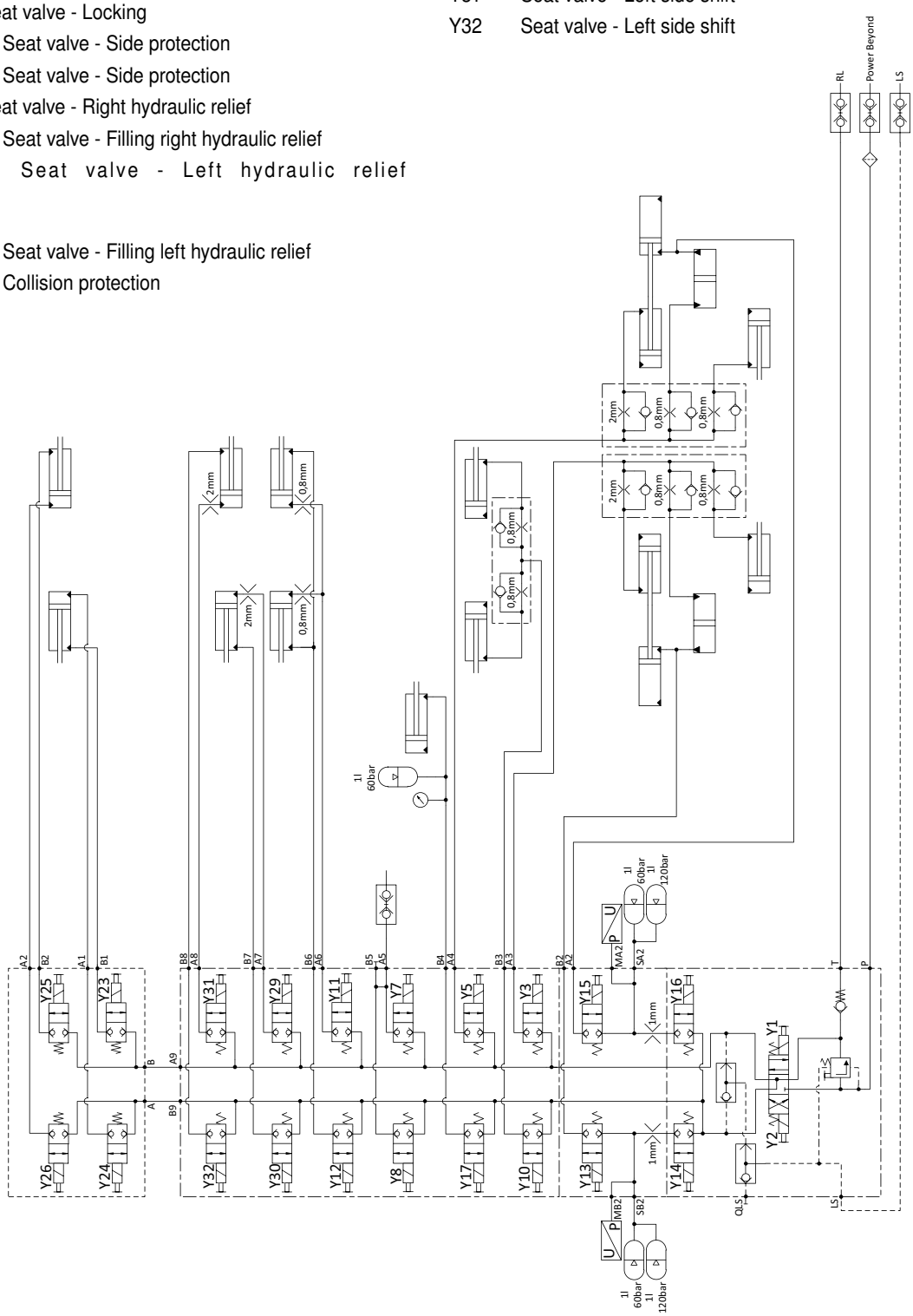
Select Control - Circuit diagram



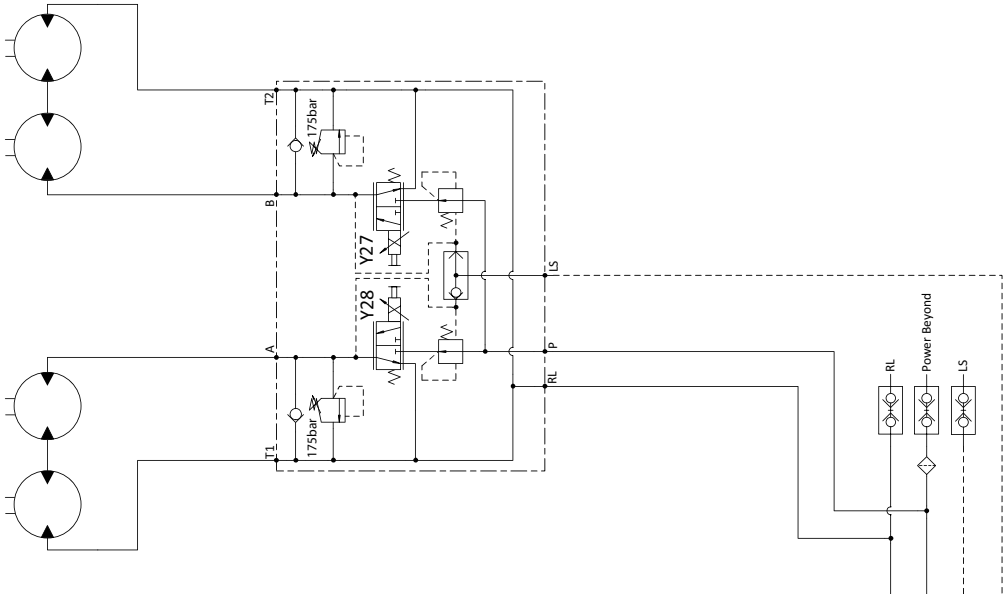
Power Control hydraulic diagram

Key

Y1 Lower directional control valve
Y2 Raise directional control valve
Y3 Seat valve - Right mower unit
Y5 Seat valve - Left mower unit
Y7 Seat valve - Middle mower unit
Y8 Seat valve - Middle mower unit in neutral
Y10 Seat valve - Locking
Y11 Seat valve - Side protection
Y12 Seat valve - Side protection
Y13 Seat valve - Right hydraulic relief
Y14 Seat valve - Filling right hydraulic relief
Y15 Seat valve - Left hydraulic relief
Y16 Seat valve - Filling left hydraulic relief
Y17 Collision protection
Y23 Seat valve - Right cross conveyor
Y24 Seat valve - Right cross conveyor
Y25 Seat valve - Left cross conveyor
Y26 Seat valve - Left cross conveyor
Y29 Seat valve - Right side shift
Y30 Seat valve - Right side shift
Y31 Seat valve - Left side shift
Y32 Seat valve - Left side shift



Cross conveyor hydraulic diagram (Select Control)



Key:

Y27 Current control valve - right cross conveyor

Y28 Current control valve - left cross conveyor

Power Control - Emergency operation

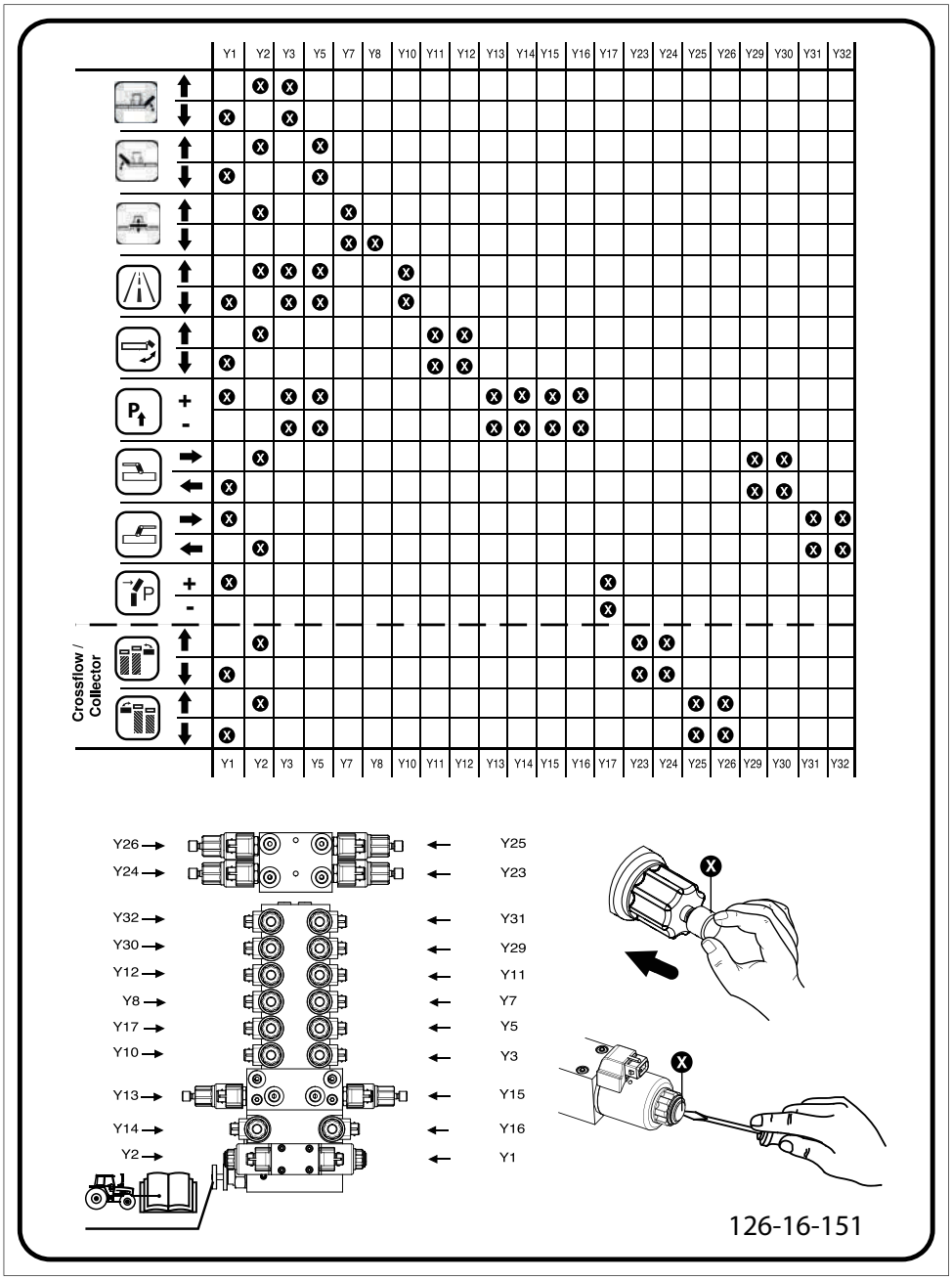
When a disturbance occurs in the electrical system then the desired hydraulic function can be carried out using an emergency action.

Be aware of the danger areas with lifting or switching on, lowering or switching off procedures!

The hydraulic block is located under the front protective cover.

To carry out the desired hydraulic function

- Screw the allocated valve button in
- Actuate servo-valve on tractor
- The hydraulic function is carried out
- Finally, screw the allocated valve button out.



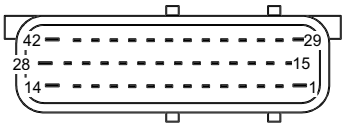
Key

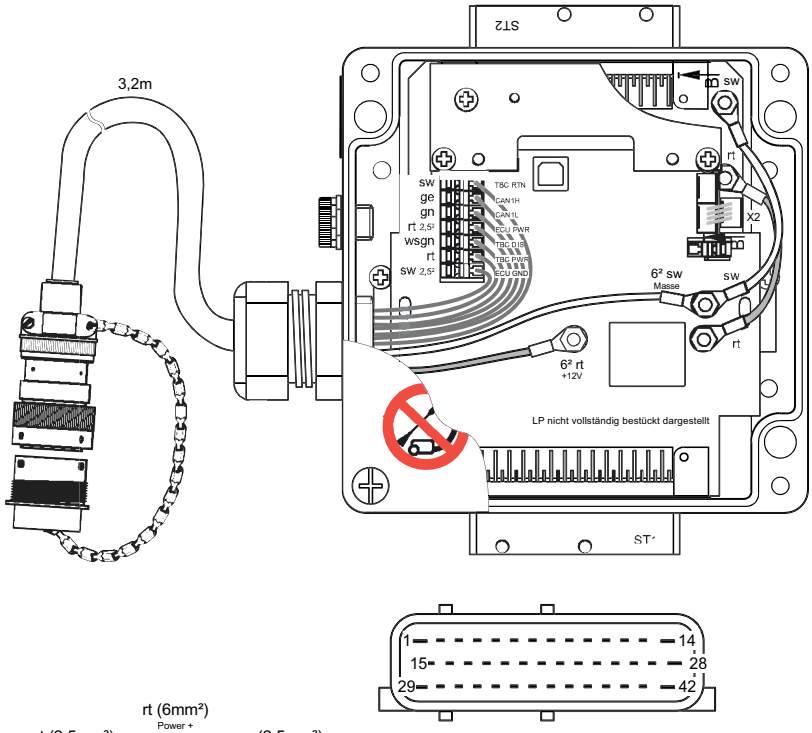
Y1 Lower directional control valve
Y2 Raise directional control valve
Y3 Seat valve - Right mower unit
Y5 Seat valve - Left mower unit
Y7 Seat valve - Middle mower unit
Y8 Seat valve - Middle mower unit in neutral
Y10 Seat valve - Locking
Y11 Seat valve - Side protection
Y12 Seat valve - Side protection
Y13 Seat valve - Right hydraulic relief
Y14 Seat valve - Filling right hydraulic relief
Y15 Seat valve - Left hydraulic relief
Y16 Seat valve - Filling left hydraulic relief
Y17 Collision protection
Y23 Seat valve - Right cross conveyor
Y24 Seat valve - Right cross conveyor
Y25 Seat valve - Left cross conveyor
Y26 Seat valve - Left cross conveyor
Y29 Seat valve - Right side shift
Y30 Seat valve - Right side shift
Y31 Seat valve - Left side shift
Y32 Seat valve - Left side shift

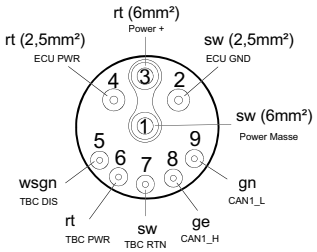
Power Control - Control panel

Power Control - Job calculator

External view of the plugs





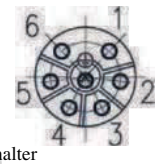


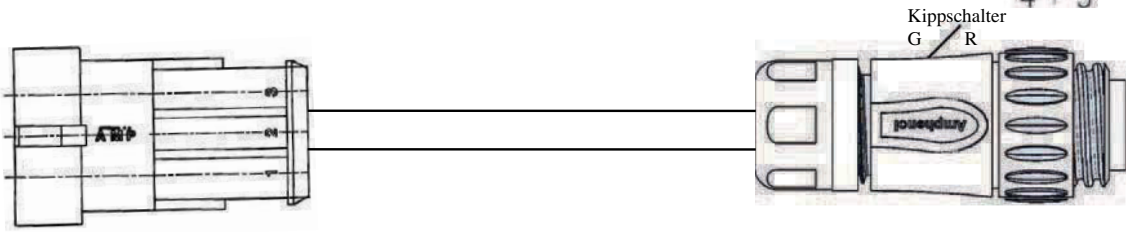
Signal socket connection cable

Signal socket connection cable

Toggle switch: G: Transmission signal from tractor

R: Radar sensor signal from tractor, if available

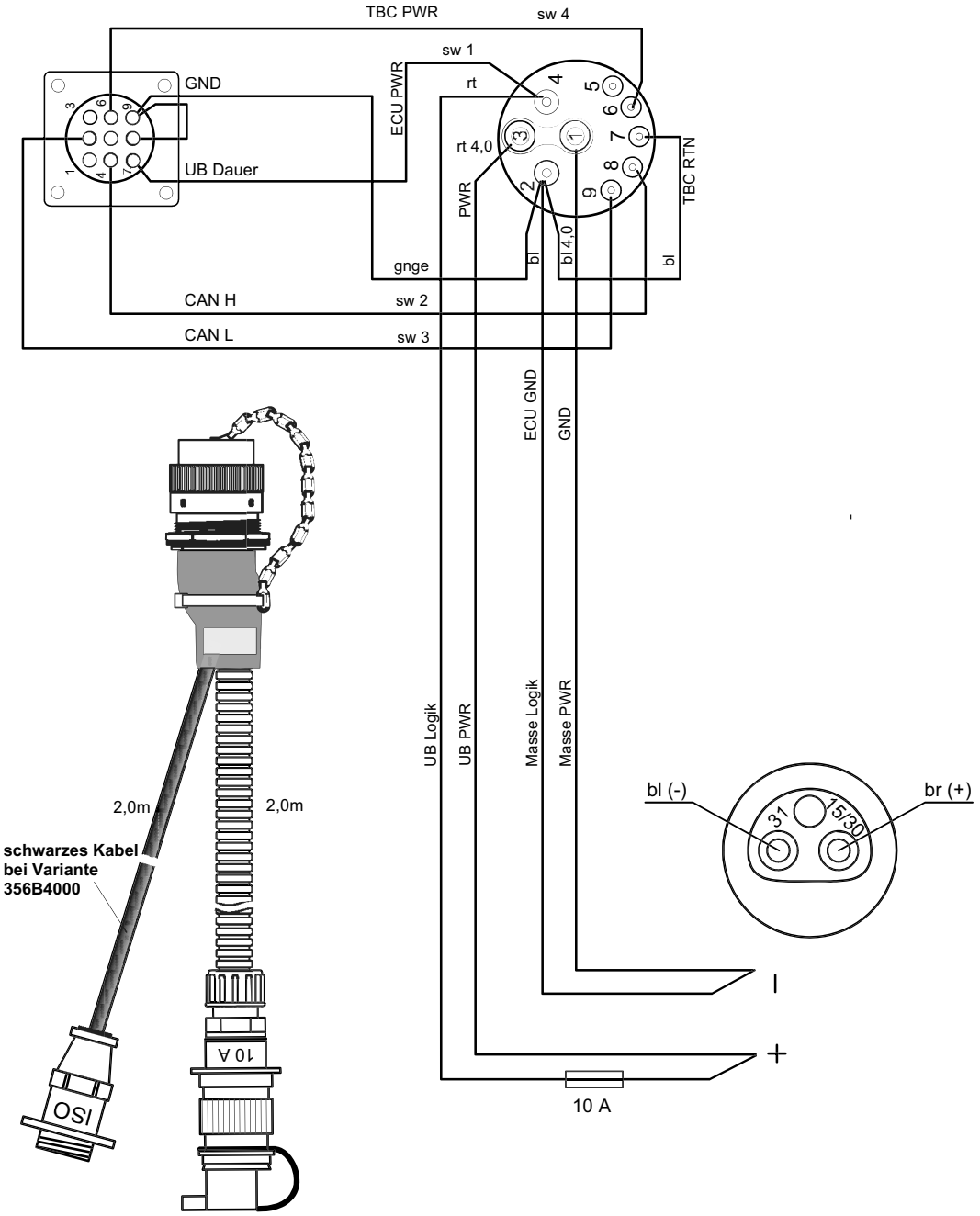




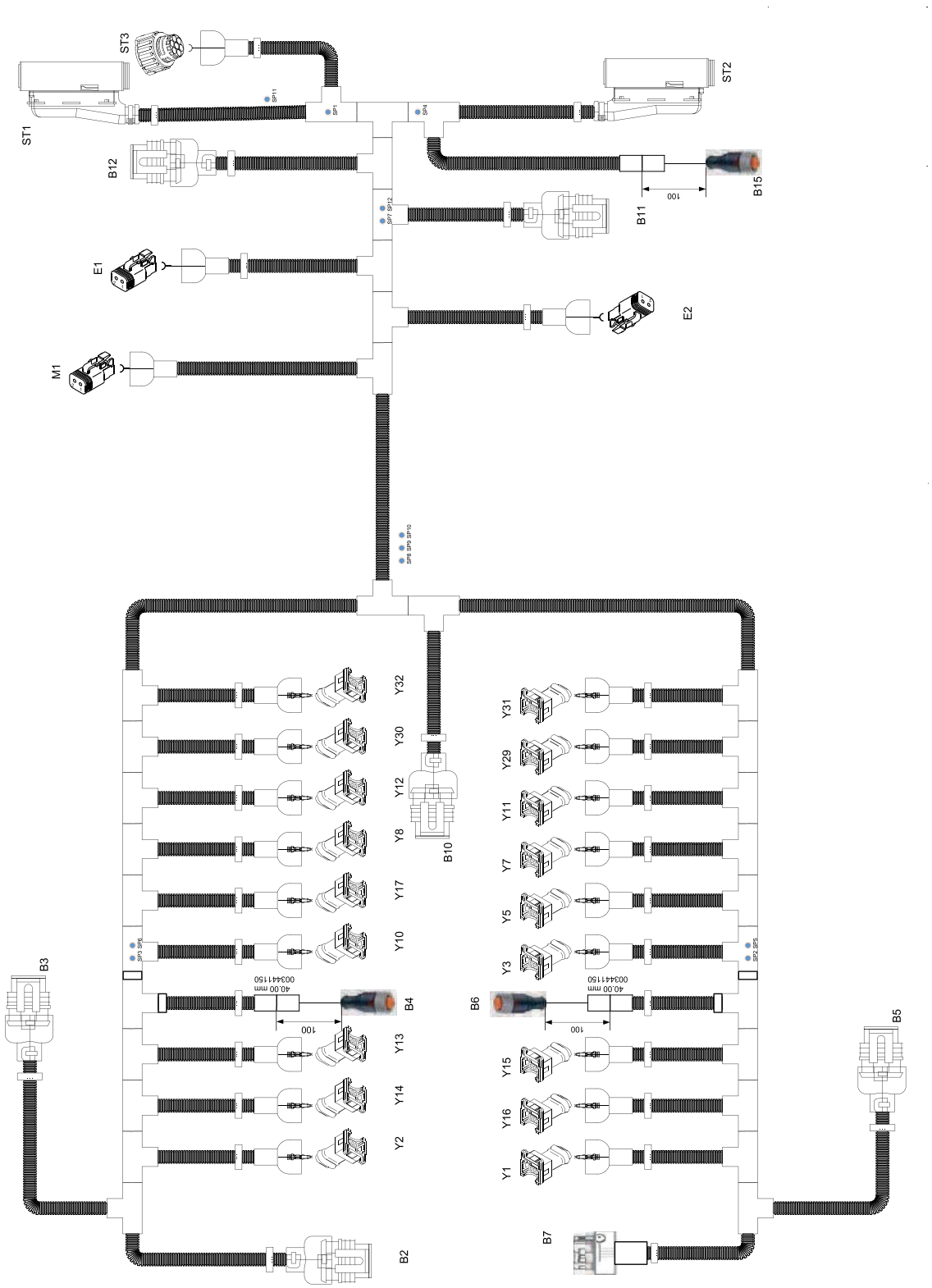
1	–	n.c.	1	–	Litze Nr. 2– Schalterstellung R
2	–	Litze Nr. 1	2	–	Litze Nr. 2 – Schalterstellung G
3	–	Litze Nr. 2			

Tractor cable

External view of plugs and plug-in connections



Power Control - Cable harness



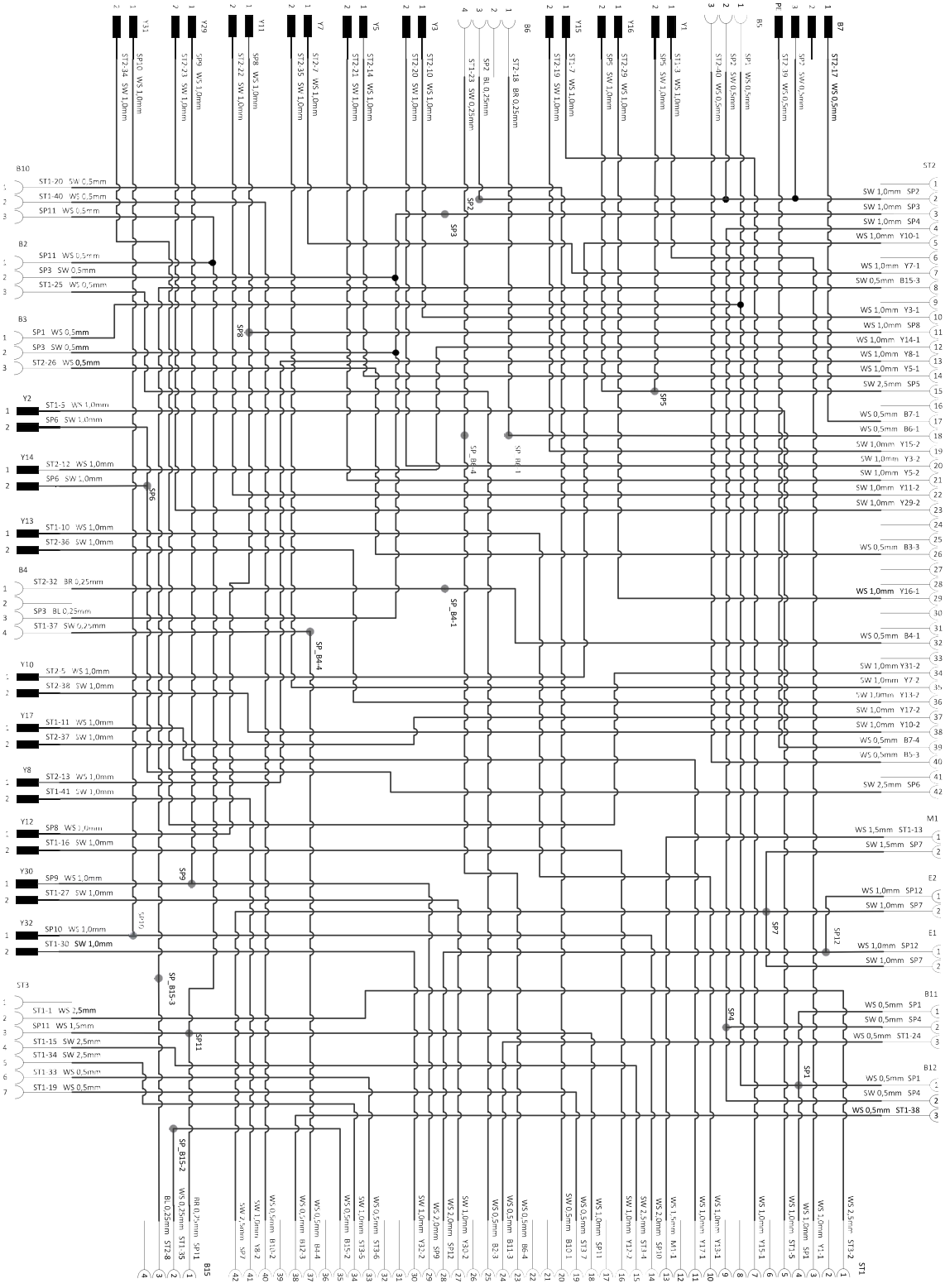
Power Control cable harness key

B2 Signal socket kph
B3 Right MW position
B4 Right relief pressure
B5 Left MW position
B6 Left relief pressure
B7 Middle MW position
B10 PTO speed input
B11 Left side angle

B12 Right side angle
B15 Slope sensor
B16 Collision safeguard pressure
B20 Left CC position
B21 Right CC position
B22 Left CC speed
B23 Right CC speed
B24 left cross flow speed
B25 right cross flow speed
M1 Optional electric grease pump
E1 Left working lights
E2 Right working lights
ST1 Plug connection to Job calculator
ST2 Plug connection to Job calculator
ST 3 Connecting plug to CC or cross flow

Y1 Lower directional control valve
Y2 Raise directional control valve
Y3 Seat valve - Right mower unit
Y5 Seat valve - Left mower unit
Y7 Seat valve - Middle mower unit
Y8 Seat valve - Middle mower unit in neutral
Y10 Seat valve - Locking
Y11 Seat valve - Side protection
Y12 Seat valve - Side protection
Y13 Seat valve - Right hydraulic relief
Y14 Seat valve - Filling right hydraulic relief
Y15 Seat valve - Left hydraulic relief
Y16 Seat valve - Filling left hydraulic relief
Y17 Collision protection
Y29 Seat valve - Right side shift
Y30 Seat valve - Right side shift
Y31 Seat valve - Left side shift
Y32 Seat valve - Left side shift

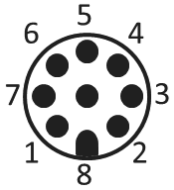
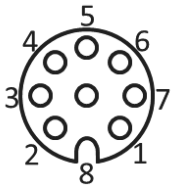
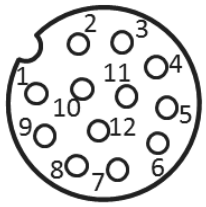
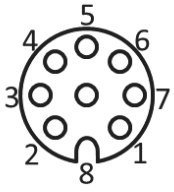
Power Control - Circuit diagram

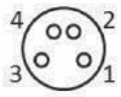


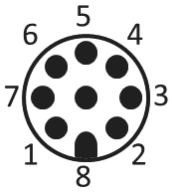
Terminal assignment of CCI terminal:

The multi-connector power board is on the back of the terminal. In addition, the terminal USB connection is located on the rear side under a flap

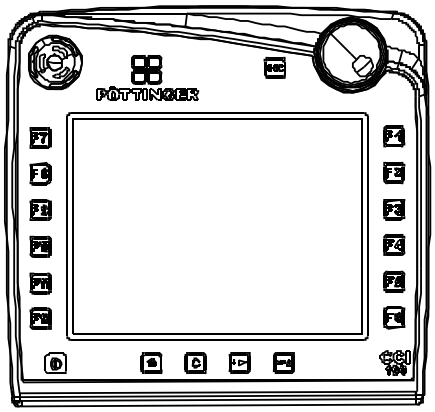
(external plug views)

Symbol	PIN	Signal	Colour	Function
CAN1 - IN / M12 x1 - 8-pin plug with switchable terminal resistance				
	1	$+U_B$	white	Supply voltage
	2	EMERGENCY STOP B	brown	Emergency-Stop input
	3	$+U_{ON}$	green	ECU- or external on/off signal
	4	EMERGENCY STOP V	yellow	Emergency supply-stop
	5	CAN0L	grey	CAN 1 Low
	6	GND	pink	GND
	7	CAN0H	blue	CAN 1 High
	8	Screen	red	Screen disconnected from GND
CAN1 - OUT / M12 x1 - 8-pin connector with switchable terminal resistance				
	1	$+U_B$	white	Supply voltage
	2	EMERGENCY STOP B	brown	Emergency-Stop output
	3	$+U_{ON}$	green	ECU- or external on/off signal
	4	EMERGENCY STOP V	yellow	Emergency-Stop supply
	5	CAN0L	grey	CAN 1 Low
	6	GND	pink	GND
	7	CAN0H	blue	CAN 1 High
	8	screen	red	Screen disconnected from GND
RS232 / Signal / M12 x1 - 12-pin connector for signal socket according to ISO 11786				
	1	$+U_{B\ SW}$	brown	Supply power interconnected
	2	GND	blue	GND
	3	SMFQ IN 2	white	ISO 11786 "Power take-off speed"
		SAN_I	Greer	
	5	SMFQ_IN3	pink	ISO 11786 "Wheel speed"
	6	SMFQ_IN4	yellow	Direction of travel
	7	SMFQ_IN1	black	ISO 11786 "Slip-free speed"
	8	COM0_RxD_IN	grey	RS232 1 RxD (Input)
	9	COM0 TxD OUT	red	RS232 1 TxD (Output)
		IGN	violet	Ignition signal (Terminal 15)
	11	COM1_RxD_IN	grey / pink	RS232 2 RxD
	12	COM1_TxD_OUT	red / blue	RS232 1 TxD
Video / M12 x1 - 8-pin connector				
	1	VIDEO_IN	white	Video Signal
	2	RS485_B	brown	EIA RS-485 B
	3	RS485_A	green	EIA RS-485 A
	4	$+U_{B\ SW}$	yellow	Supply voltage interconnected
	5	RS485_A	grey	EIA RS-485 A
	6	$+U_{B\ SW}$	pink	Supply voltage interconnected
	7	VGND	blue	Video GND
	8	screen	red	Screen disconnected from GND

Symbol	PIN	Signal	Colour	Function
LIN / M18 x1 - 4-pin connector				
	1	$+U_{B\,SW}$		Supply v
	2	N.C.	white	N.C.
	3	GND	blue	GND
	4	LIN	black	LIN bus
USB - Host 2.0 - connector - with bayonet catch for the protection cap				
	1		red	USB supply voltage 5 V
	2			data
	3	D +	Green	data +
	4		black	GND

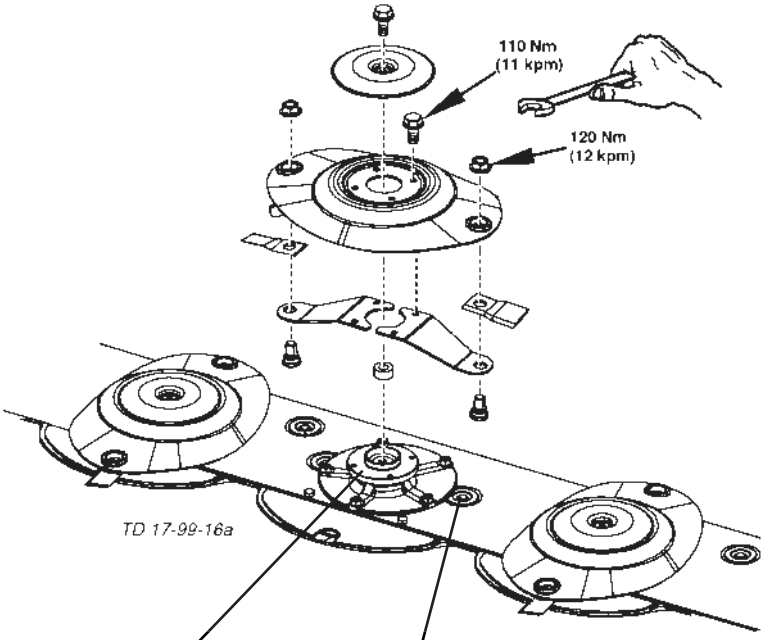
CAN2 - IN / M12 x1 - 8-pin plug				
	1	$+U_B$	white	Supply voltage
	2	EMERGENCY STOP B	brown	Emergency-Stop input
	3	$+U_{ON}$	Green	ECU- or external on/off signal
	4		Yellow	Emergency-Stop supply
	5	CAN1L	grey	CAN 2 Low
	6	GND	pink	GND
	7	CAN1H	blue	CAN 2 High
	8	screen	red	Screen disconnected from GND

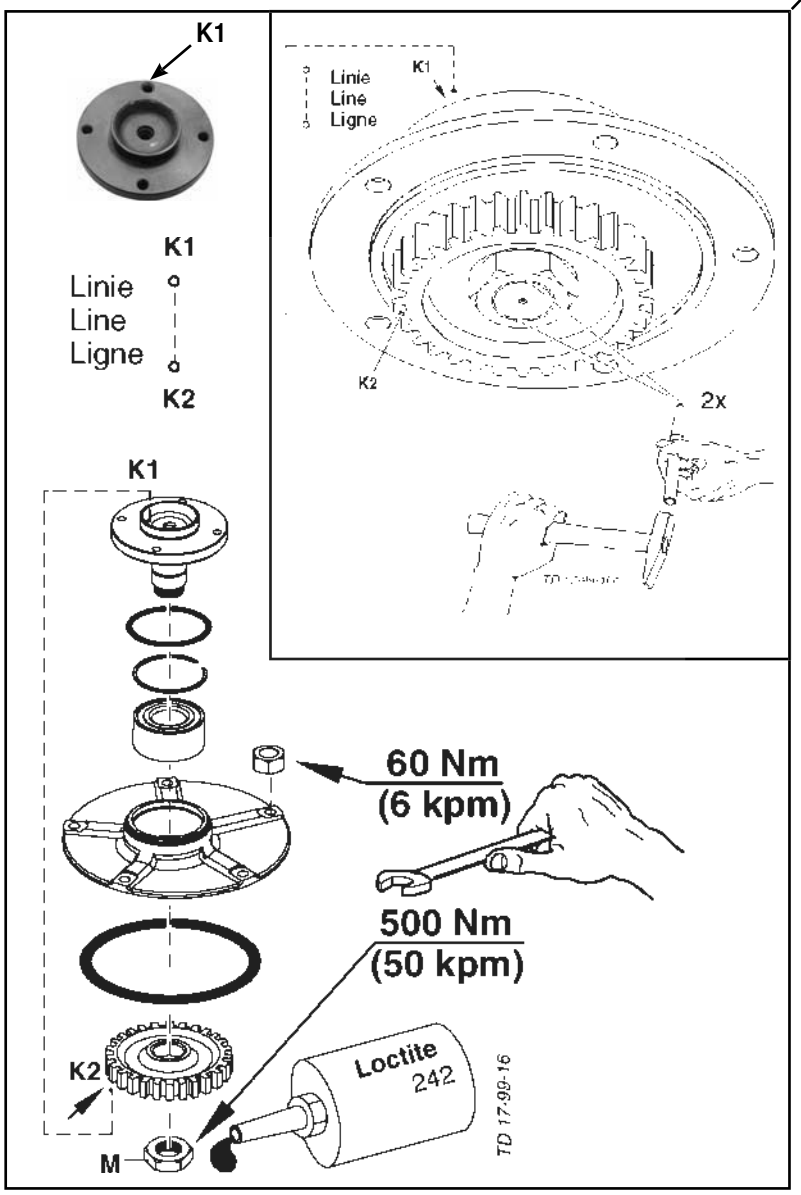
Ethernet / M12x1 4-pin connector				
	1	TX+	Yellow	D-coded IEC 61076-2-101
	2	RX+	white	
	3	TX-	orange	
	4	RX-	blue	

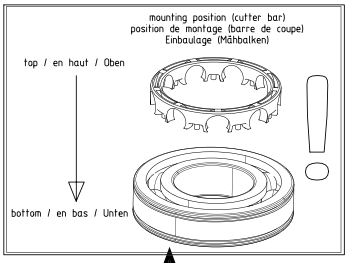


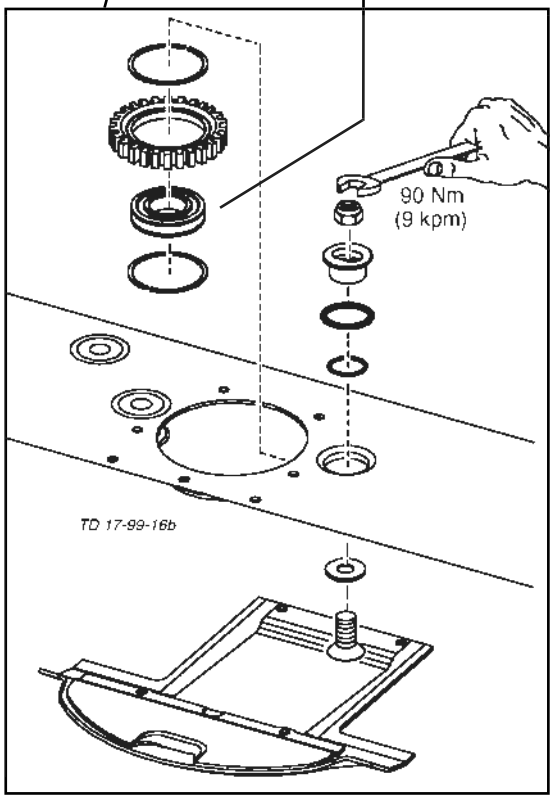
Repairs to the cutter bar

- Markings aligned (K1, K2).
  up to 2005 model
  (Marking K1 = Centre point on the hub)
  from 2006 model
  (Marking K1 = Larger countersink when drilling)
- Only screw on nut (M) when there is sufficient thread length (L) to prevent any damage.
- Secure nut (M) against loosening
  - with "Loctite 242" or an equivalent product
  - and centre point (2x)



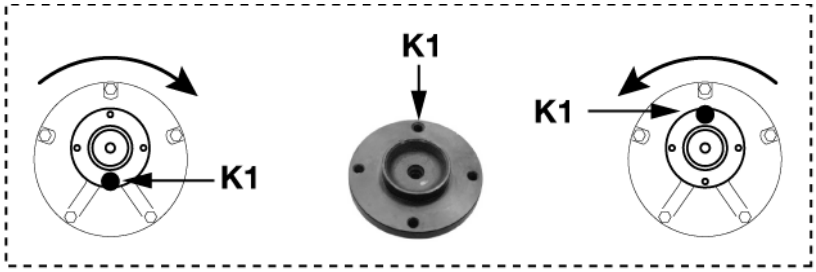


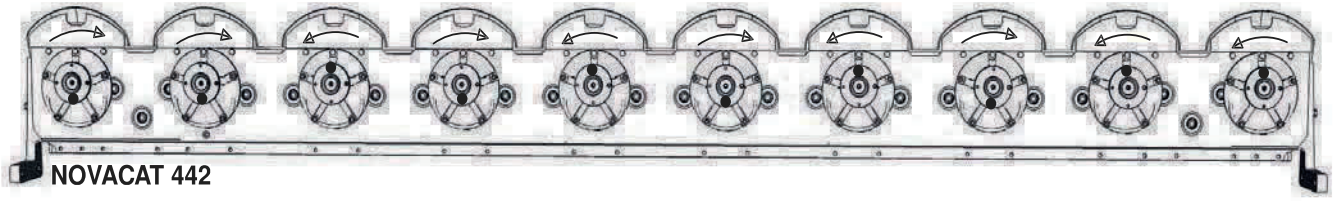




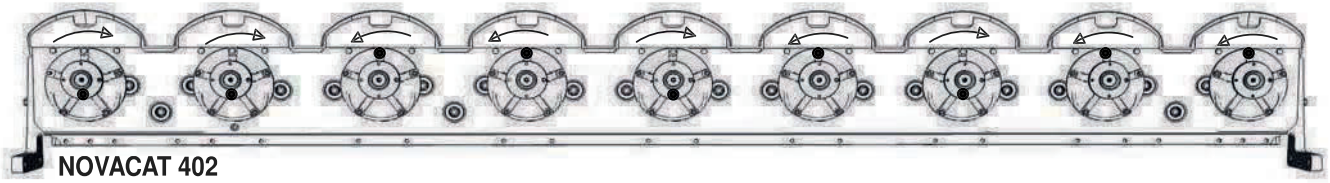
Assembly instructions

- For easier assembly of the cutting discs please proceed as follows:
  1. With the disc's direction of rotation to the left = Marking (K1) at the top
  2. With the disc's direction of rotation to the right = Marking (K1) at the bottom

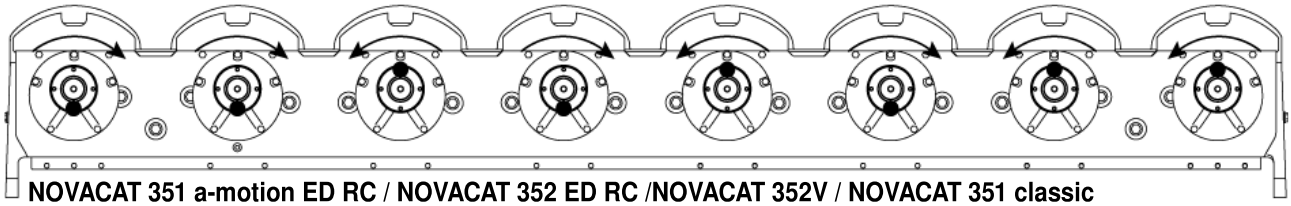




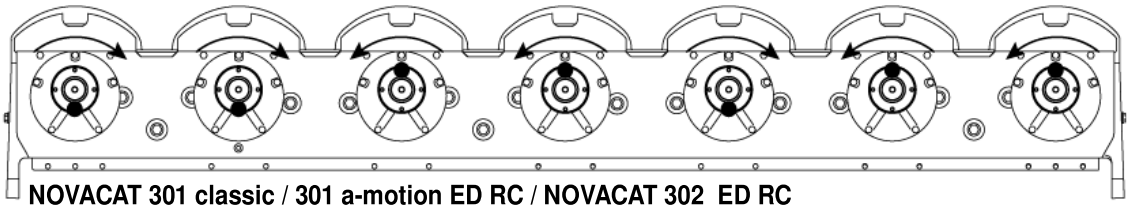
NOVACAT 442



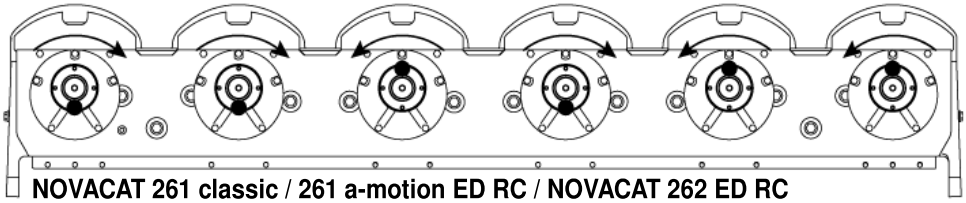
NOVACAT 402



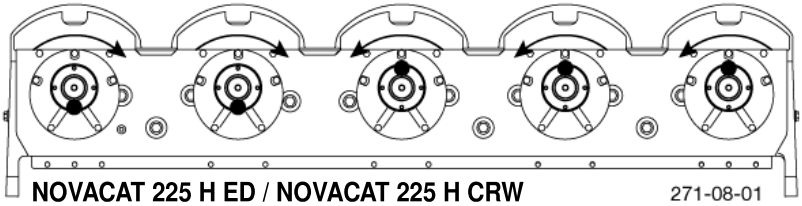
NOVACAT 351 a-motion ED RC / NOVACAT 352 ED RC /NOVACAT 352V / NOVACAT 351 classic



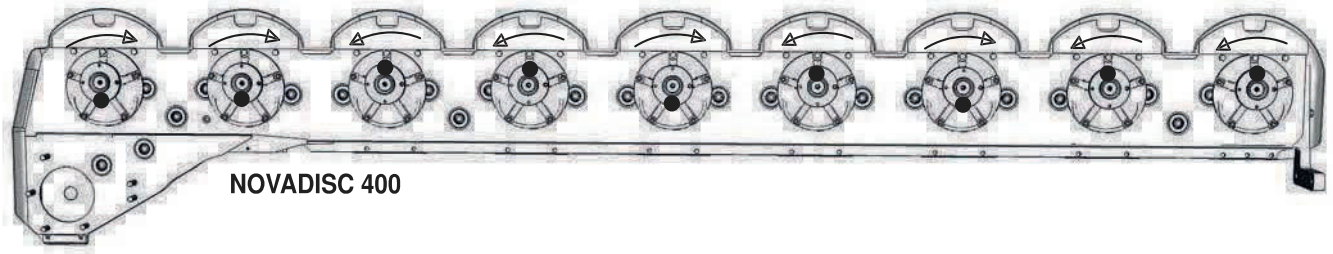
NOVACAT 301 classic / 301 a-motion ED RC / NOVACAT 302 ED RC



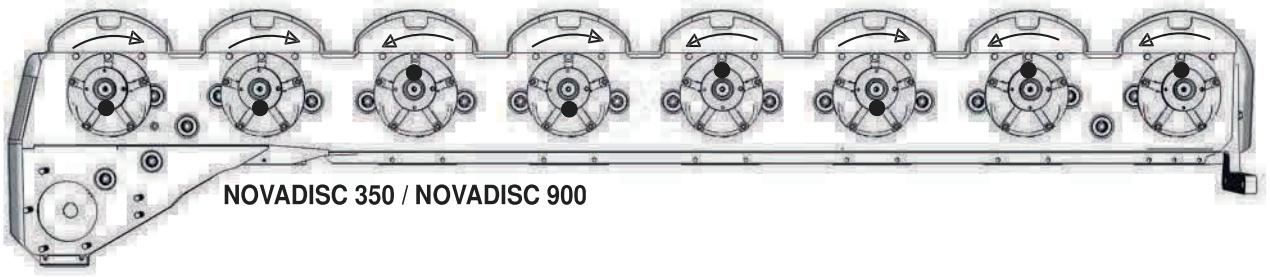
NOVACAT 261 classic / 261 a-motion ED RC / NOVACAT 262 ED RC



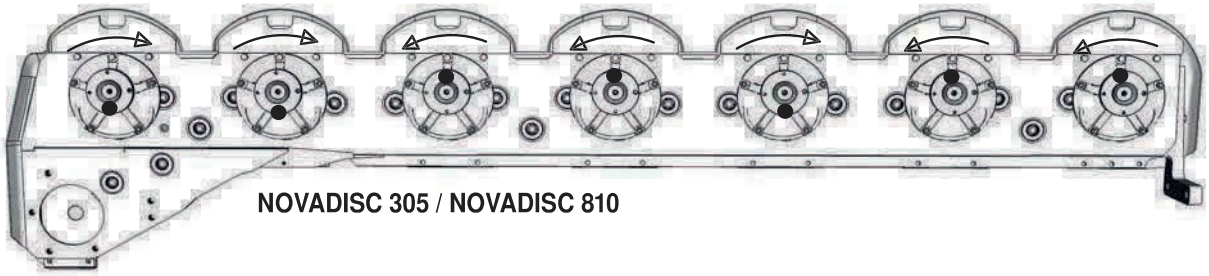
NOVACAT 225 H ED / NOVACAT 225 H CRW 271-08-01



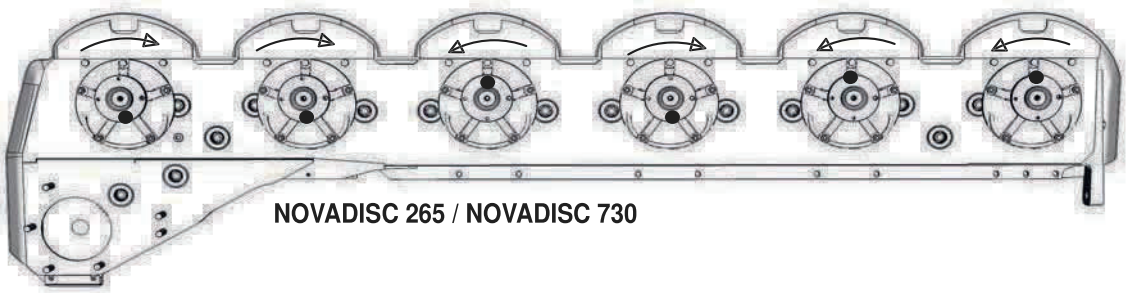
NOVADISC 400



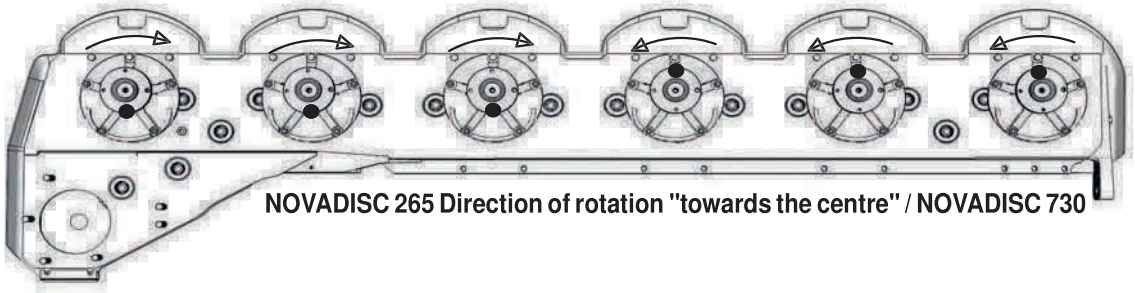
NOVADISC 350 / NOVADISC 900



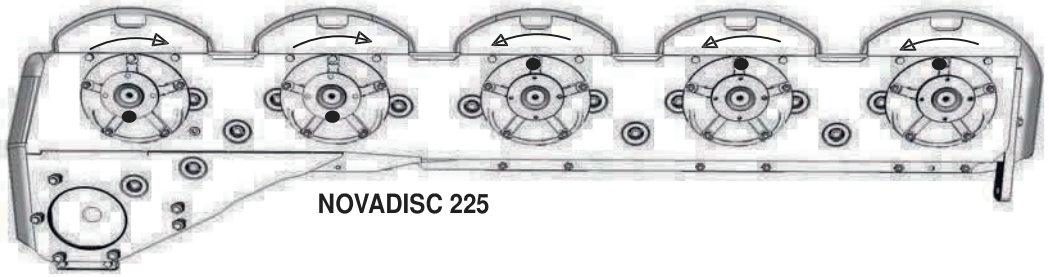
NOVADISC 305 / NOVADISC 810



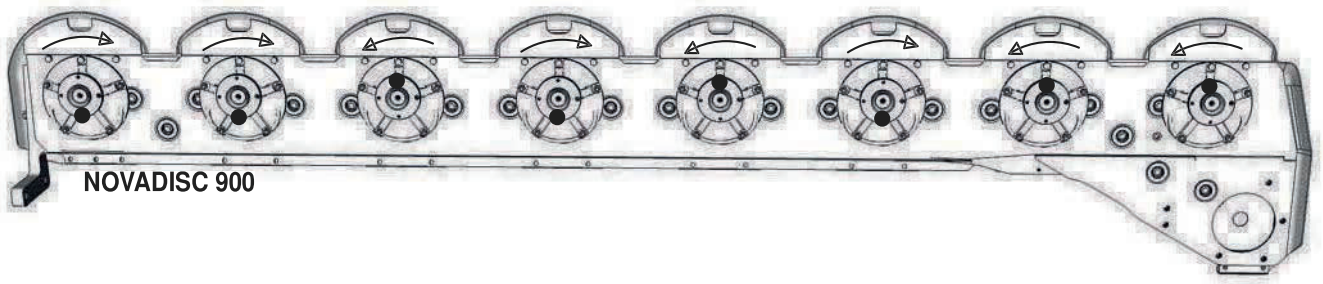
NOVADISC 265 / NOVADISC 730



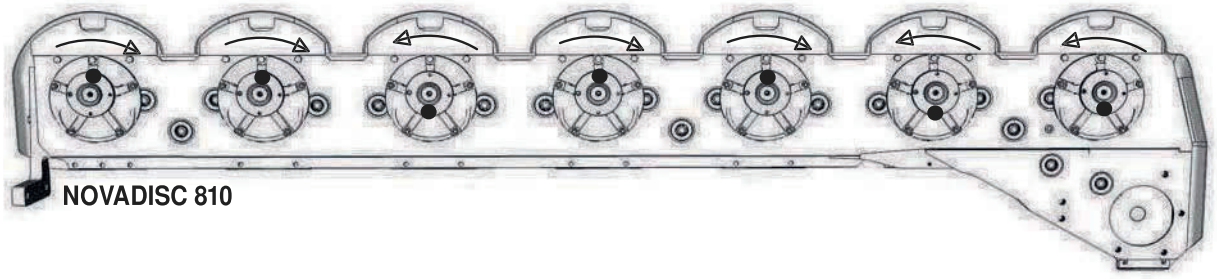
NOVADISC 265 Direction of rotation "towards the centre" / NOVADISC 730



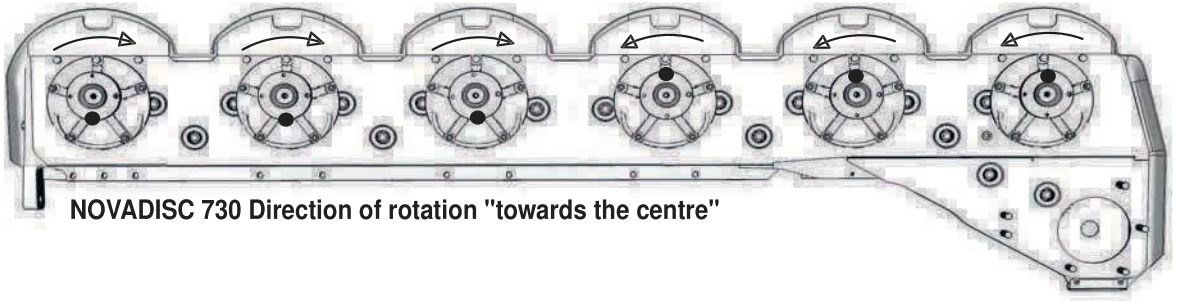
NOVADISC 225



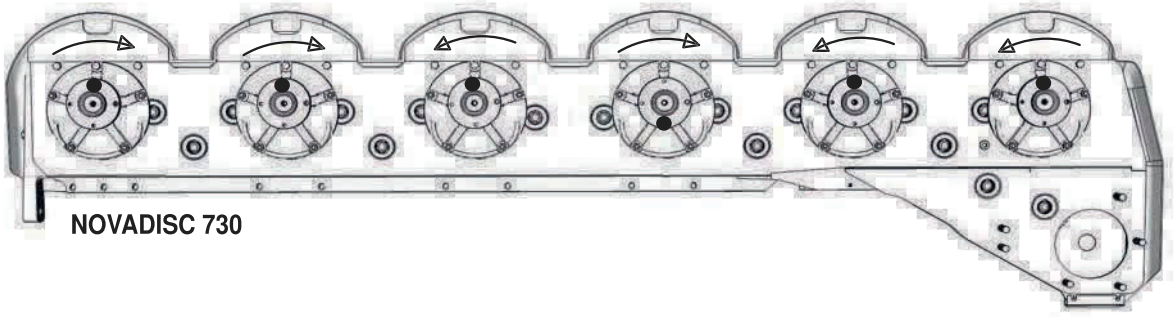
NOVADISC 900



NOVADISC 810



NOVADISC 730 Direction of rotation "towards the centre"



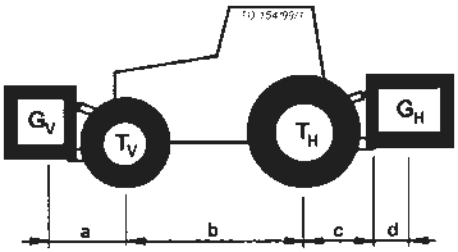
NOVADISC 730

Combination of tractor and mounted implement

The mounting of implements on the front or rear three point linkage shall not result in exceeding the maximum permissible weight, the permissible axle loads and the tyre load carrying capacities ot the tractor. The front axle of the tractor must always to be loaded with at least 20 % of the unladen weight of the tractor.

Make sure before buying an implement that these conditions are fulfilled by carrying out the following calculations or by weighing the tractor/implement combination.

Determination of the total weight, the axle loads, the tyre load carrying capacity and the necessary minimum ballasting



For the calculation you need the following data:

T_L [kg]	unladen weight of tractor	1	**a** [m]	distance from centre of gravity for combined front mounted implement/front ballast to front axle centre	2 3
T_V [kg]	front axle load of unladen tractor	1			
T_H [kg]	rear axle load of unladen tractor	1	**b** [m]	Tractor wheelbase	1 3
G_H [kg]	combined weight of rear mounted implement/rear ballast	2	**c** [m]	distance from rear axle centre to centre of lower link balls	1 3
G_V [kg]	combined weight of front mounted implement/front ballast	2	**d** [m]	distance from centre of lower link balls to centre of gravity for combined rear mounted implement/rear ballast	2

1 see instruction handbook of the tractor
2 see price list and/or instruction handbook of the implement
3 to be measured

Consideration of rear mounted implement and front/rear combinations

1. CALCULATION OF MINIMUM BALLASTING AT THE FRONT $G_{V\,min}$

Record the calculated minimum ballasting which is needed at the front of the tractor into the table.

$$G_{V\ min} = \frac{G_H \bullet (c+d) - T_V \bullet b + 0{,}2 \bullet T_L \bullet b}{a+b}$$

Front mounted implement

2. CALCULATION OF THE MINIMUM $G_{H\,min}$

$$G_{H\ min} = \frac{G_V \bullet a - T_H \bullet b + 0{,}45 \bullet T_L \bullet b}{b+c+d}$$

Record the calculated minimum ballasting which is needed at the rear of the tractor into the table.

3. CALCULATION OF THE REAL FRONT AXLE LOAD $T_{V\ tat}$

(If with the front mounted implement (G_V) the required minimum front ballasting ($G_{V\ min}$) cannot be reached, the weight of the front mounted implement has to be increased to the weight of the minimum ballasting at the front!)

$$T_{V\ tat} = \frac{G_V \bullet (a+b) + T_V \bullet b - G_H \bullet (c+d)}{b}$$

Record the calculated real front axle load and the permissible front axle load of the tractor into the table.

4. CALCULATION OF THE REAL TOTAL WEIGHT G_{tat}

(If with the rear mounted implement (G_H) the required minimum rear ballasting ($G_{H\ min}$) cannot be reached, the weight of the rear mounted implements has to be increased to at least the weight of the minimum ballasting at the rear!)

$$G_{tat} = G_V + T_L + G_H$$

Record the calculated real and the permissible total weight given in the instruction handbook for the tractor into the table.

5. CALCULATION OF THE REAL REAR AXLE LOAD $T_{H\ tat}$

Record the calculated real and the permissible rear axle load given in the instruction handbook for the tractor into the table.

$$T_{H\ tat} = G_{tat} - T_{V\ tat}$$

6. TYRE LOAD CARRYING CAPACITY

Record double the value (two tyres) of the permissible load carrying capacity into the table (see for instance documentation provided by the tyre manufacturer).

Table

	Real value according to calculation		Permissible value according to instruction handbook		**Double** permissible tyre load carrying capacity (two tyres)
Minimum ballasting front/rear	/ kg		---		---
Total weight	kg	≤	kg		---
Front axle load	kg	≤	kg	≤	kg
Rear axle load	kg	≤	kg	≤	kg

The minimum ballasting has to be attached to the tractor either in form of a mounted implement or ballasting weight!

The calculated values must be less or equal (<) the permissible values!

The CE norm is not valid in the United States of America and Canada.

EC Conformity Declaration

Original Conformity Declaration

Name and address of the manufacturer:

PÖTTINGER Landtechnik GmbH
Industriegelände 1
AT - 4710 Grieskirchen

Machine (interchangeable equipment):

mower	Novacat A10 CF	A10 ED	A10 RC
Type	3850	3850	3850
Serial no.			

The manufacturer declares that the machines adhere to all relevant provisions in the following EU directive:

machinery 2006/42/EG

In addition to this, the manufacturer also declares adherence to the other following EU directives and/or relevant provisions

Source of applied, harmonised norms:

EN ISO 12100 EN ISO 4254-1 EN ISO 4254-12

Source of applied miscellaneous technical norms and / or specifications:

Person responsible for documentation:
Andreas Gadermayr
Industriegelände 1
A-4710 Grieskirchen

Markus Baldinger,
CTO R&D

Jörg Lechner,
CTO Production

Grieskirchen, 01.08.2016

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