HE-VA

Operation Instructions
Spareparts List
Declaration of Conformity

Warning: Before using the machine it's important to read the operating instructions

Kulti-Seeder

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DS/EN 45 014

Declaration of Conformity

HE-VA ApS
N. A. Christensensvej 34,
DK-7900 Nykøbing Mors
Denmark

hereby declares that the following product:

Kulti-Seeder

3,0 / 4,0 m working width

Nr. : _____

as covered by this Declaration, conforms with
the stipulations of Directive
98/37/EC (on Machines) with later amendments

Villy Christiansen

Nykøbing Mors, 20. March 2007

Delivery check

Both after the distributor's and the customer's receipt of the machine, the Kulti-Seeder must be checked for any damages and defects.

Description of the machine

Field of application

The Kulti-Seeder is a lift-suspended seeder with 3m and 4m working widths. The Kulti-Seeder is available with either drilling tines or disc coulters. Furthermore, it comes with two sizes of seed hoppers. The Kulti-Seeder may be equipped with the HE-VA Multi-Seeder thus making it possible to combine various kinds of seed in connection with the seeding procedure.

The Kulti-Seeder is installed in the three-point suspension of the tractor, and the hydraulic coupling is connected in the tractor PTO. In order to obtain maximum utilisation of the tractive effort of the tractor, it is important to check the tyres, as under certain conditions twin tyres are recommended. Under normal conditions it is advantageous to mount a front tool for packing/preparation of the soil in front of the seeder. Tekniske specifikationer

	3,0 m	3,0 m	4,0 m	4,0 m
Model				
Working width	3,0 m	3,0 m	4,0 m	4,0 m
Power requirement	80+	80+	100+	100+
Hopper content	700 L	1000 L	1000 L	1400 L
Requirem. for double-acting oil PTO	1	1	1	1
Drilling tines / Disc coulters				
Square tube roller	1175 / 1375	1250 / 1450	1585 / 1865	1685 / 1965
	2650 / 2950	2950 / 3250	3550 / 3950	3950 / 4350
Spiral roller	1200 / 1400	1275 / 1475	1620 / 1900	1720 / 2000
	2700 / 3000	3000 / 3300	3600 / 4000	4000 / 4400
Packer roller	1425 / 1625	1500 / 1700	1870 / 2150	1970 / 2250
	2900 / 3200	3200 / 3500	3900 / 4400	4300 / 4800
Cam roller	1600 / 1800	1675 / 1875	2100 / 2380	2200 / 2480
	3200 / 3550	3500 / 3850	4350 / 4750	4750 / 5150
CTX rubber roller	1353 / 1553	1428 / 1628	1774 / 2054	1874 / 2154
	2800 / 3100	3100 / 3400	3750 / 4200	4150 / 4600

T = Empty weight L = Lifting needs at full seed hopper - Numbers are in kg

The Kulti-Seeder complies with DS/ISO 11001-1, three-point suspension.

Claims

Claims repairs must be carried out at the distributor's workshop during regular working hours. In the cases where it is not possible to carry out the repairs during regular working hours, overtime payment is required. Machines sent in for claims repairs must be in a clean state.

Safety for the Kulti-Seeder

The machine must not be started up if exposed persons* are within the danger zone**.

If exposed persons are within a danger zone (e.g. in connection with adjustment, maintenance or coupling and decoupling, the following conditions must be complied with:

1. The machine must be lowered to solid ground.
2. The hydraulics must be relieved.
3. The tractor must be stopped and the key removed from the ignition.
4. The driver must check that there are no exposed persons within the danger zone.

* Exposed person: Any person, who is – also partly - in the danger zone.
** Danger zone: On and under the machine within a distance of 4 m from the machine.

Most accidents, which occur in connection with the working, transport and maintenance of the machine, are caused by Negligence of the most elementary safety rules.
Therefore, it is vital that all persons working with the machine observe the safety instructions as well as other Instructions for the machine.
The machine may only be operated, maintained and repaired by persons who are familiar with this work and well avare of the possible elements of danger.

DANGER!! **Rotating parts and loose clothes are a dangerous combination.**

IMPORTANT!! **In connection with sudden falls, it is deadly dangerous to stay under the rack/frame of the machine when the machine is in operation, mounted on a tractor.**

Safety and Instructions as regards the Hydraulic System

1. The maximum permissible working pressure amounts to 225 bar.

2. It is recommended to mark the coupling parts of hydraulic connections between tractor and tool in order to avoid incorrect operation!

3. In connection with check for leaks, suitable protection must be used due to the danger (eye protection, gloves, etc.)
   Hydraulic oil under high pressure may penetrate the skin and cause dangerous injuries.
   In case of injuries, you must consult your doctor immediately.
   DANGER OF INFECTION!

4. Before working with the hydraulic system, you must lower the machine to solid ground. The pressure must be relieved, the motor stopped and the ignition key removed.

5. The hydraulic hoses must be inspected on a regular basis, every six months as a minimum, for cracks, wear, etc. Defective hoses must be replaced immediately.

The life of the hydraulic hoses is maximum five years.

New hydraulic hoses must comply with the manufacturer's requirements.

INSTRUCTIONS CONCERNING TRANSPORT ON PUBLIC ROADS

Before driving on public roads, you must check that the coupling of the machine with the tractor is in accordance with the valid road traffic acts (permissible overall weight, permissible axle load, transport width, lights, and warning signs).

FRONT-AXLE LOAD

After the mounting of the machine and at maximum load, the steering qualities of the tractor must be secured. Check that the front-axle is sufficiently loaded. The front-axle load must as a minimum be 20% of the weight of the tractor. The permissible axle load and permissible overall weight for the tractor must always be complied with.

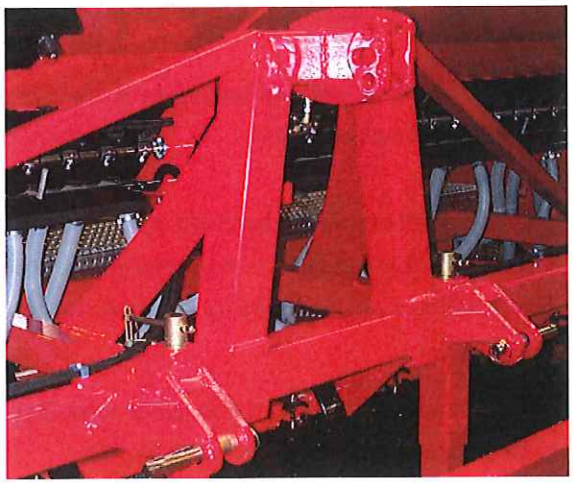
NB ! The driving, steering and braking qualities are influenced by the mounted machine combination.

Mounting the Kulti-Seeder on tractor

Figur 1

Connecting the tractor

The machine is mounted on the lift arms of the tractor using the coupling spikes. The top link of the tractor is mounted on the upper section of the three-point frame using the upper coupling spike. The spike is compatible with both Cat. II and Cat. III. The top link is adjusted to allow the machine to operate in a horizontal position.

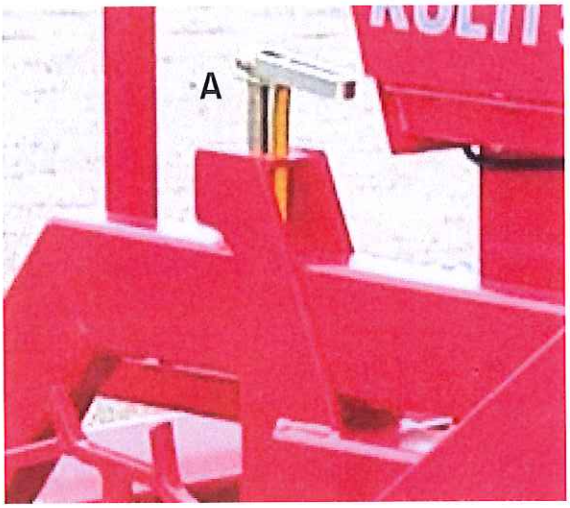


The hydraulic hoses from the markers are coupled to the double-acting oil outlet of the tractor.

Figur 2

Start up

A correct adjustment of the seeder is crucial for a perfect seeding result. Take care of the working depth - it is easily exaggerated!

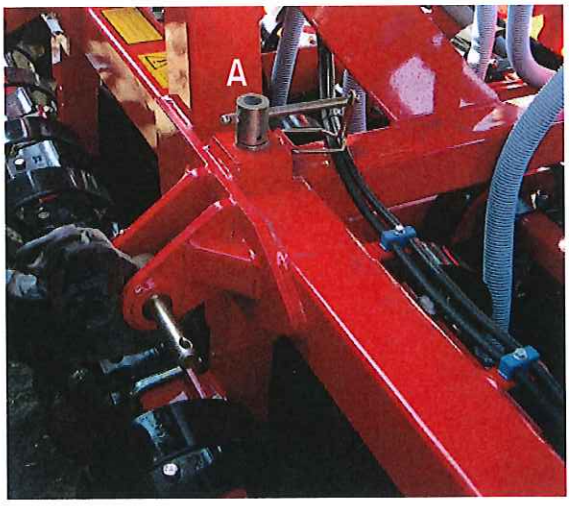


The seeding result is dependent on:

- the condition of the field
- type of seed
- adjustment of the seeder
- working speed
- weather - climate

Figur 3

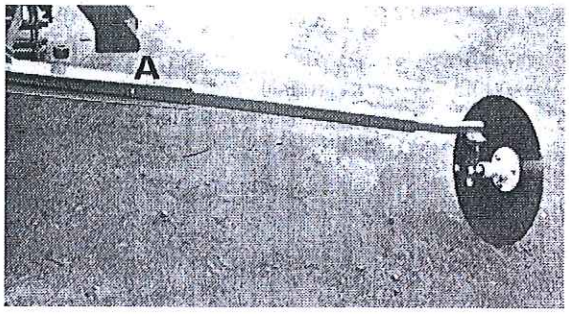
The seeder is adjusted to the desired dosage (compare p. 13). The easiest way to adjust the harrow section is by a test drive with the seed wheel in the parking device.



Harrow depth is adjusted by turning the spindles on each side. Figure 2 A.

Height adjustment of the Spring-Board is operated via the spindles. Figure 3 A.

Figur 1



Marker
The seeder is equipped with hydraulic markers.

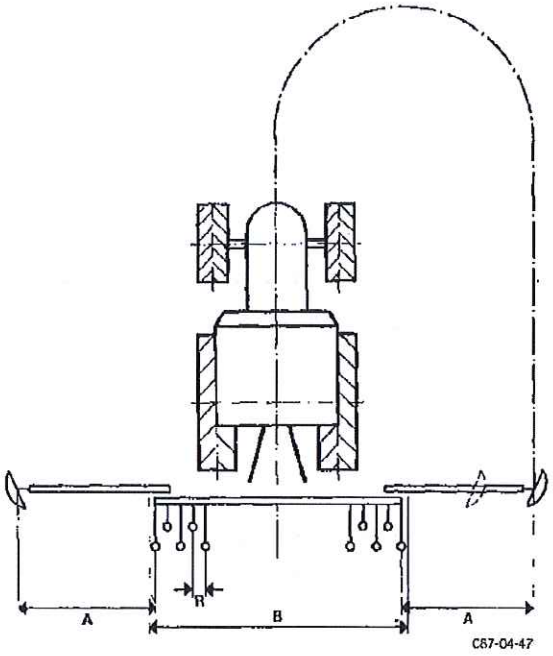
A double-acting oil outlet on the tractor is required to activate the automatic two-way valve.

The marker arms are equipped with a shear bolt with overload release. It is recommended to bring along extra shear bolt size M8x30 quality 8.8 during seeding. Compare figure 1 A.

Adjusting the marker
Marking the centre measured from outer share (figure 2), is calculated according to the following formula:

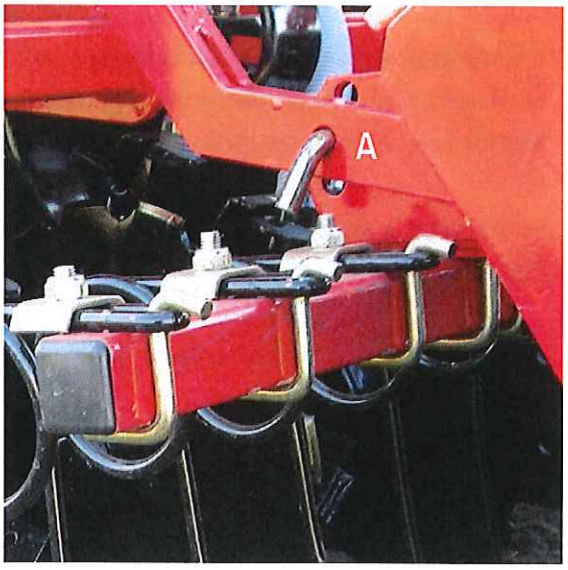
$$\frac{\text{Working width + row spacing}}{2} = \mathbf{A}$$

Figur 2



Figur 3

The long finger after-harrow between the roller and the seed coulter can be adjusted into 3 positions. A horizontal position allows the harrow to better dispose of plant residue etc. Figure 3A.



Maintenance

Pre-season checks

1. Clean dosing unit and all sensors
2. Grease lubricating nipples and ball bearings
3. Oil seed wheel chain, tighten of necessary
4. Ensure that the long finger after-harrow is in correct position
5. Ensure that markers are adjusted to correct working length
6. Ensure that support rollers are ready to start
7. Ensure that all bolts and nuts are tightened

Daily checks

1. Ensure that there are no blocks in seed coulters
2. Ensure that discs turn easily

Weekly checks

1. Ensure that all bolts and nuts are tightened
2. Grease marker discs
3. Grease rollers every 25 hours
4. Grease disc coulters:
   3m models every 150 ha.
   4m models every 200 ha.
   4m. hver 200ha.

Post-season checks

1. Empty seed hopper completely
2. Clean the machine with a compressor, then wash thoroughly with water.
   Electronics must never be cleaned with compressed air
3. Grease generously all lubricating nipples (disc coulters) and ball bearings in order to drive out the water
4. Spray oil on cogwheels and chains to prevent corrosion
5. Ensure that no parts are in hazardous or damaged condition. If so, repairs must be carried out
6. The Multitronic box must be stored in a dry place
7. Spray oil on Spring-Board adjusting bolts to prevent corrosion
8. Adjust harrow working depth spindles and grease them

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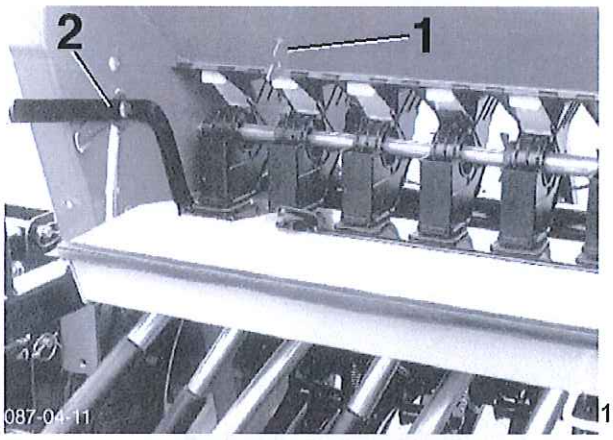
Hopper: Filling/Emptying

The seed drill should only be filled after it has been mounted and lowered.

The seed level is shown on the indicator (front hopper wall).

Observe the swimmer when filling the seed drill (**10/1**).

Do not run the hopper „on empty"; when seed level is low, ensure even distribution.



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Emptying

Lower the combination.

Lift the emptying trays so that they unlock (at **11/1**), and place horizontally.

Unlock the seed guide rail on both sides (**11/2**) - and lower.

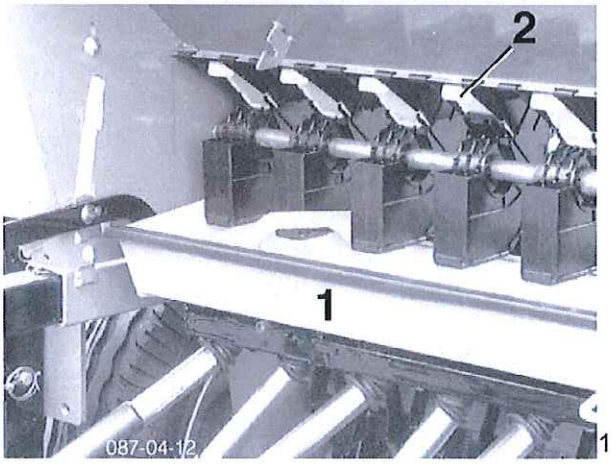
Place the trays on the seed guide rail (**12/1**).

Open all shutters (**12/2**).

Open the gates as far as possible – move lever to full extent (**13/1**).

Take note!

- **Empty only small residue amounts over the drop bottom. If drop bottom is full, danger exists of readjustment when closing.**
- **Empty large residue amounts from seed tank with suitable container (bucket).**



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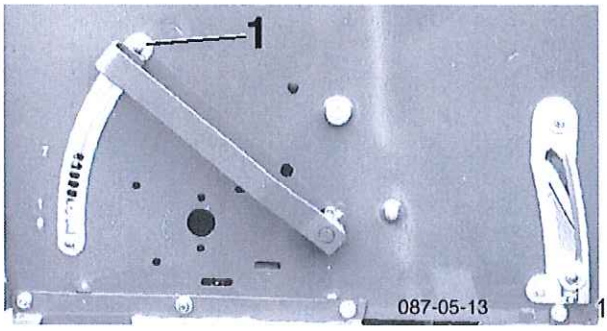
Cleaning the Hopper:

- Blow out residue with compressed air,
- Wear protective clothing against toxic seed dressing dust!
- Leave the gates wide open,

  so mice, for example, do not smell the seed and attempt to chew through the hopper on the parked drill.



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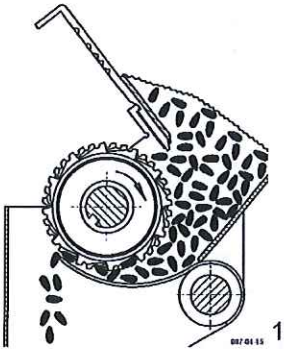
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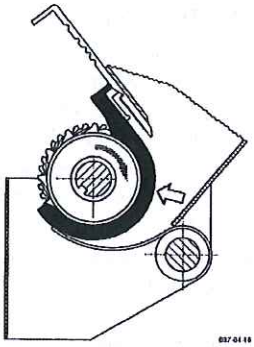
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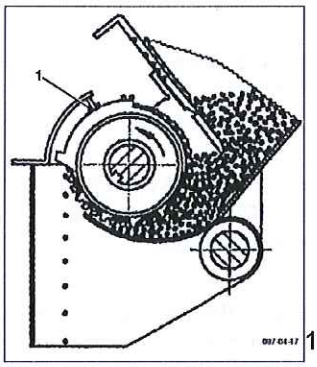

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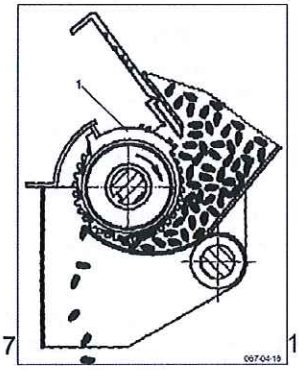

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Multidrill Sowing System

In order to provide the best possible performance for each size of drillable seed type, seed rate and spacing requirements, the Multidrill also offers four types of batching in addition to the **continuously adjustable sowing shaft speed:**

1. Undersowing

- for „normal seed types" such as grain, etc. **(Fig. 15).**

2. Undersowing with reducer

- for small quantities of fine seed, e.g. rape seed, phacelia, mustard (max. seed size: 3.3 mm) **(Fig. 16,** with reducer - available in yellow plastic).

3. Overseeding *

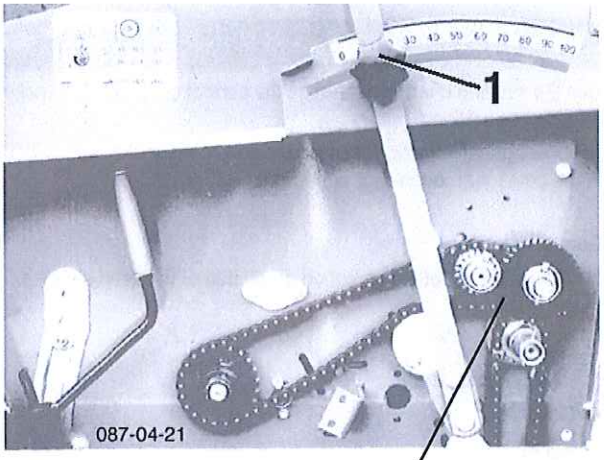
- single seed dosage for fine seed, e.g. rape seed **(Fig. 17,** with cover **17/1).**

4. Reduced undersowing *

- for „normal seed types" at a low seed rate, e.g. hybrid trye **(Fig. 18,** with cover **18/1).**

The undersowing variations also offer the option of **halving the sowing shaft speed** by using the reduction gears.

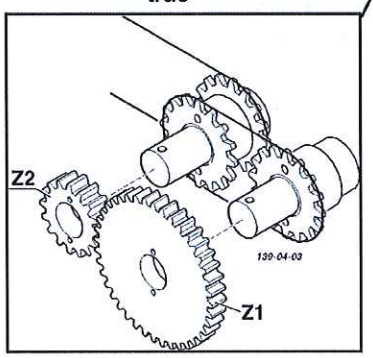
* Additional „overseeding" equipment only: changer of sowing seed shaft direction and covers available.



Attention!

Positions (Z2, Z1) of both gearwheels must not be interchanged!

true



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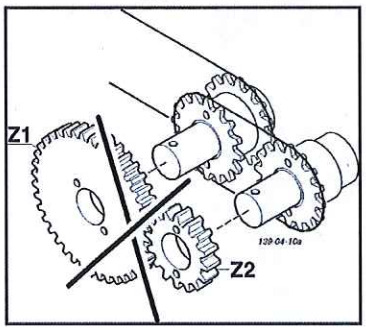

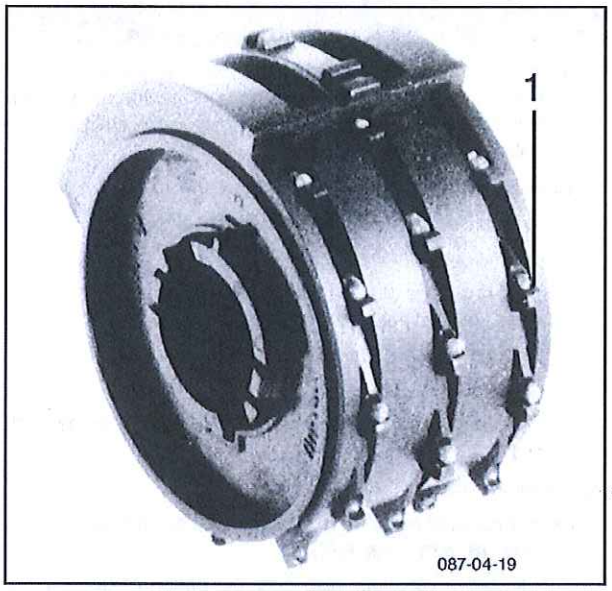

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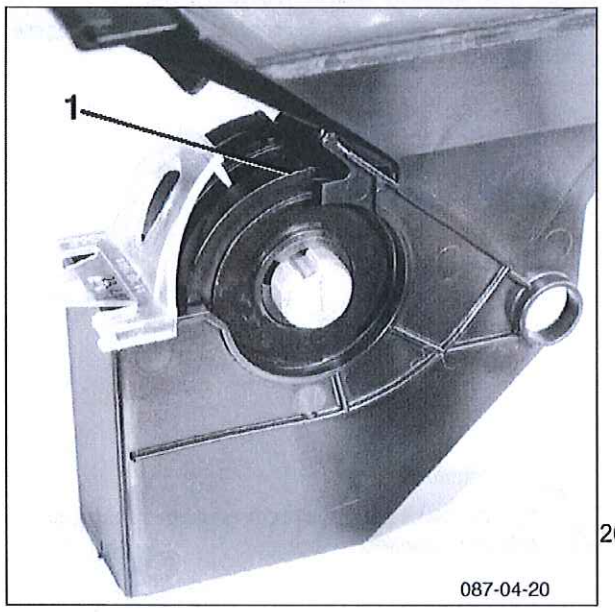

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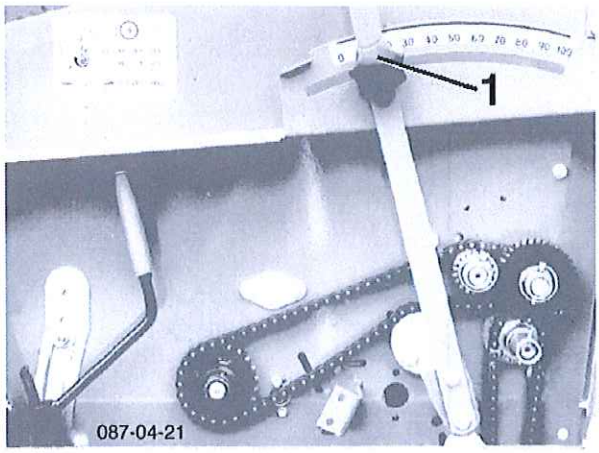

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The Advantages of Overseeding (*

By reversing the direction of rotation of the seed shaft, each sowing roller cam – with its specially shaped cups (**19/1**) – picks up a seed, transports it through a cover (**20/1**), and then releases it for „free fall" into the seed drill coulters.

Individual seed dosage enhances growing space distribution and plant development and leads to greater yields while also saving on seed stock.

The Vitasem overseed system is only suited for round, regular seed of approx. **1.8 - 2.8 mm Ø** – especially for rape seed and kale-like seed:

... the seed must be free of any loose dressing rub-off and its surface may not be sticky (brush off any seed dressing residue in the cups).

Seed containing additives such as additional dressing and slug pellets is **not** suitable for overseeding.

... to achieve even seed distribution, we recommend to never drive faster than **6 km/hr.**

Strong vibrations, caused by stones and large clods of earth for example, will affect the quality of distribution.

... the angle of inclination should not exceed **15%.**

For conditions other than those described above, we recommend „Undersowing with reducer". This also applies for hybrid rape types with irregular seed sizes.

Setting Seed Rates

Use the seeding chart to determine the correct seed rate and make appropriate settings.

The sowing shaft direction changer and covers incl. locks are included in the additional „overseed" accessory.

Control devices:

a) Transmission setting (direction of rotation of the seed shaft)
b) Shutters
c) Gate
d) Fine seed reducer
e) Covers
f) Agitator

Lever position on gearing (gear position)

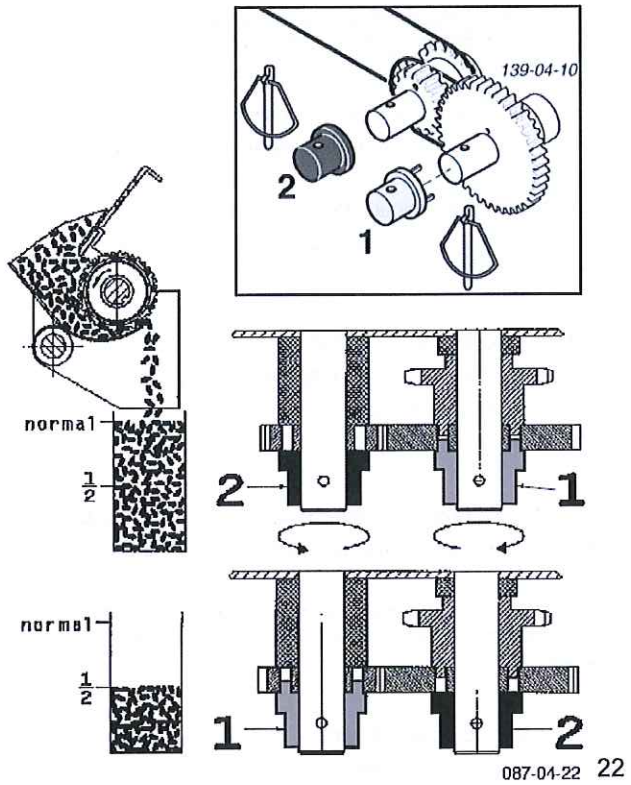
Select sowing shaft r.p.m. by adjusting lever

Adjusting range: 0 – 100 continuous

0 = Sowing shaft standstill

Value reading = on front edge of adjusting lever (towards 100)

Set adjusting lever with star grip (21/1)



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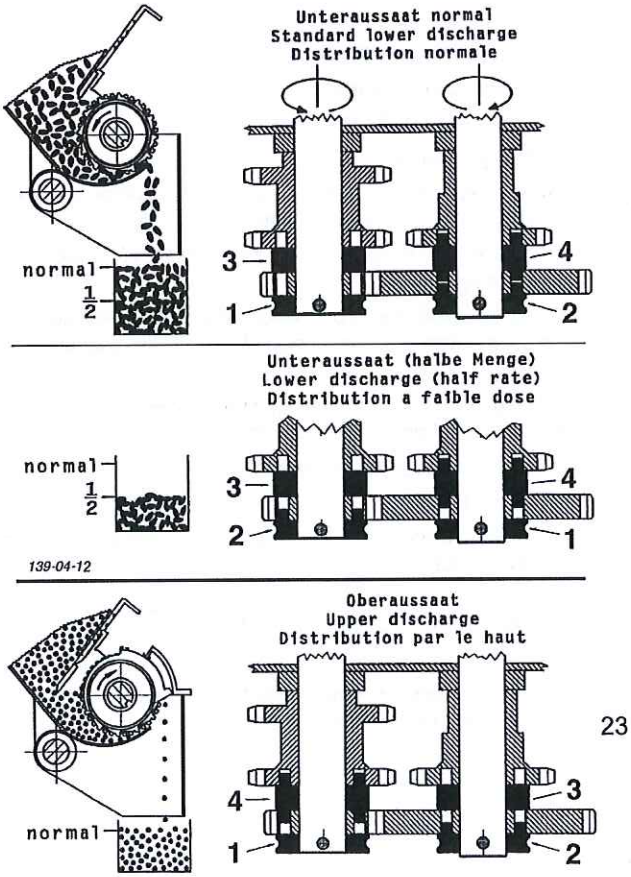

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Halving sowing shaft r.p.m.

Using the reduction gears the sowing shaft speed may be halved for „undersowing".

Open the guard on the right-hand

Standard fitting:

- Position carrier (1) and sleeve (2) on the appropriate shaft.
  carrier red: **(1)**
  sleeve black: **(2)**

Usual rpm: carrier to the right **(1)**, sleeve to the left **(2)**

ca. 1/2 rpm: sleeve to the right **(2)**, carrier to the left **(1)**

It may happen with a very low discharge rate that the gearing position value will be below 10 (on the scale)

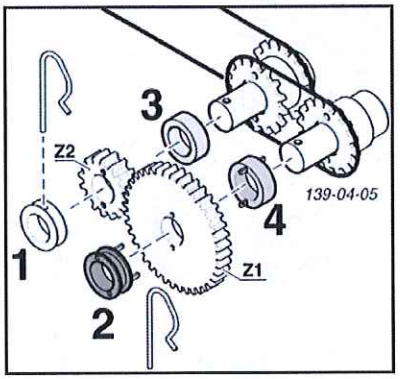
So when gearing down, approx. halve the sowing shaft r.p.m. and approx. double the gearing position value.

- sleeve to the right **(2)**, carrier to the left **(1)**

Then test run once again (calibrate)

Changing the Direction of Rotation of the Seed Shaft

Mount the carrier **(3, 4)** and spacer **(5, 6)** as required:



Undersowing (Normal rpm)

- carrier to the right: black, blue **(2, 4)**
- spacer discs to the left: red, green **(1, 3)**

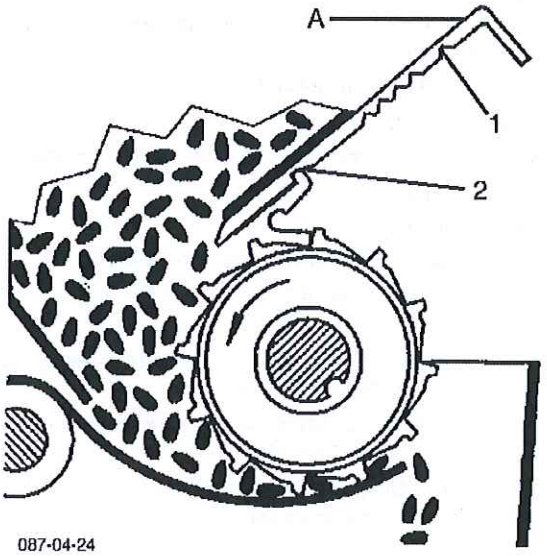
Undersowing (1/2 rpm)

- carrier to the left: black **(2)**
- carrier to the right: blue **(4)**
- spacer discs to the right: red **(1)**
- spacer discs to the left: green **(3)**

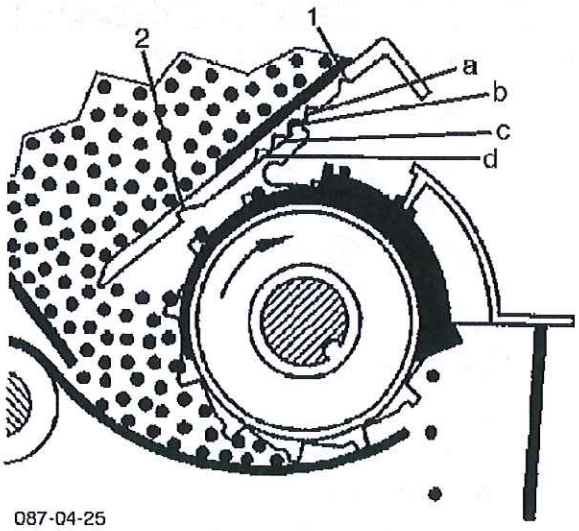
Overseeding (*

- carrier to the right: black **(2)**
- carrier to the left: blue **(4)**
- spacer discs to the right: green **(3)**
- spacer discs to the left: red **(1)**

Close the cover after making the settings



087-04-24 **24**



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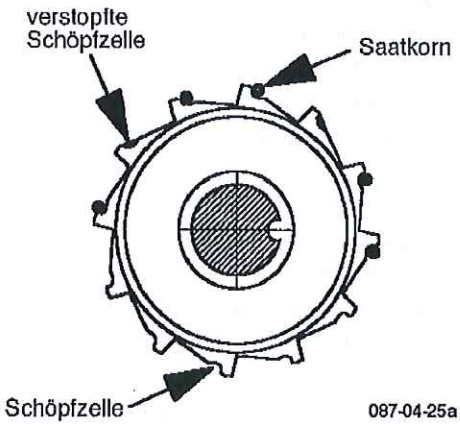


087-04-25a **25a**

Shutters

Shutters (24/A) have 2 functions:

- Closing / Opening the hopper outlet
- Setting the seed stock height in the sowing roller for overseeding.

Shutters are not designed to regulate the seed rate!

An incorrect shutter setting can result in variations in seed rates when sowing on a slope.

Shutter Settings for Undersowing:

The shutter must always be fully opened **(24/2)**.

Shutter closed = position 1 **(24/1)**

Do not use intermediary settings.

Shutter Settings for Overseeding: (Additional accessory.)

Here the shutters on the sowing roller are used to set the seed level.

This shutter setting depends on how well the seed stock flows. This may be determined by a seed test. (See also page 2 of the Seed Chart)

Seed Test for Overseeding

Preparations for seed test:

- Close shutter
- Fill hopper with seed (rape seed)
- Put emptying trays in place
- Secure shutter in position **a**
- Gate remains in position 0
- Turn the sowing shaft for at least 10 rotations

Seed test procedure:

Catch the seed from one or more spouts while continuing to turn the hand crank until the sowing shaft has made exactly one rotation.

The shutter setting is correct **(Fig. 25)** when **36 +/- 4** seeds are released during one rotation of the sowing shaft.

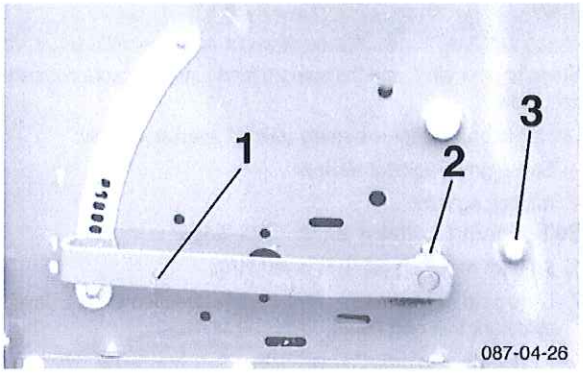
The seed is not suitable for overseeding if more than **40** seeds are released per rotation of the sowing shaft with the shutter in the position **a**.

If fewer than **32** seeds are counted per rotation, secure the shutters in the next highest position (first „**b**", then „**c**" or „**d**"). **(Fig. 25)**

The seed test must be repeated each time.

- **Important Note:**
- After each change of shutter position, turn the sowing shaft for at least 10 rotations!
- The seed test should also be performed during operation to ensure proper overseeding.

Clogged cups may sometimes cause a decrease in seed rate. Clean cups with a brush!



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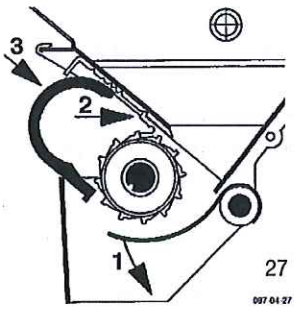
Gate

Setting-locks 0 - 7 for different seed sizes - described in Seed Chart - lever **(26/1)**.

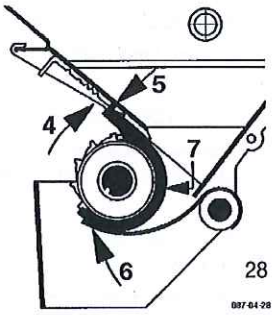
If calibration for large amounts of seed causes stalling or seed breakage, set one lock higher than stated in the Seed Chart.

(For grain, fine seed with reducer and overseeding rape use gate position **„0"**.

Adjust gates in lock **„1"** - see Maintenance.)



27



28

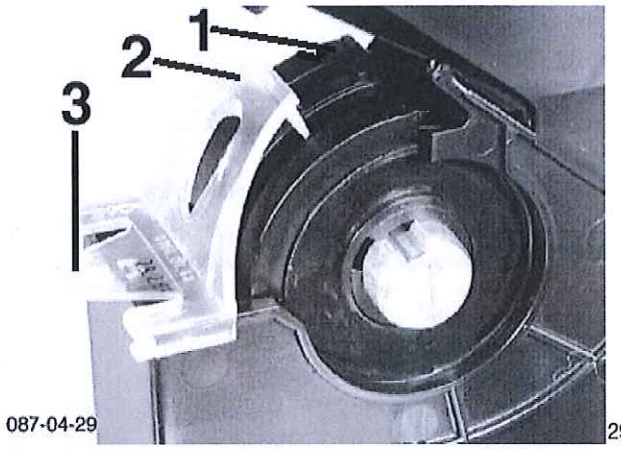
Fine Seed Reducer

Reducers are used for undersowing fine seed (e.g. rape seed) - for installation see **Fig. 27+28**:

1. Open gates (lever in lock **„3"**).
2. Shutter **„open"**.
3. Mount reducer on sowing roller **(Fig. 27** and
4. turn towards hopper **(Fig. 28)** until
5. the limiter of the reducer rests against the shutter.
6. Move gates to position **„0"**.
7. Reach into hopper and press the reducer against the sowing roller.

The reducers are installed correctly when they rest against the shutter **(28/5)**, the gate **(28/6)** and the sowing roller **(28/7)**.

Sow setting: Gate lock **„0"**
Shutter **„open"**



29

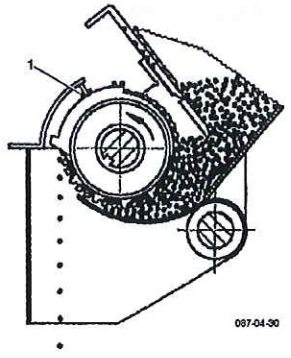
Covers (Additional equipment)

The covers incl. locks are only installed for „Overseeding" and „Undersowing with reducer" **(29/1+2)**.

(When mounting the locks, ensure that they audibly lock in. To remove, **(29/3)** lift slightly and pull off backwards.)

Secure the covers in the correct position with the locks:

Overseeding	- middle groove **(30/1)**
Undersowing with reducer	- back limiter **(31/1)**



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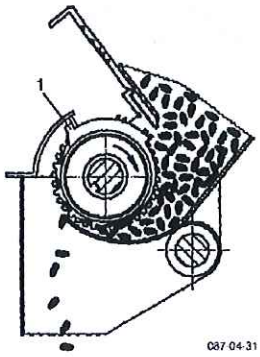

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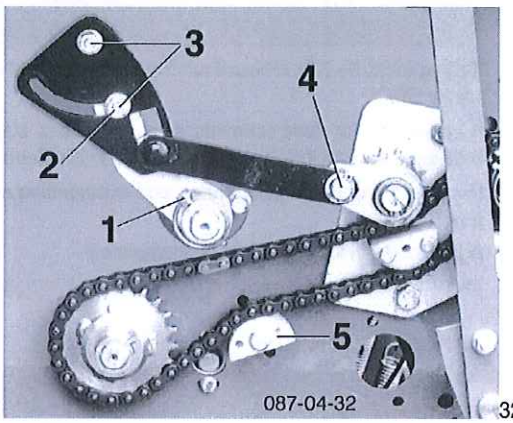

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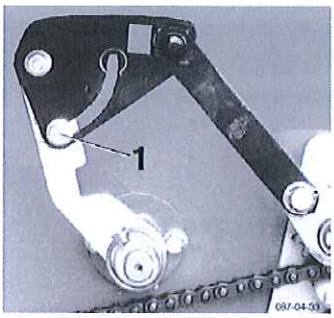

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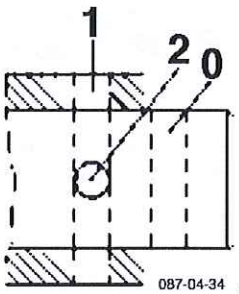


34

Agitator

Steep hopper walls and the smooth feed funnels ensure consistent seed flow.

Use agitator shaft for extremely „sticky" seed stock only:

- Self-aligning agitator shaft or
- rotating agitator.

Self-aligning Agitator Shaft - 3 settings

1. Agitator off - Plug **(32/1)** in bore **(34/0)**,
2. Long path - Plug in bore **(34/1** = same direction as „0"), lever in slit / right to limiter **(32/2)**,

... for non-flowing grass/grass mixture.

3. Short path - Plug in bore **(34/2)**, lever in slit /left to limiter **(33/1)**,

... for large, clogging seed.

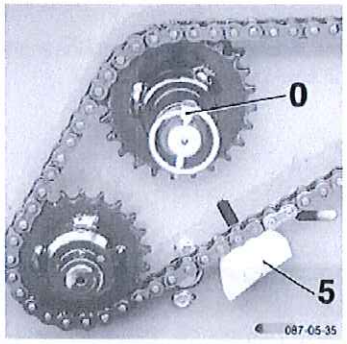
To change lever setting, loosen both screws **(32/3)** - and re-tighten.

In the „long path" position, ensure a distance of

6 mm between agitator hook and sow casing wall when fully extended **(32/4)** – secure the agitator elements in the appropriate positions on the shaft.

In the „short path" position the short agitator arms will point downwards.

In the „Agitator shaft off" position turn the agitator until the long agitator arms rest against the front wall of the hopper.



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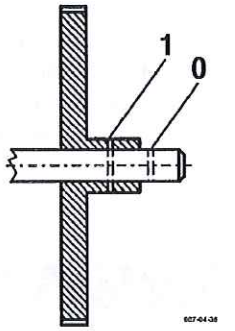

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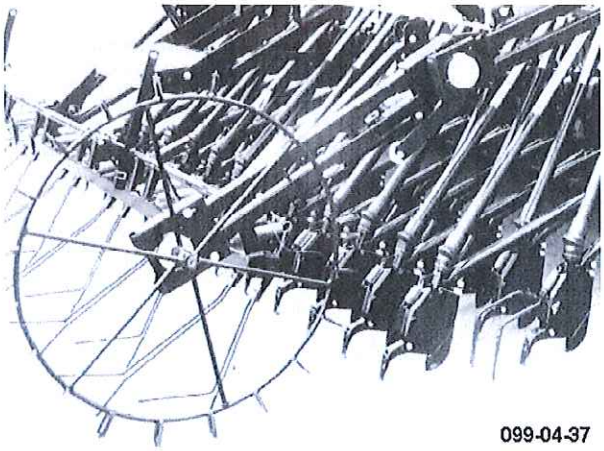
Rotating Agitator

Agitator off - Plug in bore **(36/0, 35/0)**

Agitator on - Plug in bore **(36/1)**

For rape seed, always switch agitator off.

Also switch „Rotating agitator" off for grass and bring agitator arms into upright position.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Spur Wheel

Sowing is driven by a spur wheel, which runs on the surface to be worked. The pressure with which it presses onto the ground may be set by adjusting the spring tension.

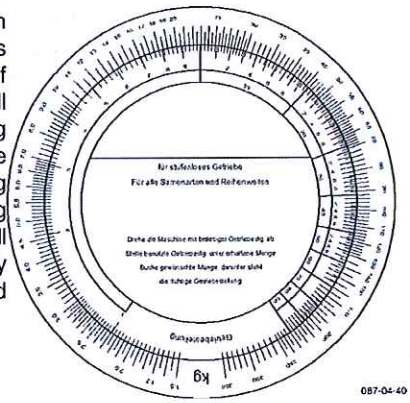
Adjusting seed quantity per hectare

The Calibration Process (Abdrehen)

* **Remark:** In German word usage it is normal to use the term „Abdrehen" (which basically means turning the dosing device by hand) instead of „Kalibrieren" (meaning to calibrate, electronically). In this manual we use the term „Kalibrieren" in order to avoid any misunderstandings with text translations.

In principle this also applies to terms such as "calibration test" and "calibration shutter".

So-called "calibration process" establishes what quantity (kg) of seed per hectare will be sown by adjusting the dosing device accordingly. Doing this enables the dosing device on the seed drill to be adjusted exactly to the desired seed quantity.



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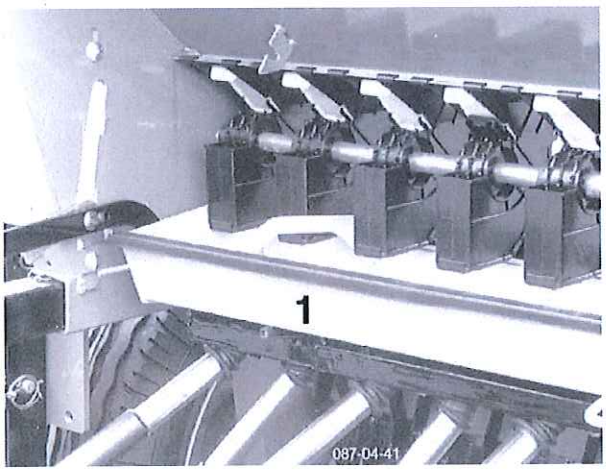

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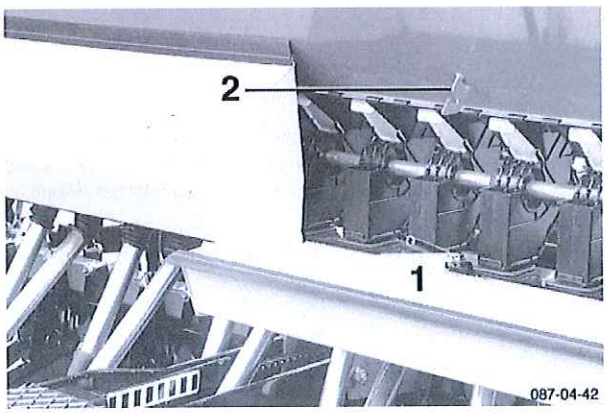

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Calibration process

As seed varies greatly in specific weight, size, shape and dressing the values given in the Seed Chart are only a guideline.

For this reason a calibration test must always be performed. In case of deviation, re-calibrate the device using a different transmission setting.

The new „correct" transmission setting can also be determined without the Seed Chart, using the values of a first calibration test (with random transmission setting). (Use the „sowing disc" supplied, **Fig. 40**).

Example: Set seed rate: 160 kg/ha

calibrated at 120 kg/ha with transmission setting 30

160 kg/ha = ?

120 kg/ha = 30

$$\frac{\text{Transmission setting (30) x Set seed rate (160)}}{\text{Calibration seed rate (120)}} = 40$$

(40 = new „correct" transmission setting)

The „Vitasem" may be calibrated during standstill – without lifting.

Ensure machine is horizontal. (top edge of hopper side)

Close unused shutters.

Tramlining control must not be switched on (all sowing rollers rotate).

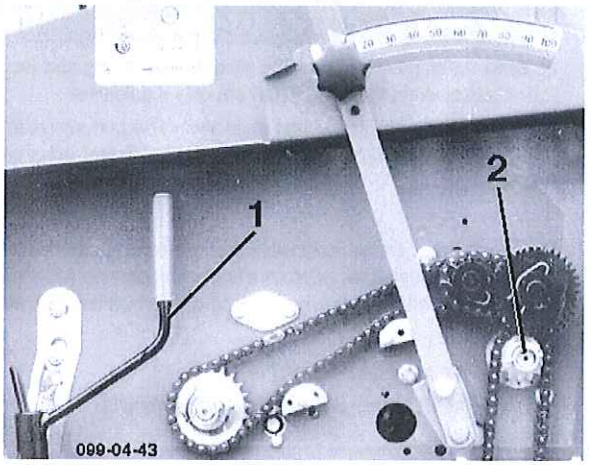
Batching
Transmission setting
Shutter
Gate
Reducers
Agitator shaft

} set according to seed chart!

Place emptying trays on seed guide rail **(41/1)** – see „Emptying" page 8.

Change back after calibration:

- return seed guide rail to upright position/lock in,
- hook in emptying trays **42/1** and lock at **42/2**.
- Fill in seed (approx. half of the normal amount).



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Seed volume trial

- First, rotate the agitator shaft approx. 10 times using the crank handle (43/1 with 43/2) so that all filled sowing wheel casings and possibly seed dressing agent deposits on the casing surfaces stabilize the flow rate.
- Empty the emptying trays into the seed box
- Now perform the calibration process test at the stated rotation; for 1/40 or 1/10 ha.

  For very small seed rates (e.g. rape seed) the calibration process test for 1/10 ha is preferable.

  Rotate evenly, approx. 1 rotation per sec.
- Multiplying the weighed amount of seed from the seed volume trial (weigh exactly) with the "area factor" gives the seed distribution volume kg/ha:

  x 40 (bei 1/40 ha; 250 m²)

  x 10 (bei 1/10 ha; 1000 m²)

Hand crank rotations for the seed volume trial

VITASEM 250 / 300 / 400				
Tyres	6,00-16	6,00-16	10,0/75-15,3	10,0/75-15,3
Area	1/40 ha	1/10 ha	1/40 ha	1/10 ha
working width				
2,5 m	100	402	~	~
3,0 m	84	335	79,5	317
4,0 m	~	~	59,5	238

VITASEM A 251 / A 301 / A 401		
Area	1/40 ha	1/10 ha
working width		
2,5 m	93	371
3,0 m	77,5	309
4,0 m	58	232

Note: The electronic tramlining control **Multitronic II** has a „Calibration process" feature. The sowing monitor calculates and counts the number of required hand crank rotations for the calibration area selected.

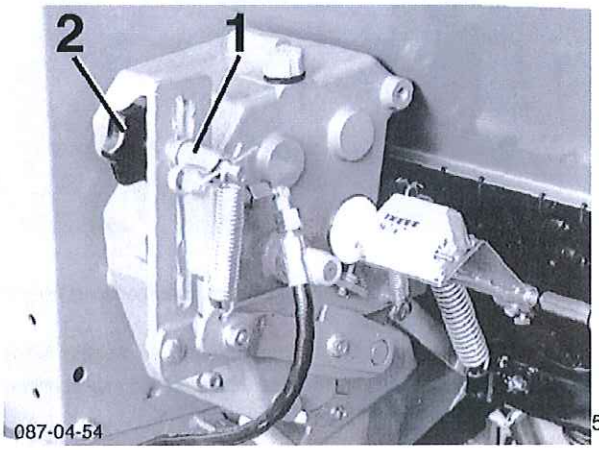
See Operating Instructions for „Multitronic II" in appendix A or „Power Control".

Hydraulic Seed Rate Adjustment

It maybe advisable to adjust to maximum seed rate in connection with the hydraulic coulter pressure adjustment.

To operate, switch the path valve to the appropriate setting (on the coupling).

Settings „Normal" and „Maximum Amount":



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„Normal Amount" – calibrate as usual; star handle (**21/1**, page 10) but set as limiter behind the lever (towards 0) – fasten tightly.

(Cylinder remains retracted.)

„Maximum Amount" – Fully extend the cylinder, select „Max. Amount" by moving cylinder – at (**54/1**) – and secure (**54/2**).

Re-calibrate.

Note: Do not clamp down the transmission select lever!

Highest transmission setting for „Normal Amount" = „100" minus required extra amount (cylinder path).

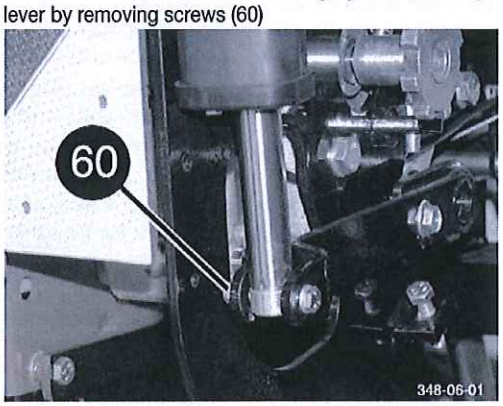
Electric sowing quantity adjustment [1)]

Emergency operation:

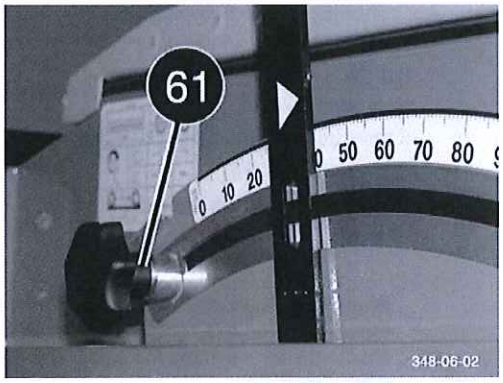
If the electronics fail the sowing quantity can be manually adjusted

Take the following steps:

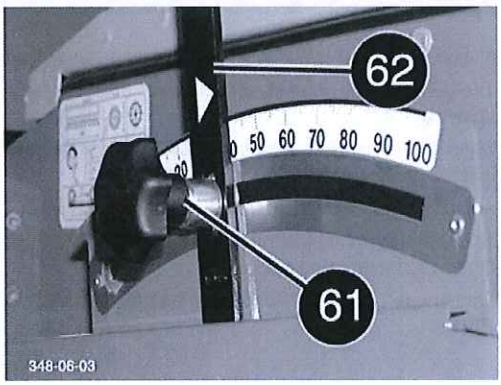
- Release connection between setting cylinder and adjusting lever by removing screws (60)



- Unscrew star grip (61)



- Determine work setting (using seed table or from Power Control Menu)
- Move lever (62) into calculated position and clamp tight using star grip (61)



Examples of Tramlines

At the edge of the field (row marker lowered on field-side) set the tramlining cycle to the correct starting number – e.g. for rhythms 3 and 4 set to **2**.

Sensors handle the automatic switching, e.g. when changing row markers.

For **symmetrical** tramlining cycles with even numbers, begin at the edge of the field with _ drill working width; switch off the left machine half by disconnecting the plug in the middle of the sowing shaft.

If the fertiliser spreader is equipped with a spread limiter, begin at the edge of the field with full drill working width **and Tramline**.

Two or three sowing rollers may be switched off per wheel track (magnetic switch/sowing roller – connection sleeves **73/1+2**).

The magnetic switch switches „off" when it receives power; this ensures that operation may continue for the full number of rows in the case of a power failure. (Shutters may then be closed if necessary.)

For **asymmetrical** tramlining, switching occurs only on one single-sided wheel track during each of two passes in opposite directions. Depending on the turn direction chosen, the unneeded magnet on the outer side of the turn must be deactivated by uncoupling.

ATTENTION:

When changing over from asymmetric to asymmetric marking, the distances that were marked are not the same

e.g. Track = 1.80 m

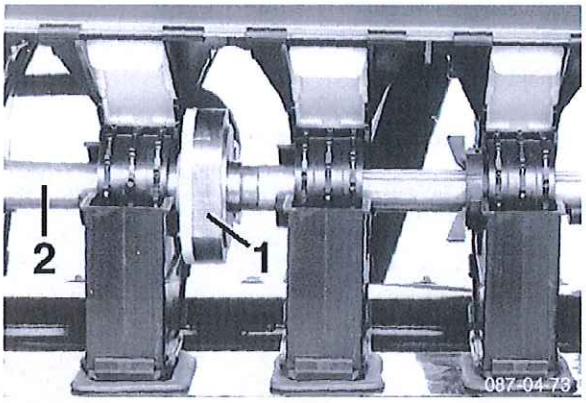
symmetric = 90 cm

(Centre track width = centre drill machine)

asymmetric = 90 cm

(Centre track width = outside drill machine)

(Note: The unit is supplied with both magnet couplings connected. For this reason the magnets must be checked after selecting the tramlining rhythm and drive direction!)



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If no tramlines are to be made but the electronic monitor is to remain active, select rhythm „**0**".

(Adjusting the tramlining rhythm: see **appendix A, section 5.1.1**)

Current operation data is stored so that operation may continue in the correct rhythm after e.g. an interruption.

If the seed drill has been out of operation for a longer period, the tramlining control must be inspected. Check that the sowing roller connection sleeves (**73/2**) are not restricted by seed dressing residue and move easily on the sowing shaft.

When driving on public roads, disconnect all electronic equipment from the on-board power supply (disconnect plug on tractor side).

Demarcation of Tramlines

(In connection with „Multitronic" and loading platform only.)

The tramline may be marked using track discs for pre-emergence spraying.

Switching is handled automatically. The electromagnetic valve is located on the front end of the machine.

Adjust the disc markers to tramline track-width (**75/1**).

To make an asymmetrical tramline in off-set tracks, fold up and secure the unneeded tramline marker.

For transport, the disc booms must be folded up and locked – plug (**76/1**).

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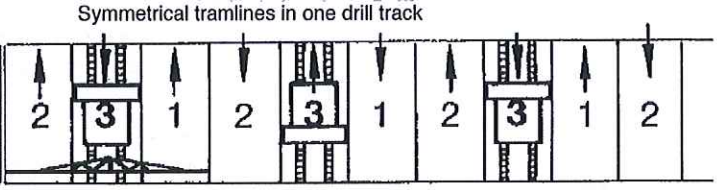
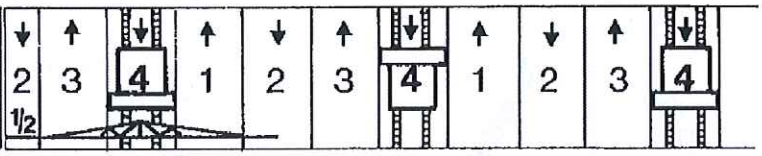
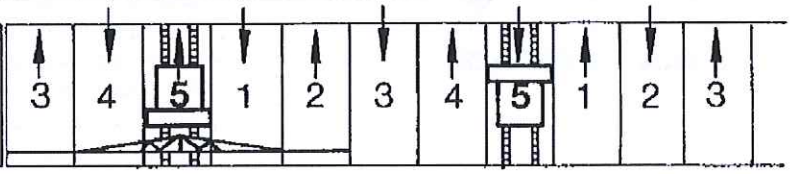
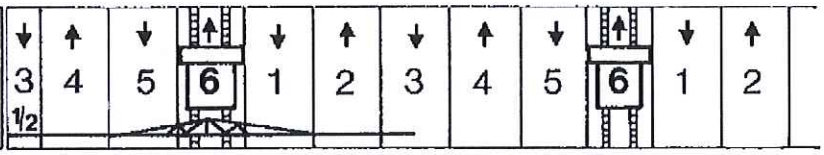
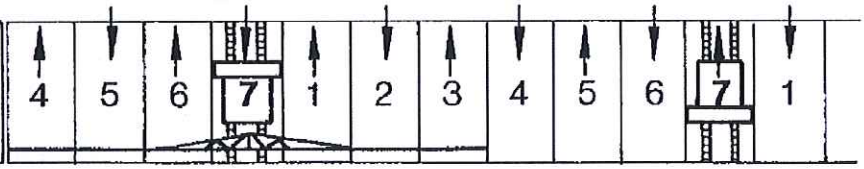
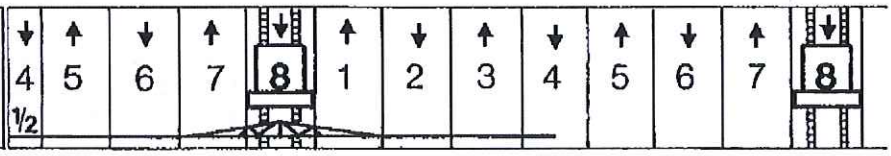
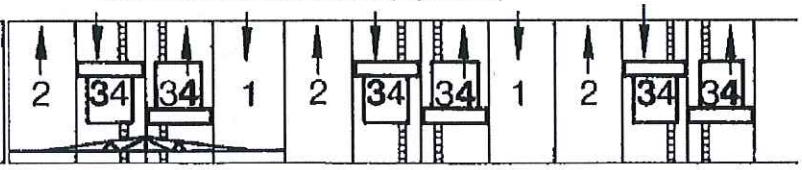
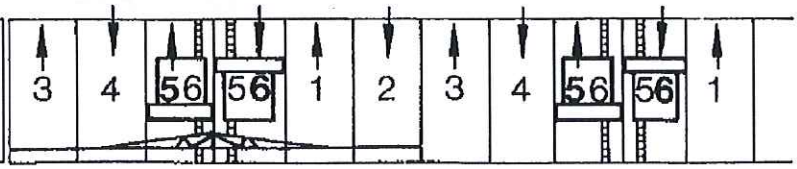
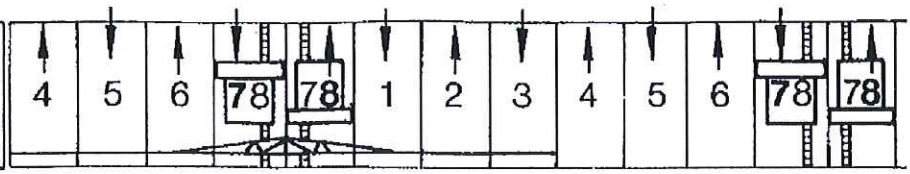
Working width Seed drill	Spraying width Distribution width	Switch rhythm	Examples for setting the tramlines
			Symmetrical tramlines in one drill track
3,00 m 4,00 m	9 m 12 m	3	
2,50 m 3,00 m 4,00 m 4,50 m	10 m 12 m 16 m 18 m	4	
2,50 m 3,00 m 4,00 m	12,5 m 15 m 20 m	5	
2,50 m 3,00 m 4,00 m 4,50 m	15 m 18 m 24 m 27 m	6	
3,00 m 4,00 m	21 m 28 m	7	
2,50 m 3,00 m 4,00 m	20 m 24 m 32 m	8	
			Tramlines in different drill tracks (asymmetric)
2,50 m 3,00 m 4,00 m 4,50 m	10 m 12 m 16 m 18 m	4 S	
2,50 m 3,00 m 4,00 m 4,50 m	15 m 18 m 24 m 27 m	6 S	
2,50 m 3,00 m 4,00 m	20 m 24 m 32 m	8 S	

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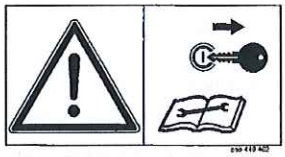
General Transport Instructions

- Bring machines into transport position; ensure suitability for transport.
- Before driving on public roads, disconnect the „MULTI tronic" from the power supply (remove plug from tractor socket).
- Riding on the machine or standing in the danger area is not permitted.
- Adjust the transport speed to suit the road conditions.
- Caution on bends: hitched implements swing outwards!
- Any applicable road safety regulations must be observed. The operator is responsible for the safe coupling of the tractor and machine when driving on public roads.
- Machinery must not compromise the safe driving of the tractor. Permissible axle-loads, total weight, and tyre load capacity (depending on speed and air pressure) must be adhered to. For safe steering, the load on the front axle must be at least 20 % of the dead weight of the vehicle.
- The highest permissible transport width is 3 m.
- Special permission is required for over-wide machines.
- Transport "4 m" combinations on a low-loader.
- Fit tine protection to perfect following harrow
- Swing row marker up and secure
- Swing sowing harrow in
- Ensure that protruding parts at the outline of the machine do not pose a danger to traffic. If this cannot be avoided, these parts must be covered and clearly marked.
- The outline and back of the machine must also be made clearly visible
  - e.g. use red/white striped warning signs 423 x 423 mm (DIN 11030; 100 mm wide strips, at a 45° angle running outwards/ downwards).
- Light fixtures are necessary if hitched machinery obstructs the tractor lights or when required by the weather conditions. Also mount lights at the front and back when the hitched machine extends more than 40 cm over the tractor lights, or at the back, if the distance between the tractor tail-lights and the machine is greater than 1 metre.
- Required warning signs and light fixtures should be bought from the respective dealers.
- For transport on a low-loader, attach warning signs, red tail-lights and yellow side reflectors to the low-loader. Always drive with lights switched on - even in daylight.

Safety point

- Turn engine off when adjustment, service and repair work is to be done.



General maintenance hints

In order to keep the implement in good condition after long periods of operation, please observe the following points:

- Tighten all screws after the first hours of operation.

In particular check:

- blade screws on the mowers
- tine screws on the swather and tedder.

Spare part

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.

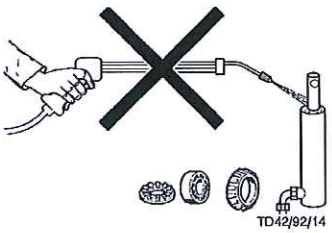
c. The installation and/or use of such products can, therefore, negatively change or influence the construction characteristics of the appliance. We are not liable for damages caused by the use of components and accessories that have not been supplied by us.

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

Cleaning of machine parts

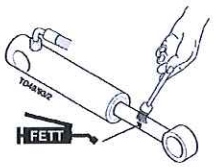
Attention! Do not use high-pressure washers for the cleaning of bearing- and hydraulic parts.

- Danger of rust!
- After cleaning, grease the machine according to the lubrication chart and carry out a short test run.
- Cleaning with too high pressure may do damage to varnish.



Parking in the ope

When parking in the open for long periods of time, clean piston rods and then coat with grease.



Winter storage

- Thoroughly clean machine before storage.
- Put up protection against weather.
- Change or replenish gear oil.
- Protect exposed parts from rust.
- Lubricate all greasing points according to lubrication chart.

Drive shafts

- see notes in the supplement

For maintenance please note!

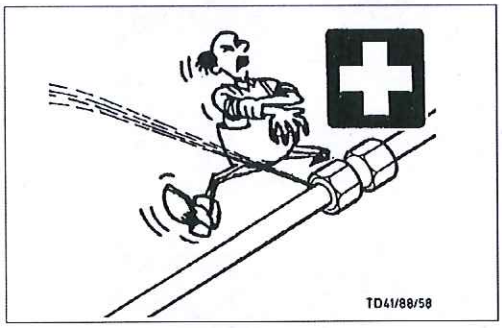
The instructions in this operating manual are always valid.

In case there are no special instructions available, then the notes in the accompanying drive shaft manufacturer' instructions are valid.

Hydraulic unit

Caution! Danger of injury or infection!

Under high pressure, escaping fluids can penetrate the skin. Therefore seek immediate medical help!



After the first 10 operating hours and then every consecutive 50 operating hours

- Check the hydraulic unit and lines for tightness and retighten screw connections if necessary.

Before operation

- Check hydraulic hoses for wear.

  Replace 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 points!

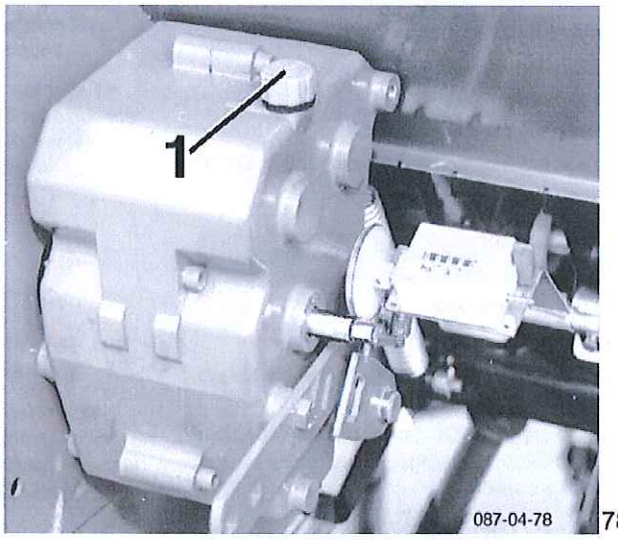
• Turn engine off when adjustment, service and repair work is to be done.

• Do not work under the machine without safe support.

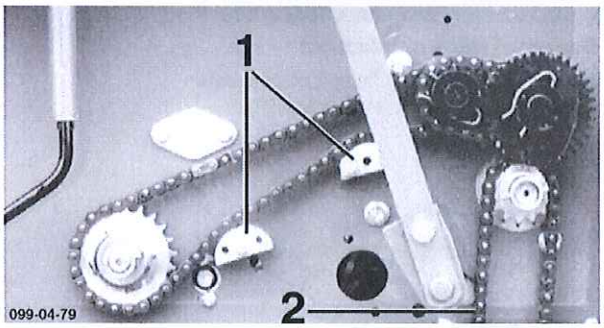
• Retighten all screws after the first hours of operation..

Repair Instructions

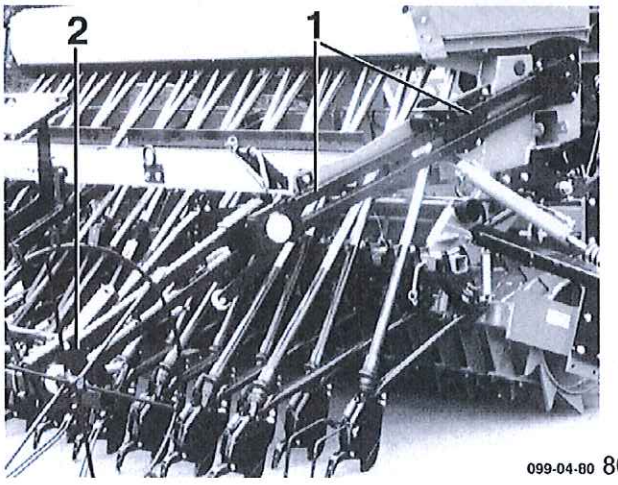
Please refer to repair instructions in supplement (if available)



78



79



80

Maintenance

Before working on the hitched machine, turn off the engine and remove ignition key!

Do not work on a raised seed drill!

If working on a raised drill is necessary, use additional safety supports to prevent unintentional lowering!

De-pressurize the hydraulic system before commencing any work!

Ensure proper disposal of oil! (Hydraulics oil is mineral based).

Retighten all screws after initial operation (approx. 8 hrs), then check at regular intervals.

Grease all bearings, including the disk bearings of the row marker and the tramlines markers approx. every 50 running hours (lithium-based multi-purpose grease).

Check the oil level in the transmission – oil stick (**78/1**). Permanent fill – filling amount: 2.5 l – if oil needs to be refilled use: Hydraulic Oil HLP 32.

Grease chain drives.

Maintain the movement of joints, spindles and sowing roller sleeves (**73/2** – for tramlining control).

(Do not oil the sowing shaft or seed-pipes).

Retighten the chain drives – at (**79/1+2**),

or, for agitator see pages 12+13 (**32/5** or **35/5**);

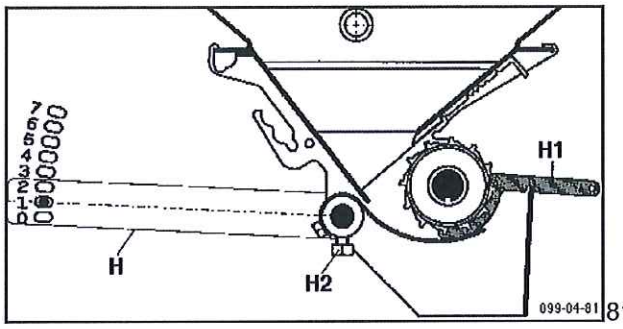
For disc coulters, keep the discs clean and check the scrapers.

Check the hydraulic pipes at regular intervals and replace if damaged or worn (see Spare Parts List). Pipes deteriorate naturally with age. Do not use for more than 5-6 years.

When cleaning with a water jet (especially high-pressure), do not point directly at electrical components (e.g. magnet couplings, cable connections) or bearings (e.g. single-disc coulter bearings).

Retouch any damage to paint.

Use a damp cloth and mild household detergent to remove any dirt on the „Multitronic" keyboard. Do not immerse the casing in liquid!



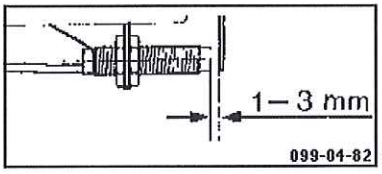
81

Inspection of Gates:

Before commencing sowing and with empty hopper, use the adjusting gauge (**71/H1**) to check the settings of all the gates; set the gate control lever (**81/H**) to „**1**" and turn the sowing shaft until the groove points downwards.

Slide the adjusting gauge between the sowing roller and the gate beside the middle row of sowing roller cams and turn from top to bottom until the handle rests on the sowing box.

The adjusting gauge must „fit" without any play; slacken the screws to make any readjustments (**81/H2**) and then retighten in the correct position ensuring there is no play.

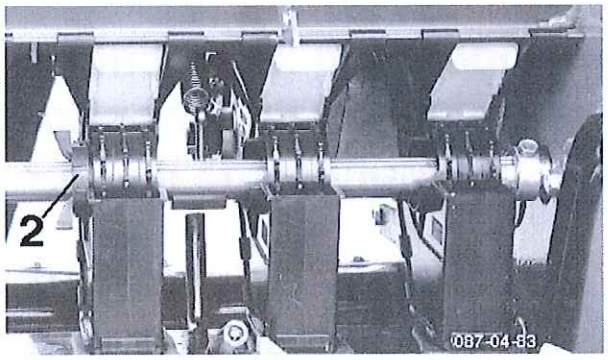


82

Setting of Sensors:

The sensors are spaced 1-3 mm apart (Fig. **82**).

An operation control (LED) has been integrated into the sensor, giving a visible indication of whether the sensor is working during corrective adjustments or test runs. (See also section Sensor Testing - Operating Instructions for Multitronic appendix A).



83

Removal of Sowing Shaft:

Open the shutter and - after loosening and moving the ring (**83/1**) -rotate the shaft in such a way that the clutch (on the right) is more or less horizontal.

Turn the bearings (**83/2**) to the right (90°; press ratchet) and slide to one side.

Remove the shaft from the rear. (Follow the instructions in reverse order to mount the shaft: replace the bearings and rotate 90° to the left. Lock the ring (**83/1**) in place „over" the clutch. Ensure that „side play" of the sowing shaft is restricted by a limiter screw (**26/3**, page 12). Adjust as necessary.

When performing welding work on the tractor or an attached machine and when charging the tractor battery or connecting a second battery (jump start) always disconnect from the electronics box.

Operating instructions Seed drill monitor Multitronic II for

VITASEM
VITASEM A

2 Operating features of the seed drill monitor

2.1 Electrical connection

Power is supplied to the seed drill monitor from the tractor's 12V electrical system via a DIN 9680 plug connection. These three-pin plugs also exist in two-pin format, as only the two main terminals (+12V, earth) are required here.

On request, the seed drill monitor can also be fitted to operate via an ISO 11786 signal socket.

Attention!

Other types of plugs and plug sockets are not permitted, as functional safety cannot be guaranteed.

2.2 Technical data

Operating voltage:	+10V .....+15V
Power consumption of the seed drill monitor:	70 mA
Operating temperature range:	-5°C ..... +60°C
Storage temperature:	-25°C .... +60°C
Protection rating:	IP65
Fuse:	6A multi-fuse in power supply plug

The circuit breaker resets itself automatically, once the short circuit has been dealt with and after a delay period of approx. 2 min has passed.

LCD unit:	Four-line back-lit display

2.3 Operating functions

The Multitronic II seed drill monitor is a compact on-board computer, which carries out a number of useful functions. It helps run important control and monitoring functions, providing practical display and system utility functions designed to simplify operation and save work.

The monitor is designed as a highly versatile unit, suitable for trouble-free application throughout both the "VITASEM" range of mechanical seed drill machines and the AEROSEM / TERRASEM range of air-operated units.

There now follows a brief overview of these operating functions:

Control functions:

- Tramline setup
- Additional tramline marking setup
- Automatic or manual relaying of tramline cycles
- Interruption of automatic relaying of tramline cycles driving in order to drive around obstacles

Display functions:

- Tramline cycle and tramline rhythm display
- Partial surface area hectare meter
- Total surface area hectare meter
- Drive speed
- Sowing shaft revolutions

Monitoring functions:

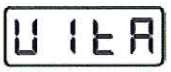
- Sowing shaft monitoring
- Hopper level monitoring

System utility functions:

- Sensor test
- Calibration assistance for calculation and inclusion of crank handle revolutions
- Calibration of hectare meter (adaptation of hectare meter to ground conditions)
- Adjustable time delay for automatic relaying of tramline cycle
- Menu language selection in English, German or French
- Switching the sensor signals
- Onboard voltage display

3 Starting the seed drill monitor for the first time

The Multitronic II seed drill monitor is activated by inserting the power supply plug in the socket. A short horn signal indicates that the unit is active. The display is then active for about two seconds, to show the type of machine in use:



<UIEA> should be displayed for the **VITASEM** range.

<AEro> should be displayed for the **AEROSEM** range.

<EErA> should be displayed for the **TERRASEM** range.

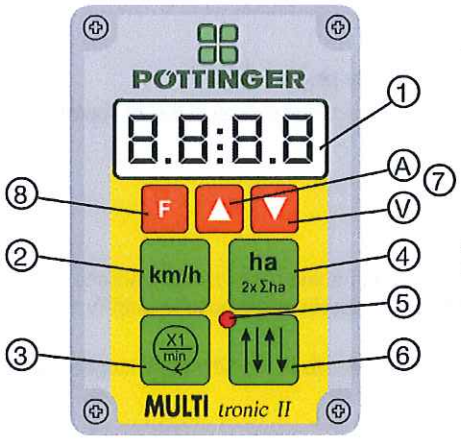
If the wrong type of machine is displayed, the unit must be readjusted according to machine type (see sect. 8). Before the seed drill monitor can operate correctly.

Displays can now be activated for drive speed, hectare meter, sowing shaft revolutions or tramline circuit.

4 Multitronic II quick startup instructions for the VITASEM

4.1 Control panel of the Multitronic II seed drill monitor

Readout/Display (**1/1**), Function key Drive speed (**1/2**),
Sowing shaft revolutions (**1/3**), Hectare meter (**1/4**),
LED (**1/5**), Tramline (**1/6**),
Arrow keys (**1/7, A,V**), **F**-key (**1/8**)



1

4.2 Readout pushbuttons

The green keys are readout pushbuttons

Drive speed indicator (**1/2**)

Push once to readout drive speed

Readout Hectare meter (**1/4**)

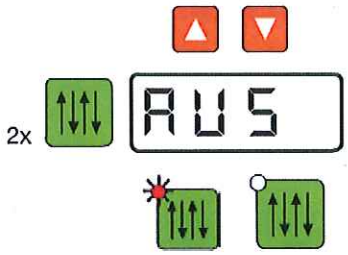
Push once to display partial surface area hectare meter
Push twice to display total surface area hectare meter

To reset the partial surface area hectare meter, press both arrow keys **A** and **V** for 2 sec.

To reset both hectare meters, press the two arrow keys **A** and **V** for 10 sec.

Display Turnings (**1/3**)

Press once to display sowing shaft revolutions



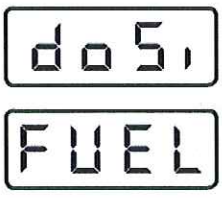
Tramline cycle and Tramline rhythm indicator (**1/6**)

Use the arrow keys **A** or **V** to alter the tramline cycle manually.

Press twice to switch **<AUS>**

LED (1/5) ON = tramline active
LED (1/5) OFF = tramline inactive

4.3 Alarm messages

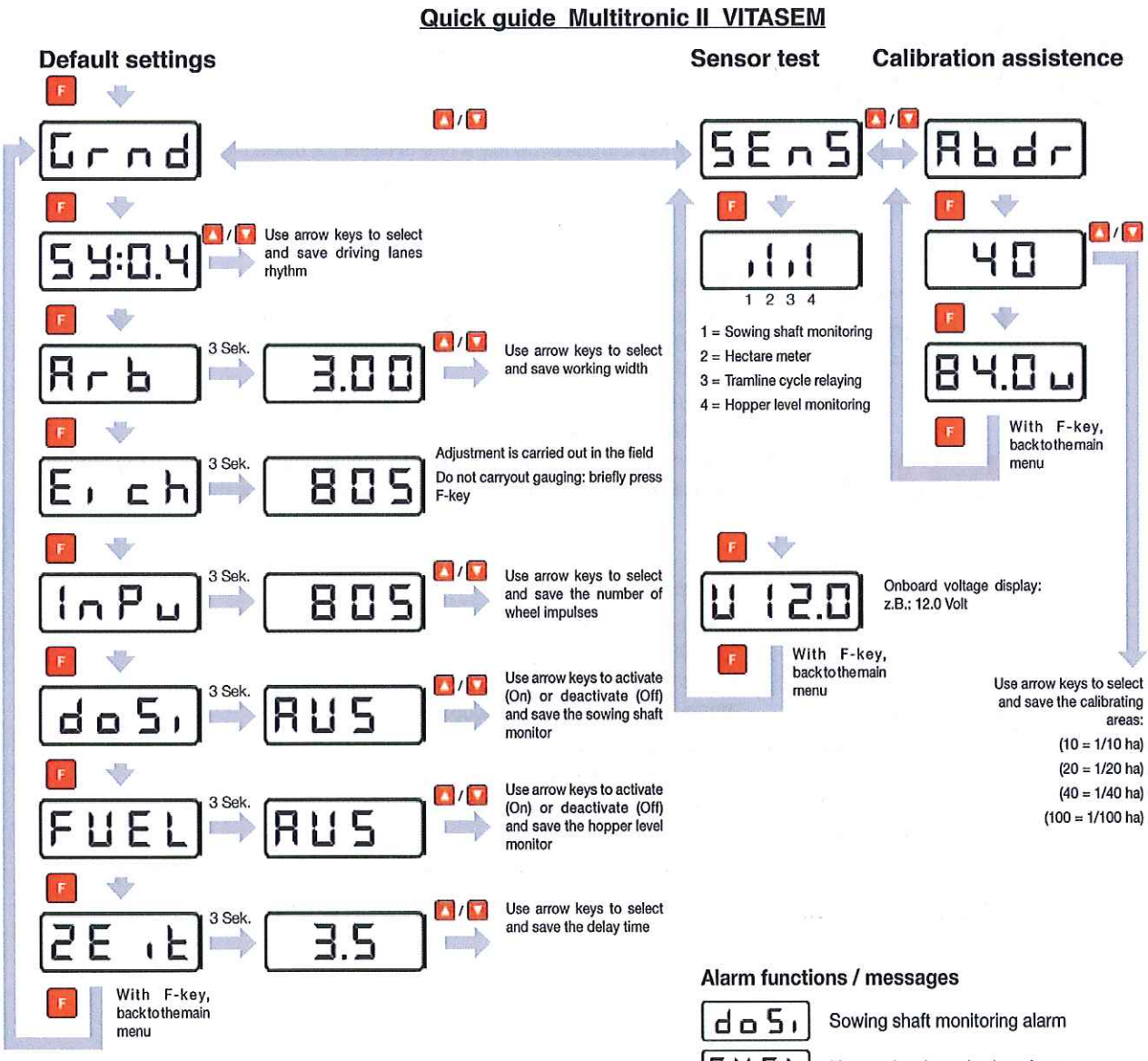


<doSi> = Sowing shaft monitoring alarm

<FUEL> = Hopper level monitoring alarm

4.4 Main menu

Press the F function key to activate the main menu. The seed drill unit is now running with its default settings <AdJU>. This operation also activates the system utility functions sensor test <SEns> and calibration assistance <CAL>.



Alarm functions / messages

doSi Sowing shaft monitoring alarm

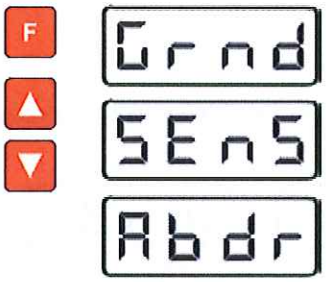
FUEL Hopper level monitoring alarm

Leaving the main menu: km/h | ha | | |

You can exit the main menu at any time by pressing one of the four display pushbuttons.

To save settings: 6 Sek. F

Keep the F key pressed for 6 sec. The display will start flashing after 2.5 sec. An acoustic signal will sound after 6 sec. When the sound stops, the setting is saved. The F key can be released. If the F key is released any earlier, the old setting will be retained.



5 Multitronic II main menu for VITASEM

Three different functions can be activated via this menu:

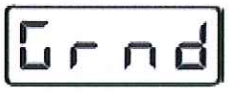
Seed drill unit default settings <**Grnd**>

Sensor test <**SEns**>

Calibration assistance <**Abdr**>

Press the F key and use arrow key **A** or **V** to select the desired function.

Press the **F** key again to activate the selected function.



5.1 Default settings

The default settings must be established before the seed drill monitor can be used for the first time. This operation allows the seed drill monitor to receive data on the configuration of the seed drill unit.

Erroneous default settings lead to functioning errors and incorrectly calculated readouts.

Press the **F** key and use **A** or **V** to select the default setting. Press the F key again to activate the default setting. This operation displays the tramline rhythm setting.

5.1.1 Tramline rhythm

This menu allows adjustment of the symmetric and asymmetric tramline rhythms, or deactivation of the tramline circuit.

Symmetric tramline rhythms:

<**SY:02**>, **03, 04, 05, 06, 07, 08, 09, 10, 11, 12**

Asymmetric tramline rhythms:

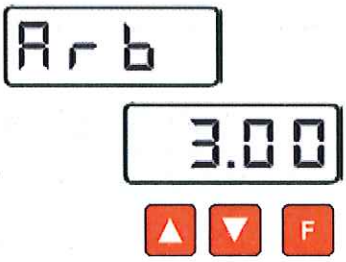
<**AS:02**>, **04, 06, 08, 10, 12**

Deactivated tramline circuit: <**FG:00**>

Use **A** or **V** to select the tramline rhythm and press F to save. (See sect. 5.1.7)

The next stage is adjustment of the seed drill unit operating width

5.1.2 Operating width



The operating width symbol <**LArG**> is now displayed and, after three seconds, the previously set operating width.

Use **A** or **V** to select the operating width and press **F** to save. (See sect. 5.1.7)

The following stage is hectare meter calibration.

5.1.3 Calibration of the hectare meter or entry of wheel impulses

An impulse count for an operating length of 100 m is required for accurate hectare metering and correct drive speed display.

This can be determined in two different ways:

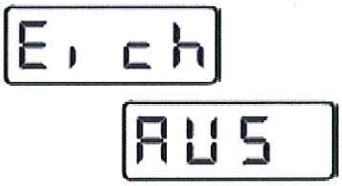
- Entry of wheel impulses using the table

  or

- by taking an actual reading of the number of impulses

The table value should always be entered first. Calibration of the hectare meter should only be carried out if the unit is giving inaccurate readings.

5.1.3.1 Calibration of the hectare meter



Calibration of the hectare meter involves adapting it to the ground conditions of the land being cultivated. This operation should only be carried out if the unit is giving inaccurate readings.

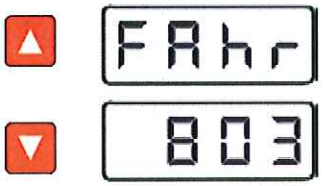
Calibration is carried out directly in the field.

The calibration symbol <GAUG> will appear first, followed after 3 seconds by the previously set wheel impulse count.

Stop calibration:

If you need to stop the calibration procedure, or carry it out later, briefly press the F key. The program will then jump directly to the next adjustment setting menu, wheel impulses <InPu>.

Calibrating the unit:



Proceed as follows if calibration is required:

Drive the machine to the beginning of the field test section.

Measure out a 100 m stretch of field

Press arrow key **A**, <FAhr> = "drive off" indication appears

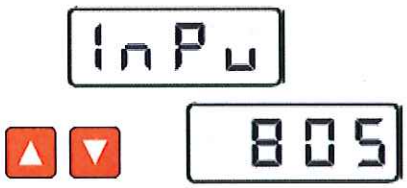
Drive along the test section. The seed drill monitor will now total up the number of hectare meter impulses.

After reaching the end of the test section, press arrow key **V** and the seed drill monitor will stop recording the number of impulses.

Press the **F** key to save the impulse reading. (See sect. 5.1.7)

After adjustment the inputting of wheel impulses is inapplicable. The program will now move on to the next adjustment setting menu: wheel impulses <InPu>.

5.1.3.2 Entry of wheel impulses



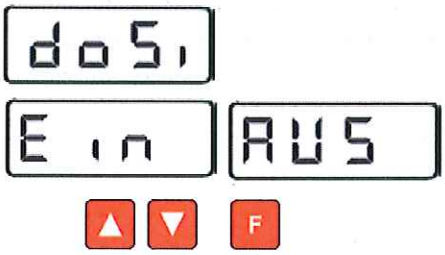
The wheel impulse symbol <InPu> will be displayed first, followed after 3 sec by the previously set impulse count.

In the case of the VITASEM, impulse count depends on the size of the drive wheel:

VITASEM	Impulse count / 100 m
Tyre 6.00-16	805
Tyre 10.0/75-15.3	762
Ground wheel	743

Use arrow key **A** or **V** to select impulse count and press the **F** key to save. (See sect. 5.1.7)

The following step is sowing shaft monitoring adjustment.



5.1.4 Sowing shaft monitoring

Sowing shaft monitoring is enabled or disabled in this menu.

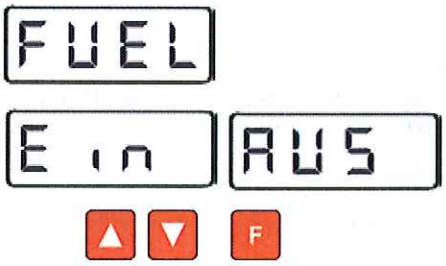
Firstly, the sowing shaft monitor symbol appears: <doSi> = Dosing, and 3 secs. later the monitoring state

Sowing shaft monitoring on = <**Ein**>

Sowing shaft monitoring off = <**AUS**>

Use arrow key **A** or **V** to enable or disable the monitoring function and press the **F** key to save. (See sect. 5.1.7)

The following step is hopper level monitoring adjustment.



5.1.5 Hopper level monitoring

This menu is used to enable or disable hopper level monitoring.

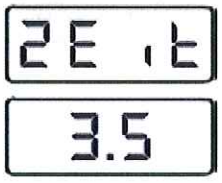
Firstly, the hopper level monitor symbol appears: <doSi> = Dosing, and 3 secs. later the monitoring state

Hopper level monitoring on = <**Ein**>

Hopper level monitoring off = <**AUS**>

Use arrow key **A** or **V** to enable or disable the monitoring function and press the **F** key to save. (See sect. 5.1.7)

The following step is delay time adjustment.



5.1.6 Delay time

Delay time t3 (t=time) involves delaying the switching impulses for automatic relaying of the tramline cycles. The purpose of this function is to avoid incorrect activation.

Delay time is adjustable between 0.5 sec and 20.0 sec, steps of.

0 to 10 sec steps of 0,5 sec

10 to 20 sec steps of 1 sec

The following values should be entered before operating the unit.

Automatic relaying via::	Display readout (= delay time in sec)
Shuttle valve pressure switch	1,5
Fendt signal plug socket	1,5
Ground wheel sensor	min 3,5
Level compensator sensor	min 3,5

Other values can also be entered however. Use arrow keys **A** or **V** to select delay time and press the F key to save. (See sect.5.1.7)

The seed drill unit default adjustment setting procedure is now complete. The program will now return to the main menu and the default setting symbol <AdJU> will be displayed once more.

Press any of the four green display pushbuttons to exit this menu.

5.1.7 Saving the machine settings

If the pre-set default settings are altered, they must be saved to memory.

All settings can be saved in the same way:

Keep the **F** key pressed for 6 sec.

The display will start flashing after 2.5 sec and an acoustic signal will sound after 6 sec.

When the sound stops, the setting is saved.

The **F** key can now be released, giving automatic access to the following menu.

If the **F** key is released early, access is gained to the following menu, but any new setting that may have been entered will be ignored and the previous setting retained.

5.2 Sensor test and onboard voltage display

The sensor test offers a method of testing the function of the seed drill unit sensors.

Press the **F** key and use arrow keys **A** or **V** to select the sensor test function, then press the F key again to start the test.

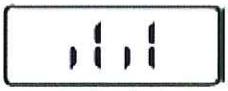
A four-bar display will now appear:

1= Sowing shaft monitoring

2= Hectare meter

3= Tramline cycle relaying

4= Hopper level monitoring



Each bar shows the activation status of its corresponding control function.

For sowing shaft monitoring, hectare meter and hopper level monitoring (sensors with opening function):

Long bar = no metal detected

Short bar = metal detected

Tramline cycle relaying via

Level compensator sensor (Sensor with opening function)

Long bar = no metal detected

Short bar = metal detected

Shuttle valve pressure switch

Long bar = Switch under pressure

Short bar = Switch pressure released

Fendt signal plug socket

Long bar = lifting gear raised

Short bar = lifting gear lowered

Ground wheel sensor (sensor with closing function):

Long bar = metal detected

Short bar = no metal detected

You can test the functioning of a sensor by holding a metallic object (e.g. a screwdriver) in front of the it and then moving it away again. Pressure switch functioning, with closed hydraulic circuit, can be tested by raising the marker arms.

If the F-key is pressed again, the onboard voltage display occurs

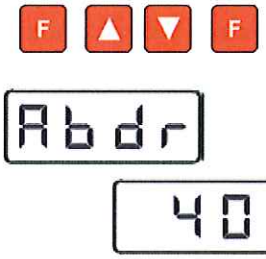
The first character "U" stands for voltage

The three numerical values indicate the onboard voltage e.g. 12.0 volt

Return to the sensor test <SEnS> by pressing the F-key

Press any of the four green display pushbuttons to exit this menu.

5.3 Calibration assistance



Calibration assistance is a system utility for the seed calibration test.

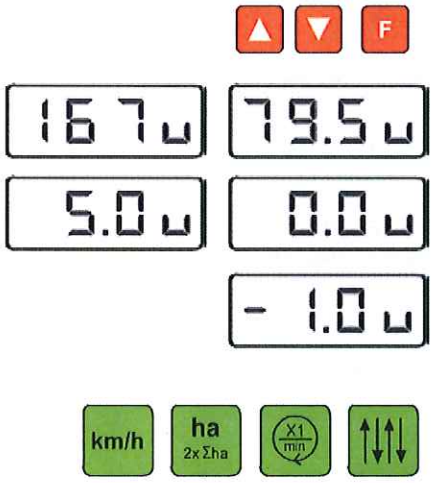
This function computes the number of crank rotations, showing them on the display, and also counts the number of crank rotations during the calibration test.

Press the **F** key and use arrow keys **A** or **V** to select calibration assistance<**CAL**>. Press the F key again to activate the function.

The following choice of surface areas for calibration will now be displayed:

1/10 ha	display <**10**>
1/20 ha	display <**20**>
1/40 ha	display <**40**>
1/100 ha	display <**100**>

Use arrow keys **A** or **V** to select the size of surface area to be calibrated and confirm the selection by a short press on the **F** key.



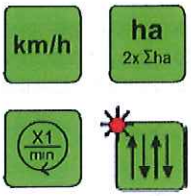
The seed drill monitor will now compute the number of crank rotations and display the figure. During this operation, values greater than 100 revolutions are displayed as whole figures. Values under 100 revolutions are shown exactly to the nearest half-turn.

The calibration test can now start. The seed drill monitor will now count the number of hand crank rotations, starting from the displayed value and running in reverse, thus providing a constant display of the crank turns that remain to be carried out. The final five turns of the crank are accompanied by an additional acoustic signal, in order to warn the operator of the impending end of the calibration procedure. Once the value reaches zero <0> a constant acoustic signal is activated to warn the operator to stop calibration immediately.

If calibration does continue, the display will show the corresponding negative value and the constant acoustic signal will continue to be heard until no more impulses are being detected at the hectare meter.

To repeat the calibration test: press the **F** key, the calibration test will restart from the beginning.

To stop the calibration test, press any one of the four green display pushbuttons to leave this menu.



6 Display (readout) pushbuttons

The green keys are the display pushbuttons, which are used to operate the following functions:

- Display drive speed
- Display / reset hectare meter
- Display sowing shaft revolutions
- Display / alter tramline cycle

6.1 Drive speed display

Press the display key to show drive speed in km/h.

6.2 Hectare meter

The seed drill monitor operates via two separate hectare meters: namely a partial area meter and a total surface area meter.

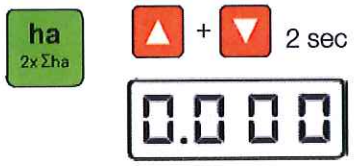
Data are displayed as follows, with floating decimal point:

0.000 – 9.999 10.00 – 99.99 100.0 – 999.9 1000 – 9999

6.2.1 Partial / total surface area meter display

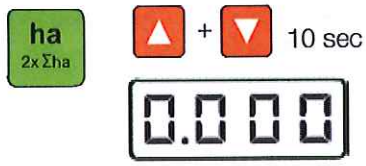
Press the display key to show the partial surface area count.

Press the display key again. The total surface area count will appear for 5 sec, followed once more by the reading for the partial surface area hectare meter.



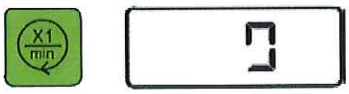
6.2.2 Partial hectare meter reset

Press the display key to show the partial surface area meter. Now press both arrow keys **A** and **V** at the same time and maintain pressed for 2 sec. The display will now start flashing and will reset to zero <0> after a further 2 sec, when it will stop flashing. This completes the reset procedure.



6.2.3 Partial surface area and total hectare meter reset

Press the display key again to show the total hectare meter. Now ress both arrow keys **A** and **V** at the same time and maintain pressed for 10 sec. The display will now start flashing and will reset to zero <0> after a further 10 sec, when it will stop flashing. This completes the reset procedure.



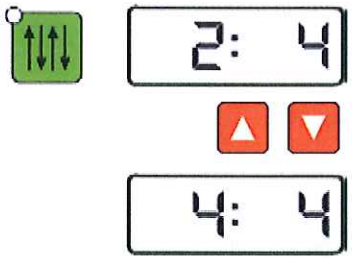
6.3 Sowing shaft revolutions display

Press the display key to show sowing shaft revolutions as a rotating <0>.

6.4 Tramline cycle

The tramline cycle can be displayed and altered, with tramline cycle relaying being carried out either automatically or manually. It is also possible to interrupt automatic relaying, when avoiding obstacles for example, without altering the tramline cycle itself.

6.4.1 Tramline cycle display / adjustment



Press the display key to show the tramline cycle and rhythm.

Left : Tramline cycle

Right : Tramline rhythm

Please refer to sect. 5.1.1 for details of tramline rhythm adjustment.

Tramline cycle relaying:

The tramline cycle is automatically relayed by means of sensors or pressure switches. Further switching the driving lane cycle is signalled with a short acoustic sound

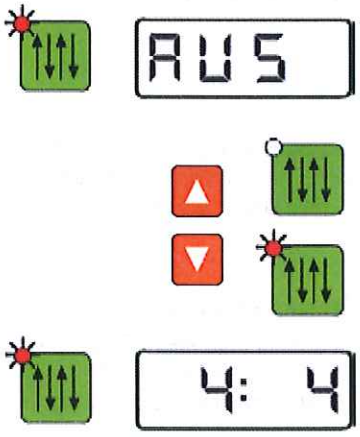
But the driving lane cycle can also be manually switched:

Use arrow keys **A** or **V** to alter the tramline cycle

Once a tramline is established, the red LED in the tramline display key will light up.

Driving lane activation is signalled by 5 short acoustic sounds

6.4.2 Automatic relaying interruption



Press the display key again to make <**AUS**> appear. This operation interrupts automatic relaying of the tramline cycle. It is now possible to operate the marker arms or raise the seed drill unit, without relaying the tramline cycle. The tramline can now also be directly activated or deactivated:

Tramline ON: press arrow key **A** (LED lights up)

Tramline OFF: press arrow key **V** (LED goes out)

Press the display key again to return to normal tramline cycle relaying. The tramline cycle that was active before the interruption will now reappear on the display.

Attention!

While the indicator <**OFF**> is activated, the other indicators are useless

The <**OFF**> function is deactivated when one of the green keys is pressed

Take note!

Only use the <**OFF**> function briefly e.g. for shunting work or driving around obstacles

To permanently deactivate driving lane switching

- see 5.1.1

7 Alarm functions / messages

Seed hopper level and sowing shaft revolutions can be monitored, on condition that the seed drill unit is fitted with the corresponding activated monitoring device. (See sections 5.1.4 and 5.1.5 for information on activating hopper level and sowing shaft monitoring.)

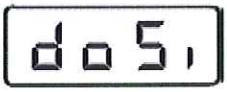
The monitoring systems are only active when the seed drill unit is in operating position (with lowered seed drill unit and/or marker arms).

The monitoring systems are not active when the seed drill unit is in transport position (with raised seed drill unit and/or marker arms).

7.1 Sowing shaft alarm

The sowing shaft monitoring system controls the turning of the sowing shaft. (Please refer to sect. 5.1.4 for information on how to activate sowing shaft monitoring).

A sensor receives impulses from a transmitting device on the sowing shaft. If 10 seconds passes without an impulse being received (with the unit in operating mode), visual and acoustic alarm signals are activated.



Acoustic alarm = intermittent sound

Visual alarm = <**doSi**>

The alarm can be stopped by pressing one of the green display keys, but will nevertheless be reactivated if the marker arms are operated or the machine is raised.

In the event of a fault occurring that cannot be dealt with immediately (e.g. a faulty sensor), it is possible to disable the monitoring system completely as a temporary measure, until the fault can be rectified. (Please refer to sect. 5.1.4 for details on how to disable sowing shaft monitoring).

7.2 Hopper level alarm

The hopper level monitoring system controls the amount of seed in the hopper. (Refer to sect. 5.1.5 for details of how to activate hopper level monitoring).

The level display receives a sensor signal when the quantity drops to a certain level, activating an acoustic and visual alarm signal.

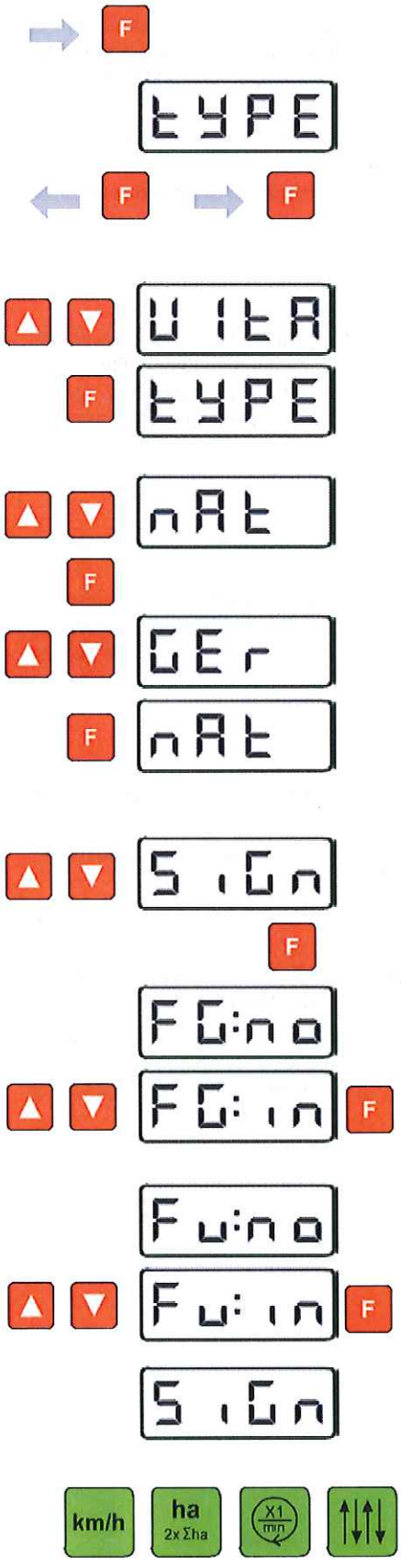
Acoustic alarm = intermittent sound

Visual alarm = <**FUEL**>

The alarm can be stopped by pressing one of the green display keys, but will nevertheless be reactivated if the marker arms are operated or the machine is raised.

In the event of a fault occurring that cannot be dealt with immediately (e.g. a faulty sensor), it is possible to disable the monitoring system completely as a temporary measure, until the fault can be rectified. (Please refer to sect. 5.1.5 for details on how to disable hopper level monitoring).

8 Setting the machine type, the local language and switching the control signals



The Multitronic II seed drill monitor can be operated with both the VITASEM range of mechanical seed drill machines and the AEROSEM, TERRASEM range of air-operated units.

The menus can be configured to appear in English, German or French.

The seed drill monitor is supplied factory-adjusted for the corresponding machine, but the user can change these parameters at any time:

Remove the power supply plug from its socket

With the **F** key pressed, push the plug back into the socket.

The display will show <**tYPE**> for the corresponding type of machine

Release the **F** key once more

Press the **F** key again to activate machine type configuration.

Use arrow keys **A** or **V** to select machine type VITASEM (display UitA) and press the F key to save. (See sect. 5.1.7)

The display will show <**tYPE**> once more

Use arrow keys **A** or **V** to activate local language configuration (and to display <nAt>)

Press the **F** key to activate the language selection feature.

Use arrow keys **A** or **V** to select the desired language

German	display <**GEr**>
French	display <**FrAn**>
English	display <**EnGL**>

Press the **F** key to save the selected language. (See sect. 5.1.7).

The display will show <**nAt**>once more

Using arrow keys **A** or **V** will activate the menu for switching the sensor signals (display <**SiGn**>)

This menu serves to reverse a sensor signal. That means sensors that have an opener function can be used for a closer function (and vice versa).

Press **F**-key

Firstly the menu for switching driving lane sensors will be called.

Save with **F**-key

Now the menu for switching the hopper level sensor will be called.

The sensor signal is utilized as normal

Using arrow keys **A** or **V** the signal utilization can be changed

Save with **F**-key

The display will show <**SiGn**>once more

Configuration is now complete. Press any one of the green display pushbuttons to leave the menu.

GB Sowing tables

Nr. 99 8521.GB.40B.0

Seed drills

VITASEM
VITASEM A

Sowing tables

Seed drills

VITASEM

VITASEM A

Follow the instructions in the operating manual!

Because of the various thousand grain weights (Tausandkorngewichte – TKG), dressing and other seed –specific characteristics, the values in the sowing table are only shown as approximate values. In every instance a turning test should be carried out before sowing.

Important instructions!

1. A pre-turn of the sowing shaft is needed to fill the sowing elements.
   - ca. 10 rotations of the sowing shaft before the actual turning test
   - with grains around 1 turning trough full. Beforehand align the machine exactly horizontal behind the seed-box top

   After ca. 500m stretch a check of the control turning should be carried out.

2. With the upper discharge system seed types up to 3.5 mm thick (all grain types in the lower discharge system)are fundamentally drilled in chute position "0".

   Chute position "1" is used when there is spraying or destruction (audible cracks) of seeds in the lower discharge system with large numbers of seed parts falling out.

3. With the upper discharge system, e.g. of rape, adjusting of the shut-off slide takes place depending on the free flow of seeds. The necessary practical monitoring of the free flow and the required adjusting of the shut-off slide is described in the chapter entitled "Grain test" in the operating manual and on page 2 of the sowing table.

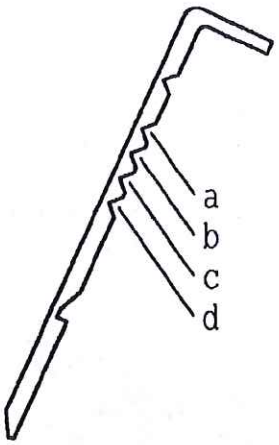
4. If rape-seeds are sown in the lower discharge system, fine seed finger is then always engaged and chute position "0" is used.

5. In the lower discharge system with very low seed amounts a gear-setting of under 10 is necessary. Then with the support halve the sowing shaft speed and double the gear setting value. Next turn again.

Grain test (for the upper discharge system)

With the upper discharge system the correct position of the shut-off valve must absolutely be observed. This shutter position is dependent on the free flow of the seeds. It can be ascertained by the grain test.

To engage the correct shutter position the following procedure must be followed:



- **Preparing the grain test**
  - close the valve
  - fill the seed box with seeds (rape)
  - place the emptying trough on the seed line beam (see "emptying" page 8)
  - lock the shut-off valve in position "a"
  - the chute remains in position "0"
  - make at least 10 sowing shaft pre-turns

Carrying out the grain test:

- The grain is to be collected in one or more spouts while the crank handle is turned until the sowing shaft has completed an exact rotation.

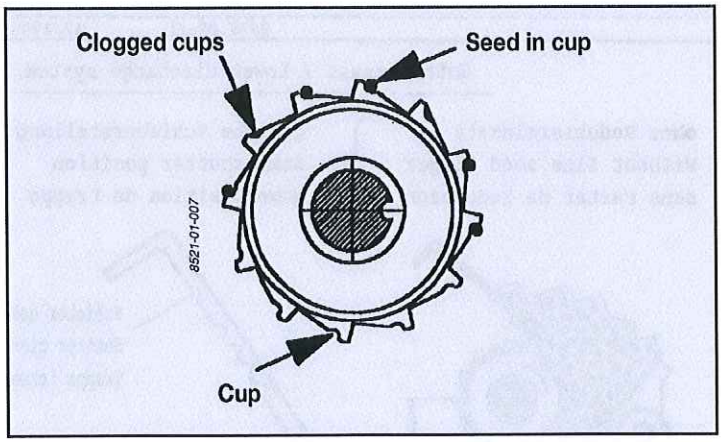
  The correct shutter position is reached when 36+/-4 seeds per spout have been run out in one sowing shaft rotation.

  If in shutter position "a" more than 40 seeds per sowing shaft rotation are counted, the seed is not suitable for the upper discharge system.

  If less than 32 seeds per sowing shaft rotation are counted the shut-off slides are to be locked in the next biggest shutter position (first "b", then "c" or "d").

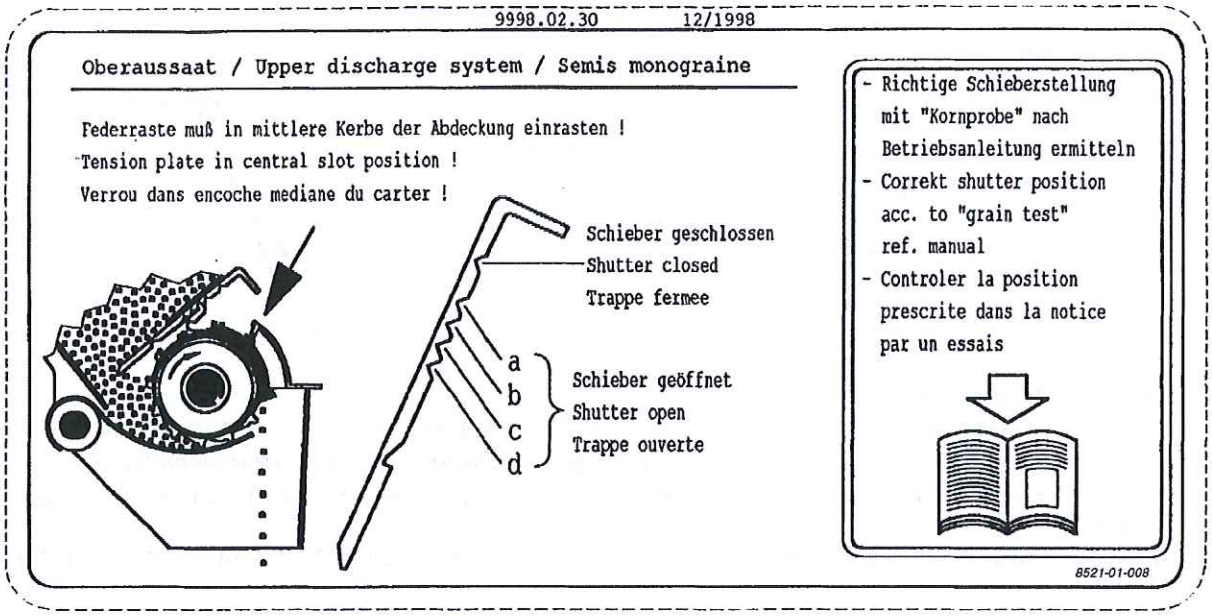
Important instruction

- after every change in the shutter position at least 10 sowing shaft rotations should again be made
- the grain test should also be carried out during the work in order that the orderly function of the upper discharge system is guaranteed. Sometimes the seed amount is reduced through clogged cups. When this happens the cups should be cleaned out with a brush.

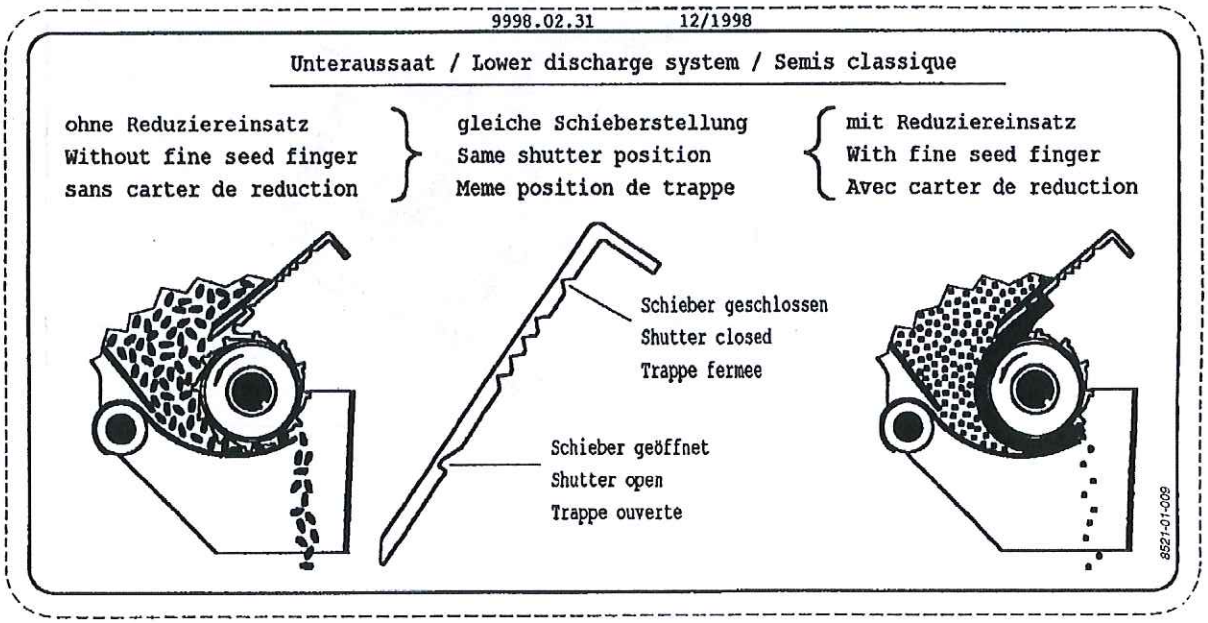


Position of the shut-off slide

1. for upper discharge system



2. for lower discharge system



VITASEM sowing table

Seed		Barley							Wheat, rye, triticale						
Chute position		0*							0*						
Shutter position		Fully opened							Fully opened						
Sowing shaft rotation direction		Lower discharge system							Lower discharge system						
Additional accessories		-							-						
Tier spacing (cm)		10	12	13	14	15	16	17	10	12	13	14	15	16	17
Gear choice	5														
	10														
	15														
	20														
	25	94							109	91	84				
	30	112	93						132	110	101	94	88		
	35	131	109	100	93				154	128	118	110	102	96	90
	40	149	124	114	106	99	93		175	146	135	125	117	109	103
	45	168	140	129	120	112	105	99	197	164	151	140	131	123	115
	50	190	158	146	135	126	118	111	220	183	169	157	146	137	129
	55	205	171	158	146	137	128	121	241	201	185	172	161	151	142
	60	224	187	171	160	150	140	132	262	219	202	188	175	164	154
	65		202	186	173	162	151	142		237	218	203	190	178	167
	70			200	186	174	162	153			234	218	204	192	180
	75				200	186	174	164				234	219	205	193
	80					199	185	175					233	219	206
	85						197	185						232	218
	90							197							231

Important: the seed amounts provided in the sowing table in kg/ha are only standard values. The exact seed amounts can only be ascertained by a turning test

* seed types up to 3.5 mm thick (all grain types) are fundamentally drilled with chute position "0".
Chute position "1" is used with seeds of over 3.5mm thick when it comes to spraying or destroying (audible cracks) the seeds.

VITASEM sowing table

Seed		Oats							Pea						
Chute position		0*							4 oder 5 **						
Shutter position		Fully opened							Fully opened						
Sowing shaft rotation direction		Lower discharge system							Lower discharge system						
Additional accessories		-							-						
Tier spacing (cm)		10	12	13	14	15	16	17	10	12	13	14	15	16	17
Gear choice	5														
	10								122	102					
	15								184	153	141	131	122	115	
	20								245	204	188	175	163	153	145
	25								306	255	235	220	205	191	180
	30	80							367	306	282	262	245	230	216
	35	94	78						428	357	330	305	286	268	252
	40	107	89	82					490	408	376	350	326	305	288
	45	120	100	92	86				550	460	424	393	367	345	325
	50	133	111	102	95	89	83		612	510	470	437	408	382	360
	55	146	122	117	104	98	91	86							
	60	161	134	124	115	107	100	94							
	65	174	145	134	124	116	109	102							
	70	187	156	144	134	125	117	110							
	75		167	154	143	134	125	118							
	80			164	152	143	133	125							
	85				162	152	142	133							
	90						150	142							

Important: the seed amounts provided in the sowing table in kg/ha are only standard values. The exact seed amounts can only be ascertained by a turning test

* seed types up to 3.5 mm thick (all grain types) are fundamentally drilled with chute position "0".
Chute position "1" is used with seeds of over 3.5mm thick when it comes to spraying or destroying (audible cracks) the seeds.

VITASEM sowing table

Seed		Grass							Phacelia						
Chute position		0							0						
Shutter position		Fully opened							Fully opened						
Sowing shaft rotation direction		Lower discharge system							Lower discharge system						
Additional accessories		Rotating agitator shaft "out" Hold agitator finger straight							Fine seed finger						
Tier spacing (cm)		10	12	13	14	15	16	17	10	12	13	14	15	16	17
Gear choice	5	12	10,0	9,2	8,5	8	7,5	7	3,7	3,1	2,8				
	10	24	20	18	17	16	15	14	7,4	6,2	5,7	5,3	5,0	4,6	4,3
	15	36	30	28	26	24	22	21	11,0	9,2	8,4	7,9	7,4	6,9	6,4
	20	48	40	37	34	32	30	28	14,8	12,3	11,3	10,5	9,8	9,2	8,7
	25	60	50	46	43	40	37	35	18,5	15,4	14,2	13,2	13,2	11,5	10,8
	30	72	60	55	51	48	45	42	22,2	18,5	17,0	15,8	14,8	13,8	13,0
	35	85	71	66	61	57	53	50		21,6	19,9	18,5	17,3	16,2	15,2
	40	97	81	75	69	65	60	57			22,8	21,2	19,8	18,5	17,4
	45												22,2	20,8	19,6
	50													23,1	21,7
	55														
	60														
	65														
	70														
	75														
	80														
	85														
	90														

Important: the seed amounts provided in the sowing table in kg/ha are only standard values. The exact seed amounts can only be ascertained by a turning test

VITASEM sowing table

Seed		Rape							Mustard						
Chute position		0							0						
Shutter position		Fully opened							Fully opened						
Sowing shaft rotation direction		Lower discharge system							Lower discharge (reduced) system						
Additional accessories		Fine seed finger*							Fine seed finger*						
Tier spacing (cm)		10	12	13	14	15	16	17	10	12	13	14	15	16	17
Gear choice	5	3,6	3,0	2,8					5,4						
	10	7,2	6,0	5,5	5,1	4,8	4,5	4,2	10,8	9,0	8,3	7,7			
	15	10,8	9,0	8,4	7,6	7,2	6,7	6,3	16,2	13,5	12,5	11,6	10,8	10,1	9,5
	20	14,4	12,0	11,1	10,1	9,6	9,0	8,4	21,6	18,0	16,6	15,4	14,4	13,5	12,7
	25	18,0	15,0	13,9	12,7	12,0	11,2	10,5		22,5	20,8	19,3	18,0	16,8	15,9
	30	21,6	18,0	16,8	15,2	14,4	13,5	12,6					21,6	20,3	19,0
	35	25,2	21,0	19,5	17,7	16,8	15,7	14,7							
	40		24,0	22,3	20,2	19,2	18,0	16,8							
	45				22,8	21,6	20,2	18,9							
	50						22,4	21,0							
	55														
	60														
	65														
	70														
	75														
	80														
	85														
	90														

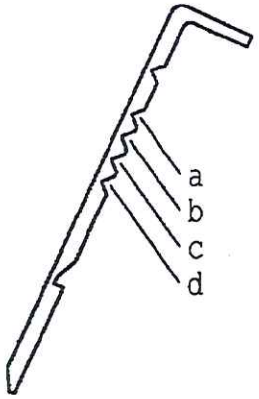
Important: the seed amounts provided in the sowing table in kg/ha are only standard values. The exact seed amounts can only be ascertained by a turning test

)* For foundations rape seeds and mustard seeds can also be sown without reducing sleeve.
Adjusting discharge rate is carried out using the accompanying coulter (see operating manual).

Rape

Upper discharge system

Chute position: 0



Slide position

1a for good flowing seed (incrusted, natural)
1b for normal flowing seed (powdered, abrasive)
1c for badly flowing seed (TGW > 6kg
1d for very good flowing seed and from vibrations caused through very clumpy, stony soil or vibration transference from agricultural implements.

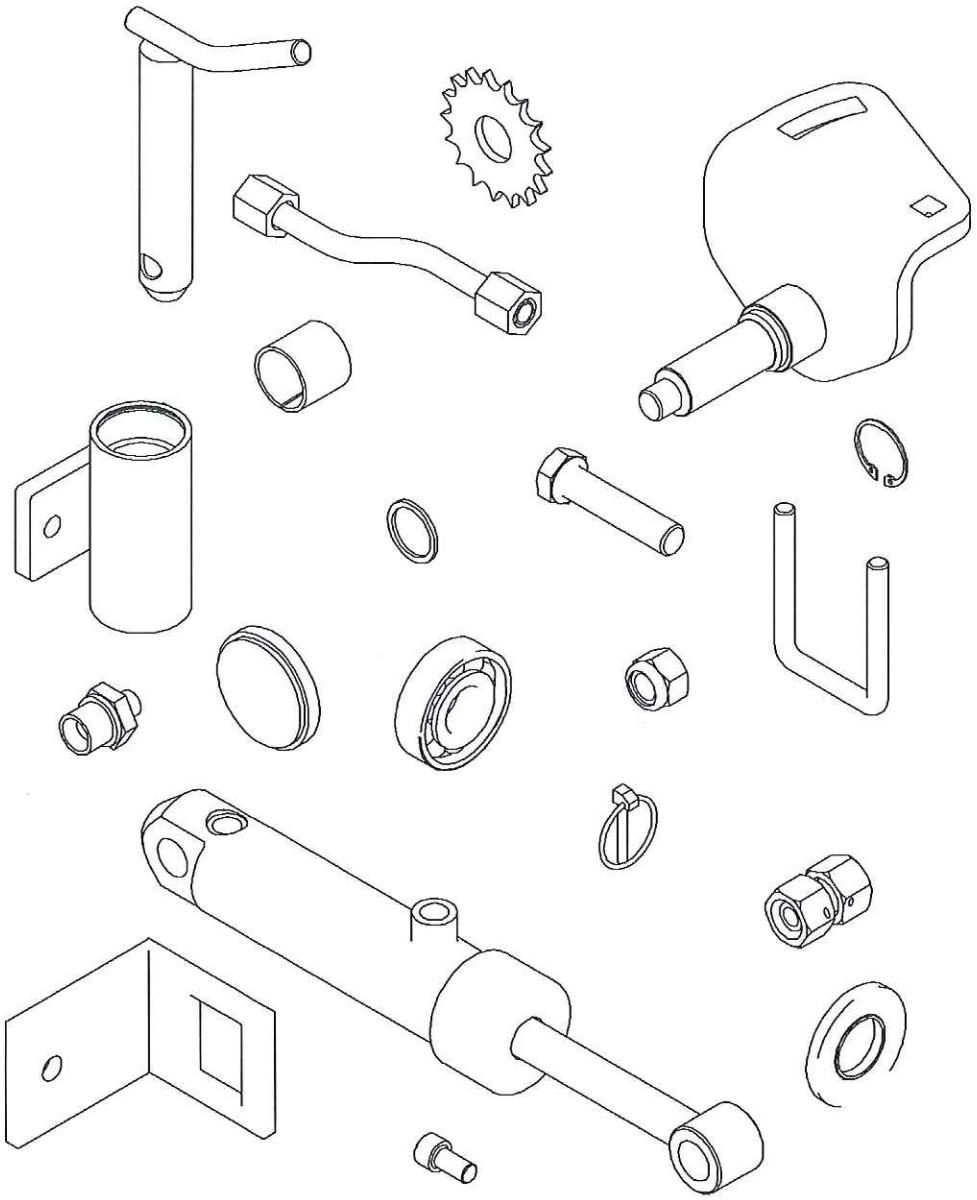
Gear positionlung	Theoretical seed space (cm)	Max. speed (km/h)	Seed amount							
			TGW (thousand grain weight) = 5 g				TGW (thousand grain weight) = 4 g			
			Tier spacing 10cm		Tier spacing 12 cm		Tier spacing 10cm		Tier spacing 12 cm	
			kg / ha	K / m²	kg / ha	K / m²	kg / ha	K / m²	kg / ha	K / m²
80	8,8	5,5	5,4	108	4,5	90	4,3	108	3,6	91
70	10	6,2	4,7	94	3,95	79	3,75	94	3,2	79
60	11,8	7,3*	4,1	83	3,3	69	3,3	83	2,85	69
50	14,1	8,7*	3,4	67	2,8	56	2,7	67	2,25	56
40	17,8	8,7*	2,7	54	2,25	45	2,15	54	1,8	45
30	23,5	8,7*	2	41	1,7	34	1,65	41	1,4	35
20	35,5	8,7*	1,35	27	1,1	21,5	1,1	28	0,9	22

Max. speed for inclines from 15% is 3.5 km/h

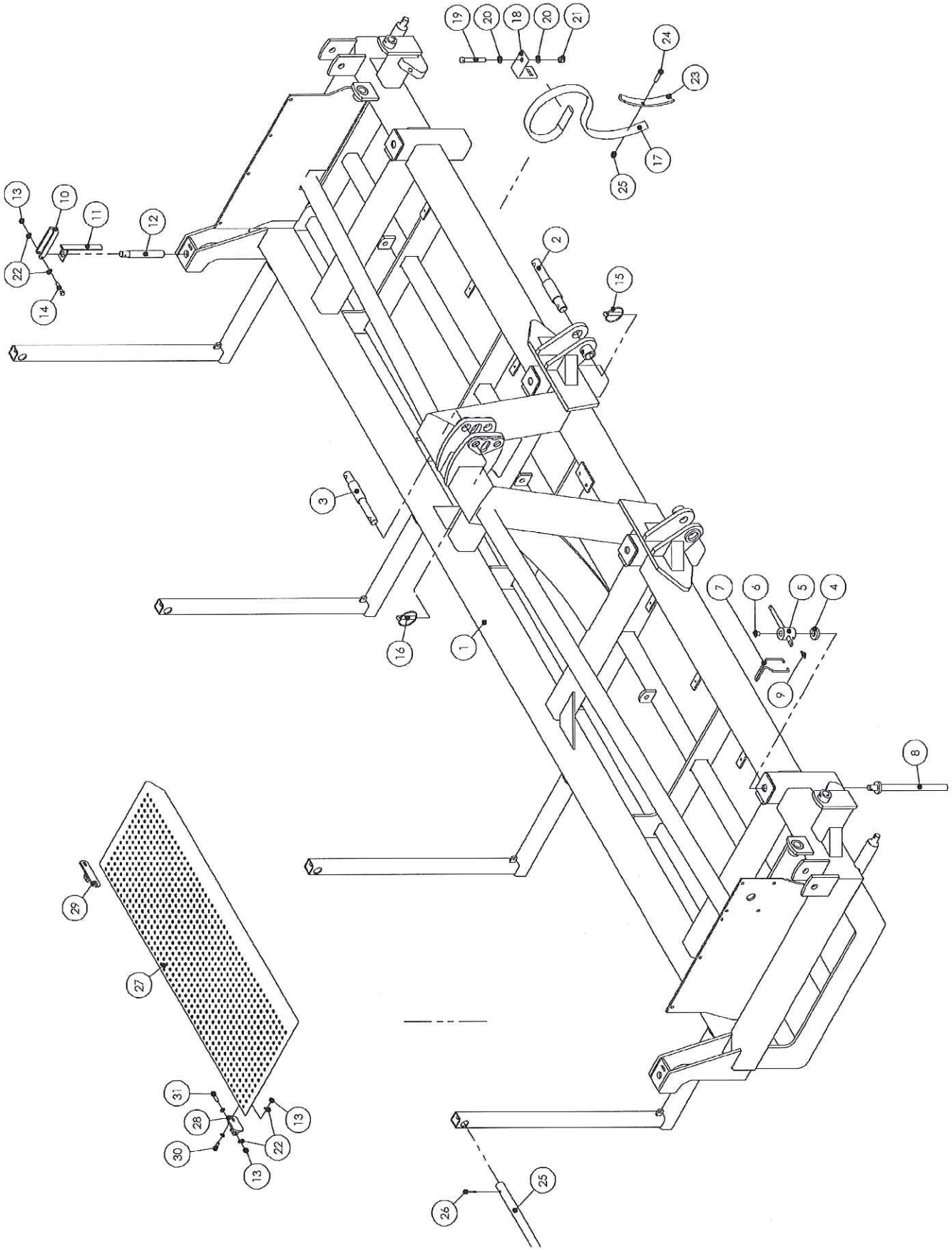
* It is recommended that a max. speed of 6 km/h should not be exceeded

Important: The discharge rates in kg/ha as given in the seed table are only approximate values.
The exact discharge rate can only be determined through a trial run (= calibrating)

Spareparts list



Main frame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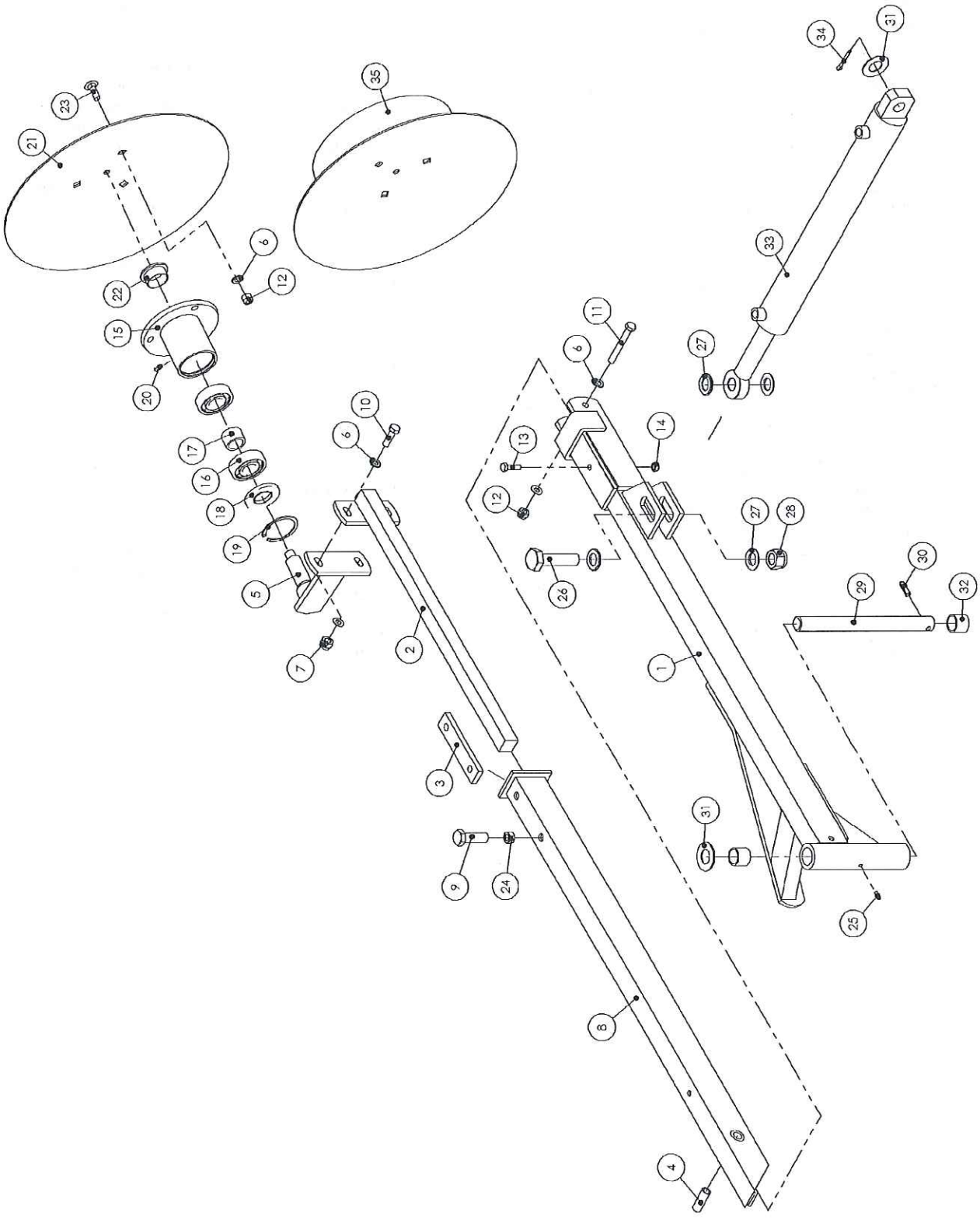
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1077170	3m. hovedramme	Main frame	Hauptrahmen	Plan principal
	1077060	4m. hovedramme	Main frame	Hauptrahmen	Plan principal
2	69528105C	Nagle ø28	Spike	Niet	Rivet
3	69525105C	Nagle ø25	Spike	Niet	Rivet
4	1011410	Stopring	Stop ring	Stopp ring	Arrêt l'anneau
5	1035800	Håndsving	Crank	Handkurbel	Manivelle
6	0489070	Plast prop	PVC cap	Verschluss	Bouchon en plastique
7	0431990	Låsebøjle for sving	Spindle keeper	Speerbügel	Collier d'aarêt
8	1080540	Spindel	Spindle	Spindel	Arbre
9	0371500	Spændstift ø6x32	Retaining pin	Spannstift	Goupille mecanindus
10	1105520	Håndtag	Handle	Handgriff	Poignér
11	1105430	Skala	Scale	Skala	Échelle
12	1105470	Spindel	Spindle	Spindel	Arbre
13	0264050	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
14	0234800	Stålbolt M8x45	Hexagon screw	Schraube	Vis H
15	690134008	Ringsplit ø11	Ring split	Klappsplint	Goupille
16	0422110	Harvetand 10x32	Spring tine	Zinken	Dent
17	0422351	Tandholder	Clamp	Spannstück	Bride de dent
18	0235450	Stålbolt M12x90	Hexagon screw	Schraube	Vis H
19	0272270	Facetskive M12	Disc	Scheibe	Rondelle
20	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
21	0272250	Facetskive M8	Disc	Scheibe	Rondelle
22	0422020	Spids	Peak	Spitze	Bout
23	0235070	Stålsætskrue M10x40	Hexagon screw	Schraube	Vis de pression
24	0264060	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
25	1077280	3m. gelænder rør	Railling	Geländer	Grille
	1077270	4m. gelænder rør	Railling	Geländer	Grille
26	0373310	Split ø5x32	Split pin	Splint	Goupille
27	0487060	Trinpanel	Platform	Plattenrost	Planche de debarque
28	1077260	Lille spændestykke	String disc	Spannplatte	Plaque de serrage
29	1077250	Stort spændestykke	String disc	Spannplatte	Plaque de serrage
30	0234760	Stålbolt M8x25	Hexagon screw	Schraube	Vis H
31	0234780	Stålbolt M8x35	Hexagon screw	Schraube	Vis H

Marker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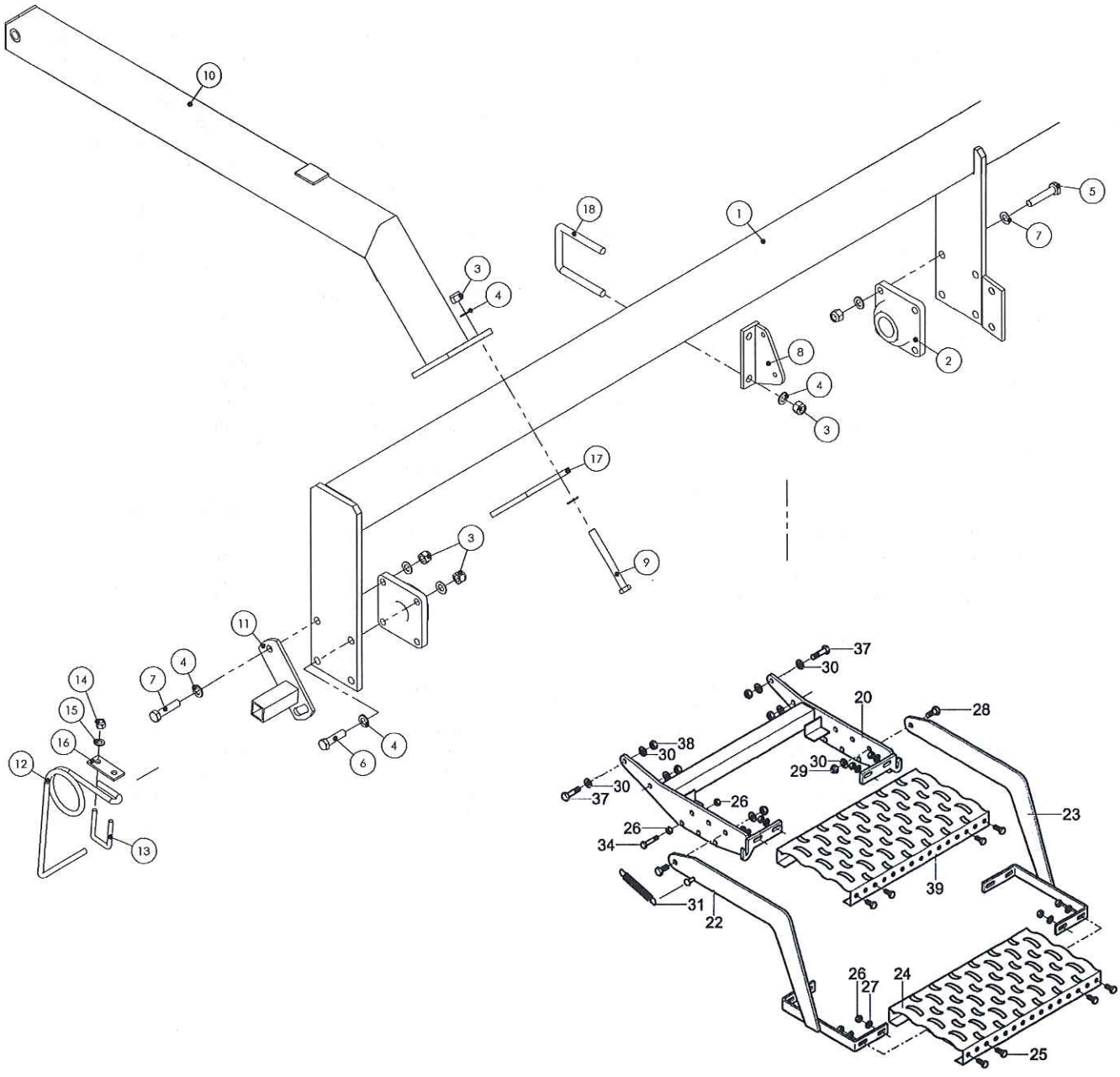
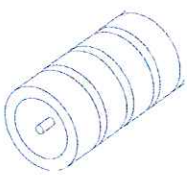
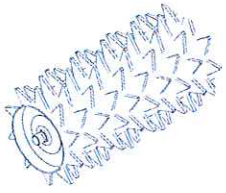
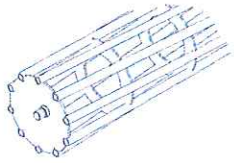
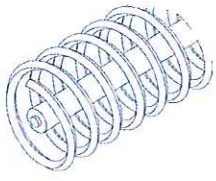
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1076980	Markørarm, venstre	Marker arm, left	Spuranzeigerarm, links	Bras de marque, gauche
	1076990	Markørarm, højre	Marker arm, right	Spuranzeigerarm, rechts	Bras de marque, droite
2	1042900	Yderste markørarm	Marker arm, outer	Spuranzeigerarm, Außen	Bras de marque extérieur
3	1042940	Gevindstykke	Threaded rod	Gewindeflanke	Flanc de filet
4	1042930	Bøsning	Bush	Buchse	Bague
5	1042961	Aksel f. kugleleje	Axle for ball bearing	Achse für Kugellager	Essieu pour le roulement à billes
6	0272260	Facetskive M10	Disc	Scheibe	Rondelle
7	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
8	1042740	Midter markørarm	Marker arm, middel	Spuranzeigerarm, Mitte	Bras de marque milieu
9	0235380	Stålbolt M12x50	Hexagon screw	Schraube	Vis H
10	0235060	Stålsætskrue M10x35	Hexagon screw	Schraube	Vis de pression
11	0235150	Stålbolt M10x80	Hexagon screw	Schraube	Vis H
12	0264060	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
13	0234770	Stålsætskrue M8x30	Hexagon screw	Schraube	Vis de pression
14	0264050	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
15	1043790	Nav	Hub	Nabe	Moyeu nu
16	0472960	Kugleleje 6305z	Ball bearing	Kugellager	Roulement à billes
17	1066840	Afstandsbøsning	Distance bush	Distanzbuchse	Bague de distancer
18	0483401	Tætningslamel	Sealing device	Dichtung Lamelle	Joint
19	0379220	Låsering I 62	Locking ring	Schliessring	Anneau-frein
20	0432100	Smørenippel M8	Lubricating nipple	Schmiernippel	Graisseur
21	0427790	Markørtallerken	Marker disc	Spuranzeigerteller	Disque de marqueur
22	0489380	Plast prop	PVC cap	Verschluss	Bouchon en plastique
23	0248421	Bræddebolt M10x30	Cup square bolt	Flachrundschraube	Vis J
24	0261070	Stålmøtrik M12	Nut	Mutter	Écrou
25	0432130	Smørenippel 90 M6	Lubricating nipple	Schmiernippel	Graisseur
26	0236170	Stålbolt M20x80	Hexagon screw	Schraube	Vis H
27	0272310	Facetskive M20	Disc	Scheibe	Rondelle
28	0264110	Låsemøtrik M20	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
29	1129950	Nagle ø25	Spike	Niet	Rivet
30	0371660	Spændstift ø8x32	Retaining pin	Spannstift	Goupille elastique
31	0271650	Planskive M24	Disc	Scheibe	Disque
32	0475301	I-presbøsning ø30	Nipper	Quetschwalze	Pince
33	0465003	Hydraulisk cylinder	Hydraulics cylinder	Hydraulisch Zylinder	Hydraulique vérin
34	0373420	Split ø6,3x32mm	Split-pin	Splint	Goupille
35	1137000	Engelsk tallerken	English disc	Englische teller	Disque anglais

Roller

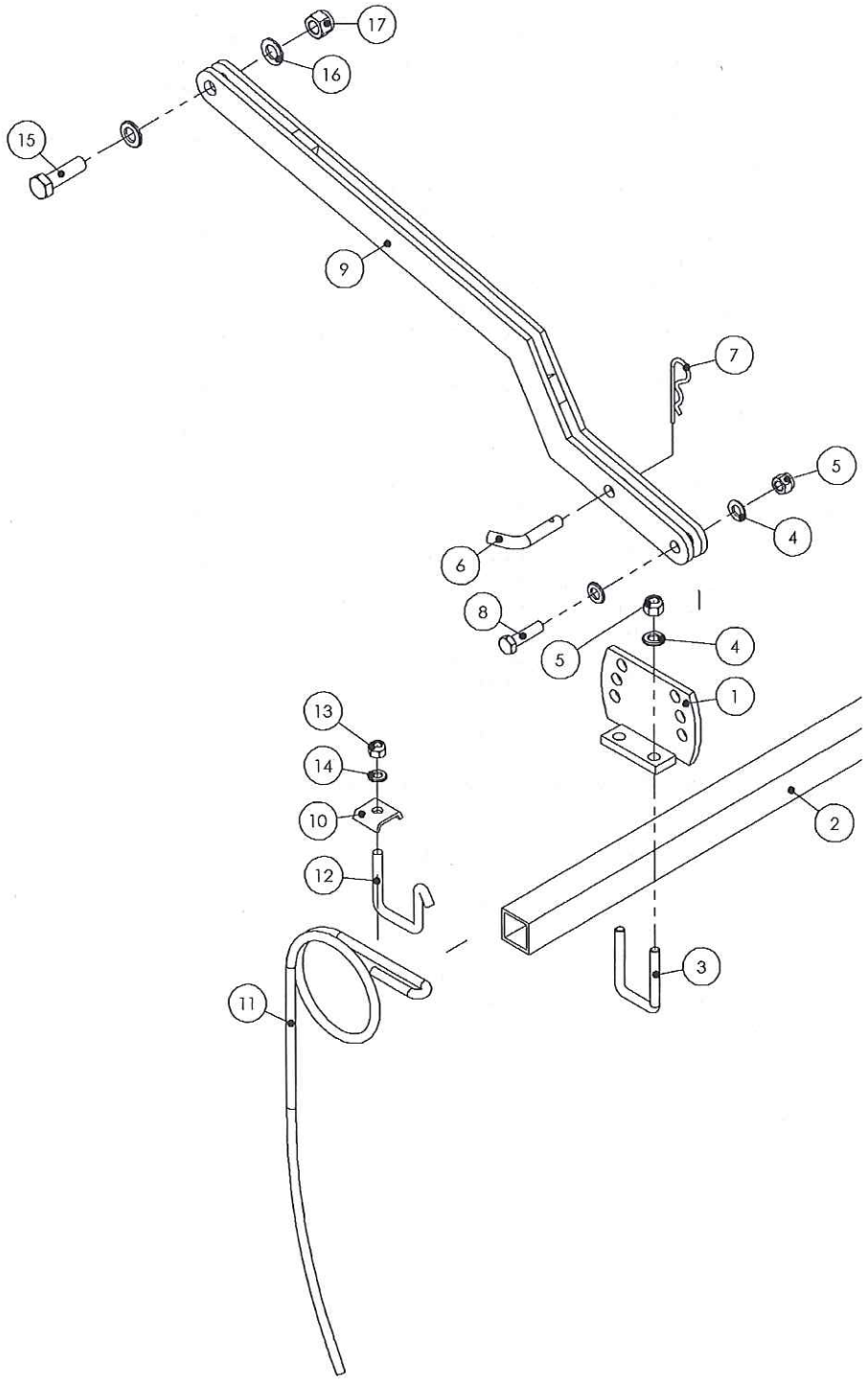


CTX valse	Tandpakkervalse	Rørpakkervalse	Spiralvalse
CTX roller	Packer crumbler	Packer roller	Spiral roller
CTX walze	Zahnpackerwalze	Rohrpackerwalze	Spiralpackerwalze
Rouleau de CTX	Rouleau packer denté	Rouleau á tubes pour	Rouleau spire pour

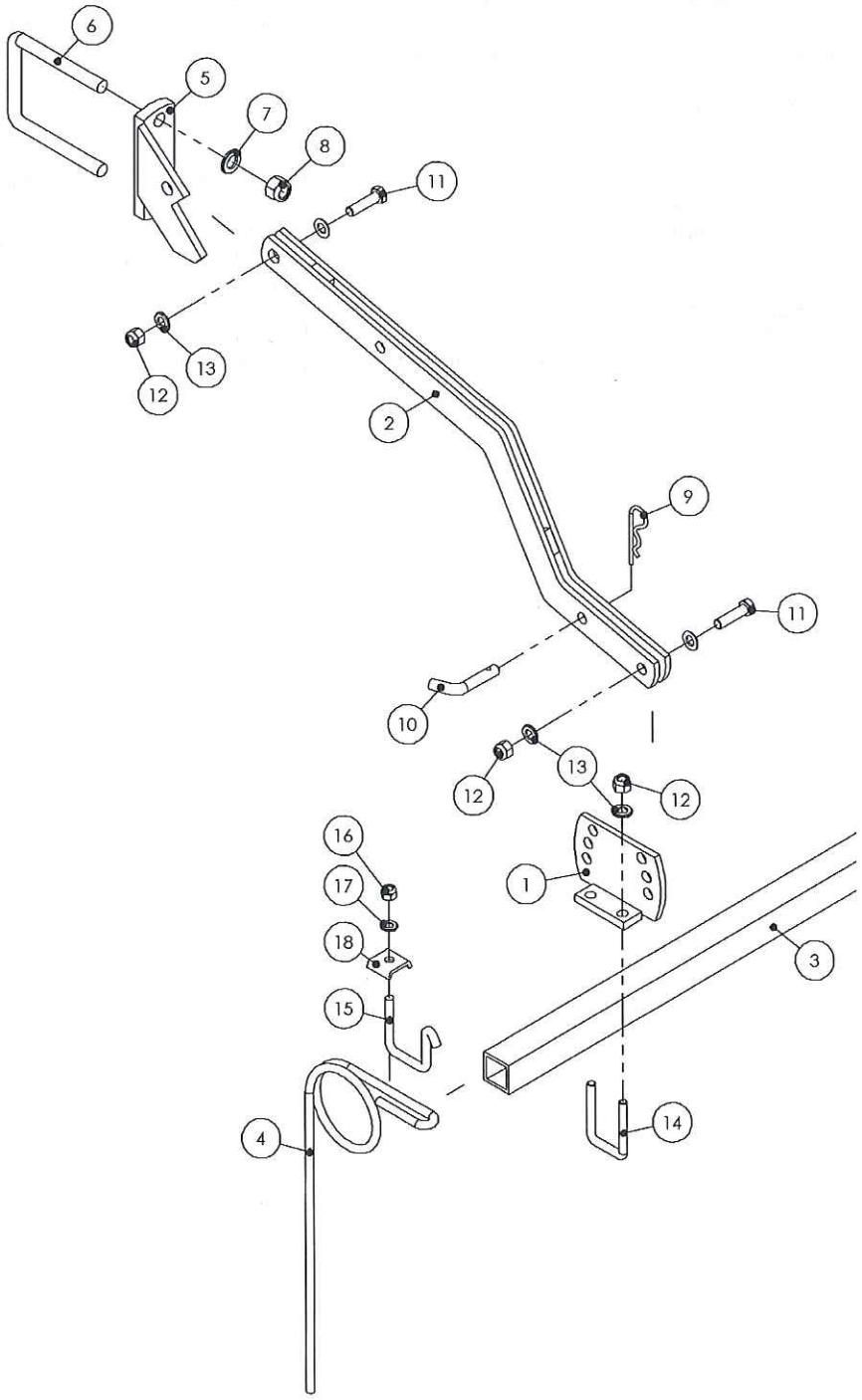
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1044270	3m. bom	Bar	Stab	Barre
	1044310	4m. bom	Bar	Stab	Barre
2	0478950	Flangeleje ø50	Flanged bearing	Kugellager	Roulement à billes
3	0264090	Låsemøtrik M16	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
4	0272290	Facetskive M16	Disc	Scheibe	Rondelle
5	0235880	Stålbolt M16x80	Hexagon screw	Schraube	Vis H
6	0235840	Stålbolt M16x60	Hexagon screw	Schraube	Vis H
7	0235860	Stålbolt M16x70	Hexagon screw	Schraube	Vis H
8	1077220	Trappe fæste, V	Stair bracket, left	Treppen beschlag, link	Garnitures d'escalier, g
	1077210	Trappe fæste, H	Stair bracket, right	Treppen beschlag, rechts	Garnitures d'escalier, d
9	0235950	Stålbolt M16x150	Hexagon screw	Schraube	Vis H
10	1077190	Valsearm	Arm for roller	Arm für walze	Bras pour le rouleau
11	1044360	Drejeled	Swivel	Drehgelenk	Joint articulé
12	1033990	Jævnertand, V	Tine, left	Zinken, link	Dent, gauche
	1034000	Jævnertand, H	Tine, right	Zinken, rechts	Dent, droite
13	0382120	Spændebøjle 40x40	String brace	Klammer	Colier de serrage
14	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
15	0272270	Facetskive M12	Disc	Scheibe	Rondelle
16	1012520	Spændeplade M12	String disc	Spannplatte	Plaque de serrage
17	1106070	Spændeplade M16	String disc	Spannplatte	Plaque de serrage
18	0382160	Spændebøjle 100x100	String brace	Klammer	Colier de serrage
20	P00853552200	Trinramme	Step frame	Treppenrahmen	Cadre marchepied
22	P00853552400	Trinbeslag, venstre	Step bracket, left	Tritthälter, LI	Support, gauche
23	P00853552410	Trinbeslag, højre	Step bracket, right	Tritthälter, RE	Support, droite
24	P7991105711	Trinpanel 2x40x240x450	Platform	Zahnprofil	Planche de debarque
25	P00103043	Stålsætskrue M8x20	Hexagon screw	Schraube	Vis de pression
26	P00120159	Låsemøtrik M10 DIN934	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
27	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
28	P00103065	Stålsætskrue M10x30	Hexagon screw	Schraube	Vis de pression
29	P00122006	Låsemøtrik M10 DIN985	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
30	P00162159	Skive A 10,5 DIN 9021	Washer	Scheibe	Rondelle
31	P7990041702	Fjeder CF-155	Spring	Zugfeder	Ressort
34	P00103286	Stålbolt M8x55	Hexagon screw	Schraube	Vis H
37	0238100	Stålsætskrue M10x45	Hexagon screw	Schraube	Vis de pression
38	P00120160	Låsemøtrik M10 DIN934	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
39	P00853552010	Trinpanel 2x40x360x4	Platform	Zahnprofil	Planche de debarque
	1044100	3m. svær rørvalse	Packer roller	Rohrpackerwalze	Rouleau á tubes pour
	1044090	4m. svær rørvalse	Packer roller	Rohrpackerwalze	Rouleau á tubes pour
	0513001	3m. spiralvalse	Spiral roller	Spiralpackerwalze	Rouleau spire pour
	0512001	4m. spiralvalse	Spiral roller	Spiralpackerwalze	Rouleau spire pour
	1044230	3m. tandpakkervalse	Packer crumbler	Zahnpackerwalze	Rouleau á tubes pour
	1044210	4m. tandpakkervalse	Packer crumbler	Zahnpackerwalze	Rouleau á tubes pour
	0515300	3m. CTX valse	CTX roller	CTX walze	Rouleau de CTX
	0515200	4m. CTX valse	CTX roller	CTX walze	Rouleau de CTX

Harrow before roller



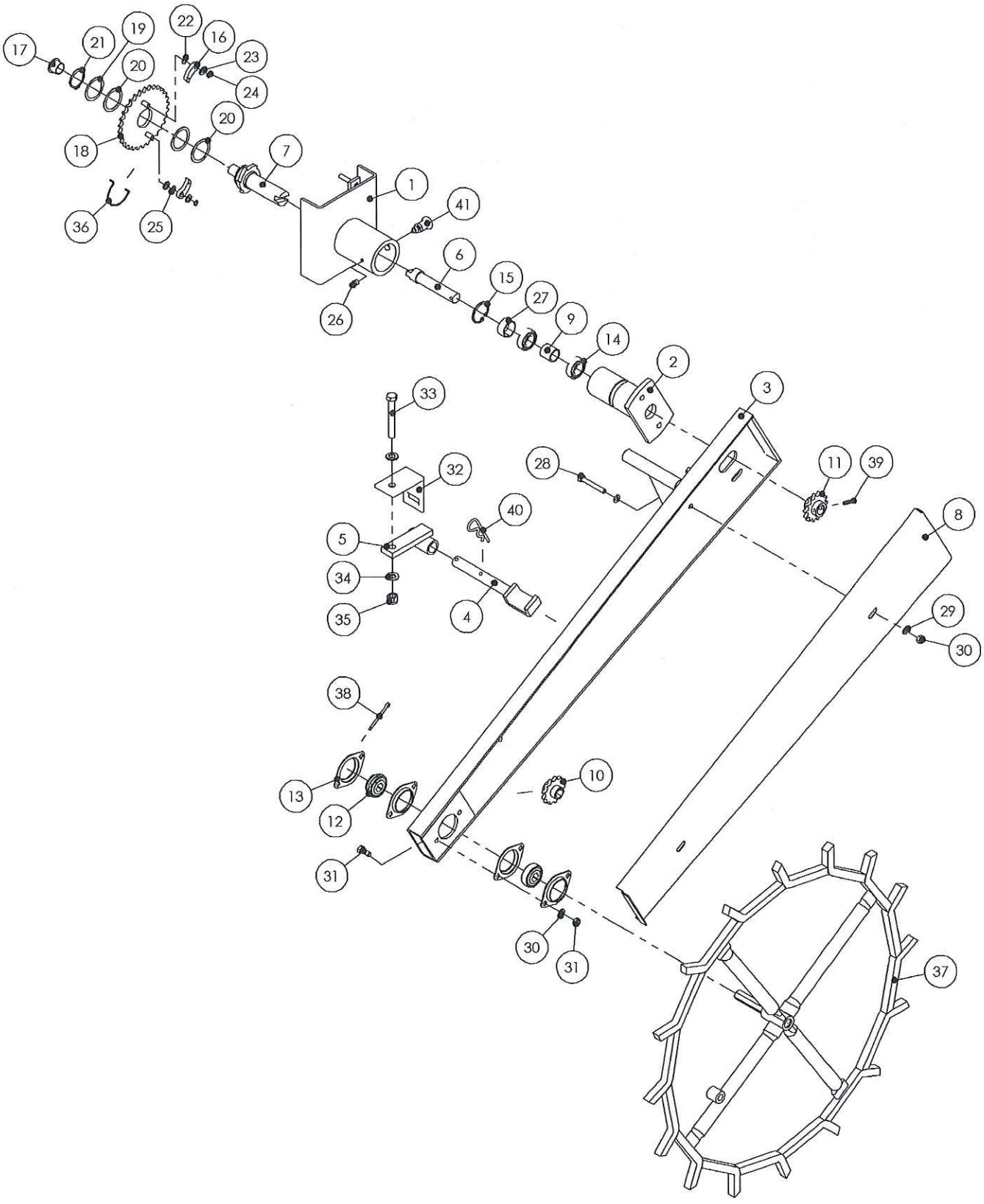
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1012590	Hulbue	Holed bracket	Hohlbogen	Arc creux
2	1140422	3m. bom	Bar	Stab	Barre
	1053470	4m. bom	Bar	Stab	Barre
3	0382120	Spændebøjle 40x40	String brace	Klammer	Colier de serrage
4	0272270	Facetskive M12	Disc	Scheibe	Rondelle
5	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
6	1011580	Nagle ø13	Spike	Niet	Rivet
7	0377400	Hårnålesplit ø4	Hairpin split-pin	Federvorstecker	Goupille
8	0235370	Stålbolt M12x45	Hexagon screw	Schraube	Vis H
9	1077040	Trækarm	Draw arm	Zugarm	Bras de traction
10	1012510	Spændeplade M10	String disc	Spannplatte	Plaque de serrage
11	0426090	Langfingertand ø9	Tine	Zinken	Dent
12	0382100	Spændebøjle M10	String brace	Klammer	Colier de serrage
13	0264060	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
14	0272260	Facetskive M10	Disc	Scheibe	Rondelle
15	0235830	Stålbolt M16x55	Hexagon screw	Schraube	Vis H
16	0272290	Facetskive M16	Disc	Scheibe	Rondelle
17	0264090	Låsemøtrik M16	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H

Harrow after roller



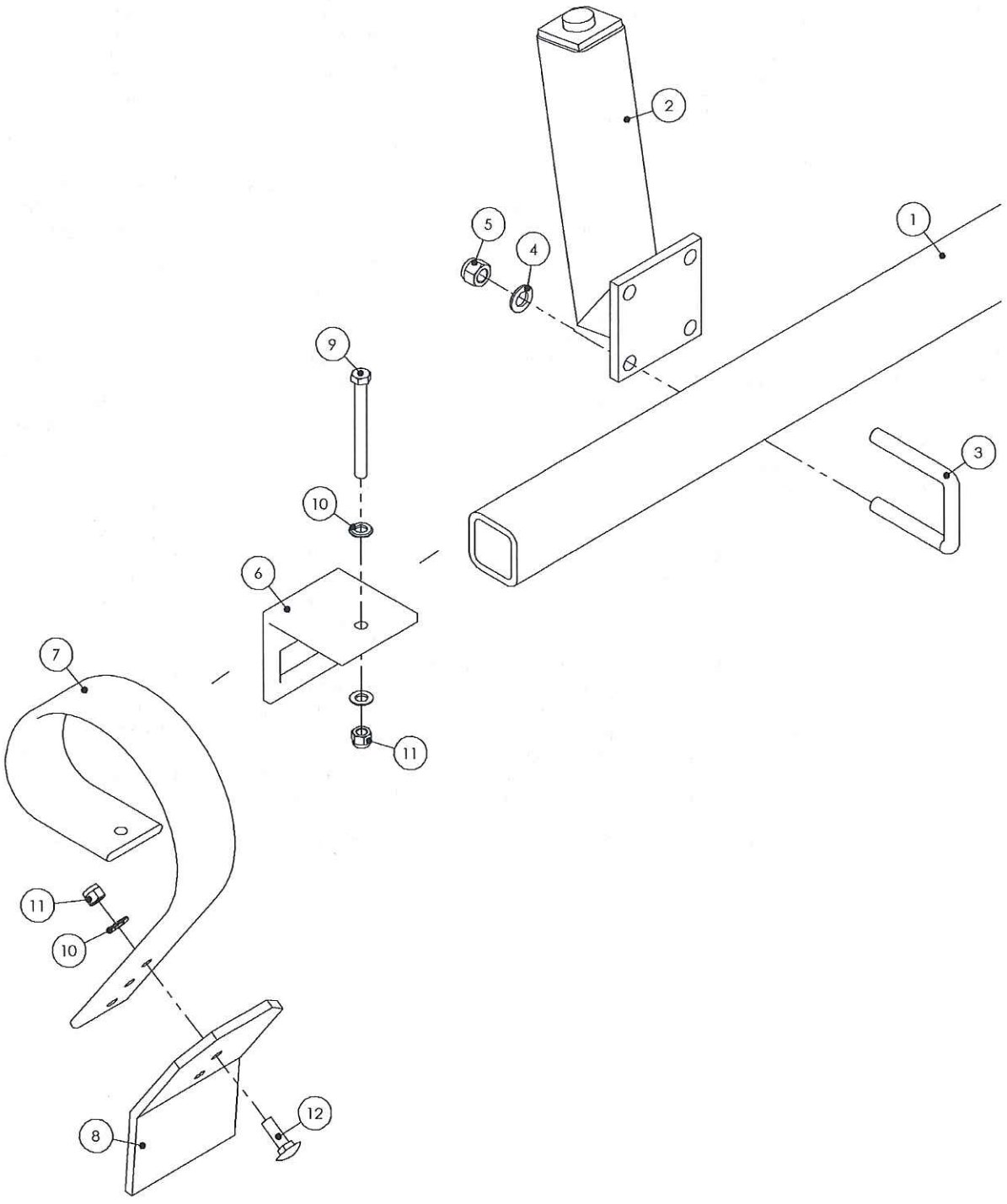
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Description	Beschreibung	Désignation
1	1012590	Hulbue	Holed bracket	Hohlbogen	Arc creux
2	1076150	Trækarm	Draw arm	Zugarm	Bras de traction
3	1140422	3m. bom	Bar	Stab	Barre
	1053470	4m. bom	Bar	Stab	Barre
4	0426100	Langfingertand	Tine	Zinken	Dent
5	1076120	Beslag	Bracket	Beschlag	Garnitures
6	0382160	Spændebøjle 100x100	String brace	Klammer	Colier de serrage
7	0272290	Facetskive M16	Disc	Scheibe	Rondelle
8	0264090	Låsemøtrik M16	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
9	0377400	Hårnålesplit ø4	Hairpin split-pin	Haarnadelsplint	Goupille mecanindus
10	1011580	Nagle ø13	Spike	Niet	Rivet
11	0235370	Stålbolt M12x45	Hexagon screw	Schraube	Vis H
12	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
13	0272270	Facetskive M12	Disc	Scheibe	Rondelle
14	0382120	Spændebøjle 40x40	String brace	Klammer	Colier de serrage
15	0382100	Spændebøjle M10	String brace	Klammer	Colier de serrage
16	0264060	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
17	0272260	Facetskive M10	Disc	Scheibe	Rondelle
18	1012510	Spændeplade M10	String disc	Spannplatte	Plaque de serrage

Ground wheel drive



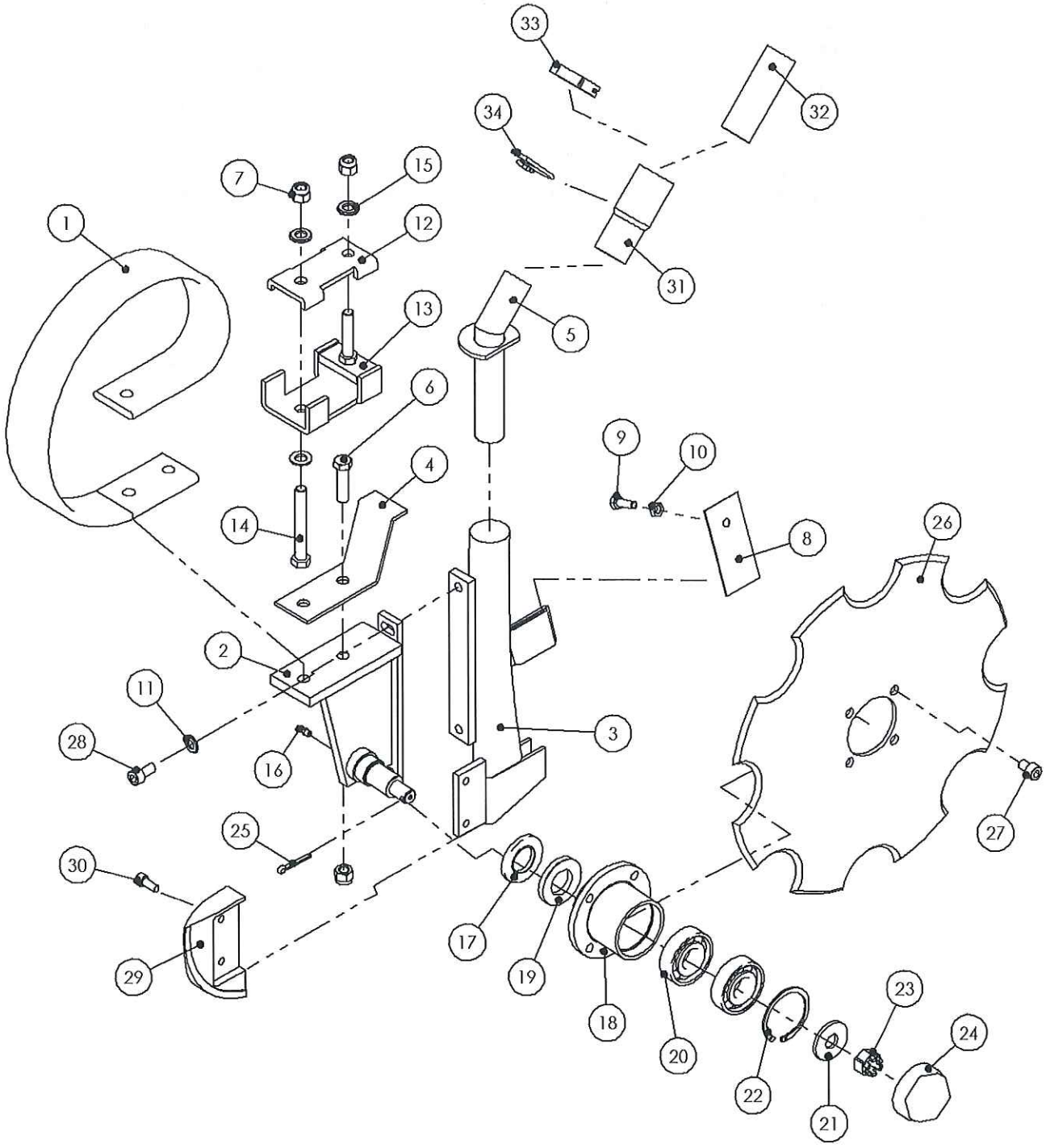
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1076830	Kædehus	Chain housing	Kettenkasten	Carter de chaîne
2	1076960	Inderrør	Innertube	Innenrohr	Tube
3	1076940	Kædekasse	Chain case	Kettenkasten	Carter de chaîne
4	1076920	Holder	Bracket	Beschlag	Garnitures
5	1076890	Leje	Bracket	Beschlag	Garnitures
6	1076850	Aksel f. såhjul	Axle	Achse	Essieu
7	1077230	Aksel med træk	Axle	Achse	Essieu
8	1076690	Låg f. kædekasse	Cover	Deckel	Couvercle
9	1076680	Afstandsbøsning	Spacer tube	Distanzbuchse	Entretoise
10	1097080	Kædehjul, 13 tands	Sprocket wheel, 13 T.	Kettenrad, 13 Z.	Roue à chaîne, 13 D.
11	1097070	Kædehjul, 14 tands	Sprocket wheel, 14T.	Kettenrad, 14 Z.	Roue à chaîne, 14 D.
12	0471650	Sporkugleleje	Track runner bearing	Rillenkugellager	Roulement à billes
13	0471651	Plade f. sporkugleleje	Plate for bearing	Platte für Kugellager	Plat pour le roulement
14	0472300	Sporkugleleje 6004-Z	Track runner bearing	Rillenkugellager	Roulement à billes
15	0379160	Låsering I 42	Retaining ring	Verschlußring	Bague de fermeture
16	P7991057117	Tand	Tine	Zinken	Dent
17	P7991089002	Plast prop	PVC cap	Verschluss	Bouchon en plastique
18	P7991057202	Tandhjul, 32 tands	Cogwheel, 32 T.	Kettenrad, 32 Z.	Pignon, 32 D.
19	P79988D40501	Skive 40x50x0,5	Washer	Scheibe	Rondelle
20	P79988D405005	Skive 40x50x1	Washer	Scheibe	Rondelle
21	P00155827	Låsering 40x2,5	Retaining ring	Verschlußring	Bague de fermeture
22	P79988D81405	Facetskive 8x14x0,5	Disc	Scheibe	Rondelle
23	P00162158	Facetskive 8,4	Disc	Scheibe	Rondelle
24	P79471D808	Låsering 8x0,8	Retaining ring	Verschlußring	Bague de fermeture
25	P79988D8141	Skive 8x14x1	Shim ring	Scheibe	Rondelle
26	0432500	Smørenippel M8	Lubricating nipple	Schmiernippel	Graisseur
27	0475070	Glideleje 303416 E	Slide bearing	Gleitlager	Palier lisse
28	0234830	Stålbolt M8x60	Hexagon screw	Schraube	Vis H
29	0272250	Facetskive M8	Disc	Scheibe	Rondelle
30	0264050	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
31	0234750	Stålsætskrue M8x20	Hexagon screw	Schraube	Vis de pression
32	0422351	Tandholder	Clamp	Spannstück	Bride de dent
33	0235450	Stålbolt M12x90	Hexagon screw	Schraube	Vis H
34	0272270	Facetskive M12	Disc	Scheibe	Rondelle
35	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
36	P7991057114	Fjeder	Clamping spring	Spannfeder f. freilauf	Ressort
37	1126970	Såhjul	Seedwheel	Spornradantrieb	Entrainement roue
38	0373350	Split ø5x50	Split pin	Splint	Goupille
39	0371500	Spændstift ø6x32	Retaining pin	Spannstift	Goupille mecanindus
40	0377400	Hårnålesplit ø4	Hairpin split-pin	Haarnadelsplint	Goupille mecanindus
41	0377200	Positioneringsbolt	Indexing plungers	Rastbolzen	Doigt d'indexage, avec ecrou
42	0409402	Kæde, 2m.	Chain	Kette	Chaîne
43	0409411	Kæde samlings led	Chain link	Kettenglied	Anneau de chaîne

Springboard



Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	1077010	3m. bom	Bar	Stab	Barre
	1077020	4m. bom	Bar	Stab	Barre
2	1139420	Inderrør	Innertube	Innenrohr	Tube
3	0382150	Spændebøjle 70x70	String brace	Klammer	Colier de serrage
4	0272290	Facetskive M16	Disc	Scheibe	Rondelle
5	0264090	Låsemøtrik M16	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
6	633052200	Tandholder	Clamp	Spannstück	Bride de dent
7	0422144	Tand	Tine	Zinken	Dent
8	0422143	Slidplade	Plate	Platte	Plaque
9	0235480	Stålbolt M12x120	Hexagon screw	Schraube	Vis H
10	0272270	Facetskive M12	Disc	Scheibe	Rondelle
11	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
12	0248660	Bræddebolt M12x40	Cup square bolt	Flachrungschraube	Vis J

Disc share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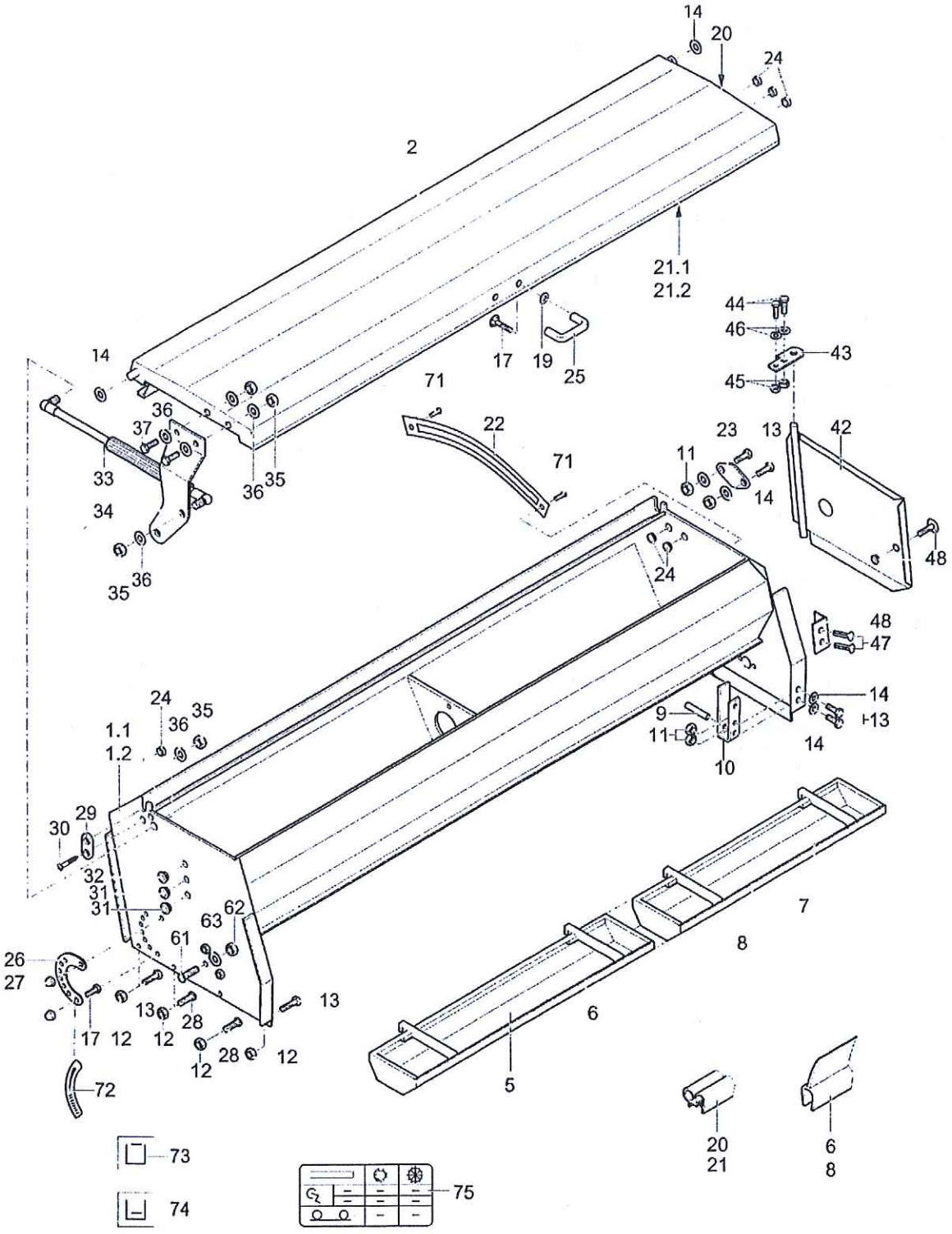
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	0422500	Overfjeder	Spring	Oberteil	Ressort supérieure
2	1036521	Flange m. aksel, venstre	Axle, left	Achse, links	Essieu, gauche
	1036531	Flange m. aksel, højre	Axle, right	Achse, rechts	Essieu, droite
3	1036500	Såhus, venstre	Coulter house, left	Schargehäuse, links	Porte-soc, gauche
	1036531	Såhus, højre	Coulter house, right	Schargehäuse, rechts	Porte-soc, droite
4	1127480	Holdeplade	Plate	Platte	Plaque
5	1036480	Mellem rør	Pipe	Rohr	Tube
6	0235370	Stålbolt M12x45	Hexagon screw	Schraube	Vis H
7	0264070	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
8	1036490	Skraber	Scraber	Abstrecher	Decrottoir
9	0234760	Stålsætskrue M8x25	Hexagon screw	Schraube	Vis de pression
10	0261350	Stålmøtrik M8	Nut	Mutter	Écrou
11	0272260	Facetskive M10	Disc	Scheibe	Rondelle
12	1036400	Øverste spændestykke	Uppel clamp	Halter, oben	Clame, haut
13	1129550	Nederste spændestykke	Lower clamp	Halter, unten	Clame, bas
14	0235450	Stålbolt M12x90	Hexagon screw	Schraube	Vis H
15	0272270	Facetskive M12	Disc	Scheibe	Rondelle
16	0432100	Smørenippel M6	Lubricating nipple	Schmiernippel	Graisseur
17	0483390	Tætningslamel	Sealing device	Dichtung Lamelle	Joint
18	1036541	Nav	Hub	Nabe	Moyeu nu
19	0483580	Olietætnings ring	Oil sealing ring	Dichtungsring	Joint
20	0479070	Kugleleje	Ball bearing	Kugellager	Roulement à billes
21	1036930	Skive	Disc	Scheibe	Rondelle
22	0379220	Låsering I 62	Retaining ring	Verschlußring	Bague de fermeture
23	0262150	Kronemøtrik M16	Slotted nut	Kronenmutter	Écrou à créneaux
24	0393830	Nav dæksel	Hub cover	Buchse abdecken	Moyeu parcourir
25	0373310	Split ø5x32	Spilt	Splint	Goupille
26	0427851	Tallerken	Disc	Teller	Disque
27	0227790	Insex skrue M10x14	Countersunk screw	Senkschraube	Vis FHC
28	0227820	Insex skrue M10x20	Countersunk screw	Senkschraube	Vis FHC
29	0411350	Såskær, venstre	Drill coulter, left	Drillschar, links	Soc semeur, gauche
	0411340	Såskær, højre	Drill coulter, right	Drillschar, rechts	Soc semeur, droite
30	0228020	Unbraco M8x20	Unbraco	Unbraco	Unbraco
31	0489020	Overgangsmuffe	Sleeve	Übergangsmuffe	Manchon
32	332045027	Slange	Tube	Schlauch	Tuyau ergot
33	0435110	Stor klemme 46/12	Large clamp	Grosse Spannband	Grand collier
34	0435100	Lille klemme 38/12	Small clamp	Kleine Spannband	Petit collier

Hopper 3m.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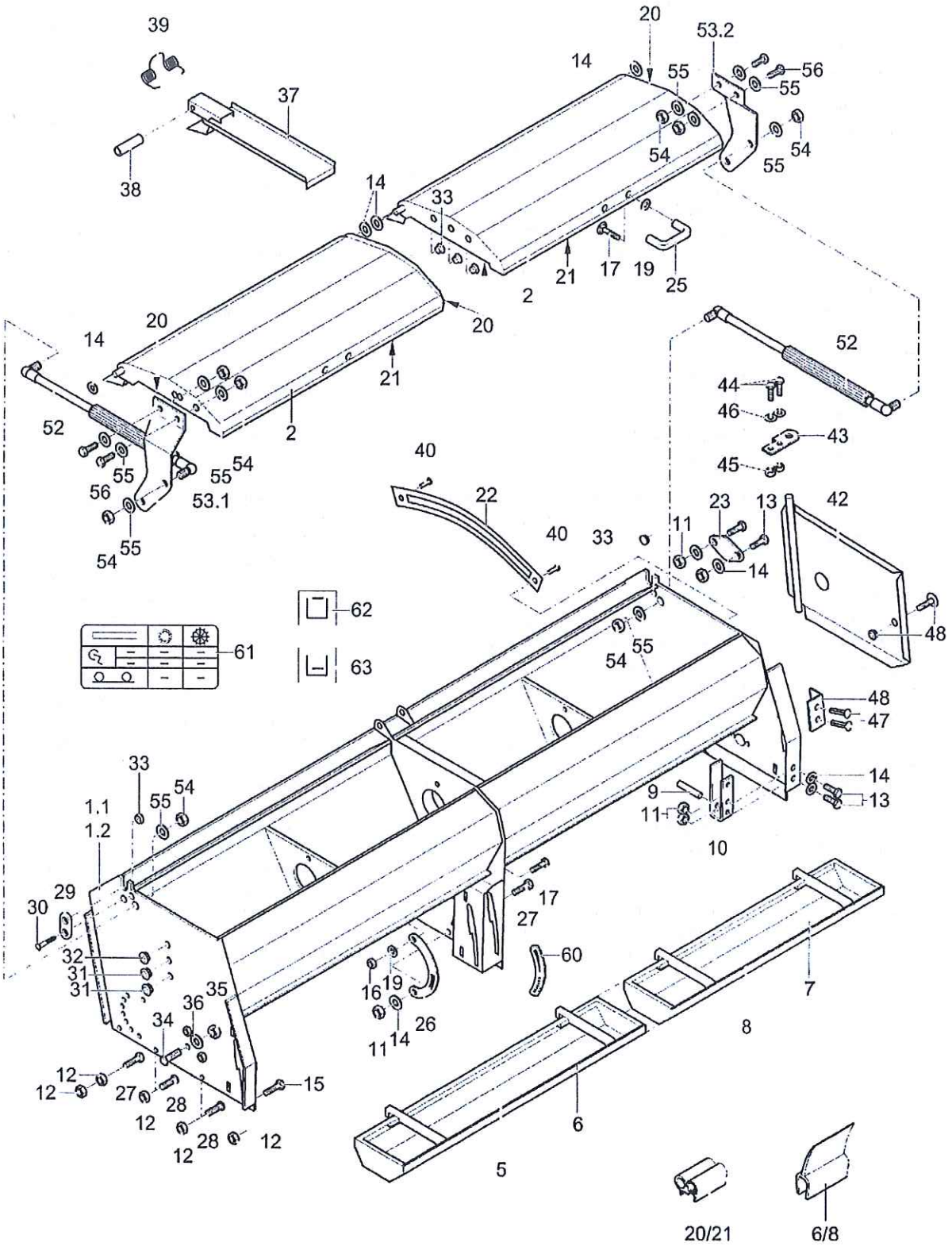
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1.1	P0086015025	Såkasse 700 L	Hopper	Saatkasten	Trémie
1.2		Såkasse 1000 L	Hopper	Saatkasten	Trémie
2	P7991067801	Såkasse låg	Hopper cover	Kastendeckel	Couvercle
5	P7991061118	Bakke 1180	Calibration tray	Mulde	Auget
6	P7991069018	Tætning 1180	Seal	Dichtungsprofil	Joint
7	P7991061119	Bakke 1260	Calibration tray	Mulde	Auget
8	P7991069019	Tætning 1260	Seal	Dichtungsprofil	Joint
9	P00173112	Spændestift 5x40	Rollpin	Spannstift	Goupille mecanindus
10	P7991060040	Håndtag holder	Crank holder	Kurbelhalter	Support
11	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
12	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
13	P00103041	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
14	P00162158	Skive A 8,4	Washer	Scheibe	Rondelle
17	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
19	P00162157	Skive A 6,4	Washer	Scheibe	Rondelle
20	P7991069901	Tætning 450	Seal	Dichtungsprofil	Joint
21	P7991069912	Tætning 2500	Seal	Dichtungsprofil	Joint
22	P7991112062	Profil	Grid	Stellhebelblech	Reglette
23	P7991110113	Plade	Cover	Deckel	Couverture
24	P7991087403	Bøsning	End coupling	Verschlußstopfen	Bouchon
25	P7990011103	Håndtag	Handle	Handgriff	Poignee
26	P7991060042	Profil	Grid	Rastenblech	Reglette
27	P00125126	Topmøtrik M6 DIN 1587	Cover nut	Hutmutter	Écrou a chapeau
28	P7991088410	Bræddebolt M8x16	Cup square bolt	Flachrungschraube	Vis J
29	P7991060037	Dæksel	Lid lock	Deckelsicherung	Eclisse
30	P797976DB6316A	Pladeskrue M6,3x16	Sheet metal screw	Blechschraube	Vis H
31	P7991087401	Låg	Cap	Adbeckkappe	Chapeau
32	P7991087402	Låg	Cap	Adbeckkappe	Chapeau
33	P7991067513	Cylinder	Gas strut	Gasfeder	Verin amortisseur
34	P7991067511	Endestyk	Latch	Federanlenklasche	Eclisse de ressort
35	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
36	P00120158	Skive A 8,4	Washer	Scheibe	Rondelle
37	P00103043	Stålsætskrue M8x20	Hexagon screw	Schraube	Vis de pression
42	P7991113111	Beskyttelsesskærm	Protection plate	Schutzblech	Protection
43	P7991064002	Holder	Mounting	Halter	Support
44	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
45	P00120157	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
46	P00162157	Skive A 6,4	Washer	Scheibe	Rondelle
47	P797337D38AL	Blindnitte 3x8	Blind rivets	Blindniet	Popnitte
48	P7991064003	Skrue	Pressure fastener	Druckverschluß	Fermoir
61	P00108143	Stålbolt M10x25	Screw M	Schraube	Vis M
62	P00120160	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
63	P79440DR11A	Skive R 11	Washer	Scheibe	Rondelle
71	P797337D48A	Blindnitte 4x8	Blind rivets	Blindniet	Popnitte
72	P00495773	Skala transfer	Decal	Aufkleber	Etiquette
73	P00495760	Transfers høj frø indhold	Decal	Aufkleber	Etiquette
74	P00495761	Transfers lav frø indhold	Decal	Aufkleber	Etiquette
75	P7999980221	Transfers for indsåning	Calibration	Adbrehhinweis	Étalonnage

Hopper 4m.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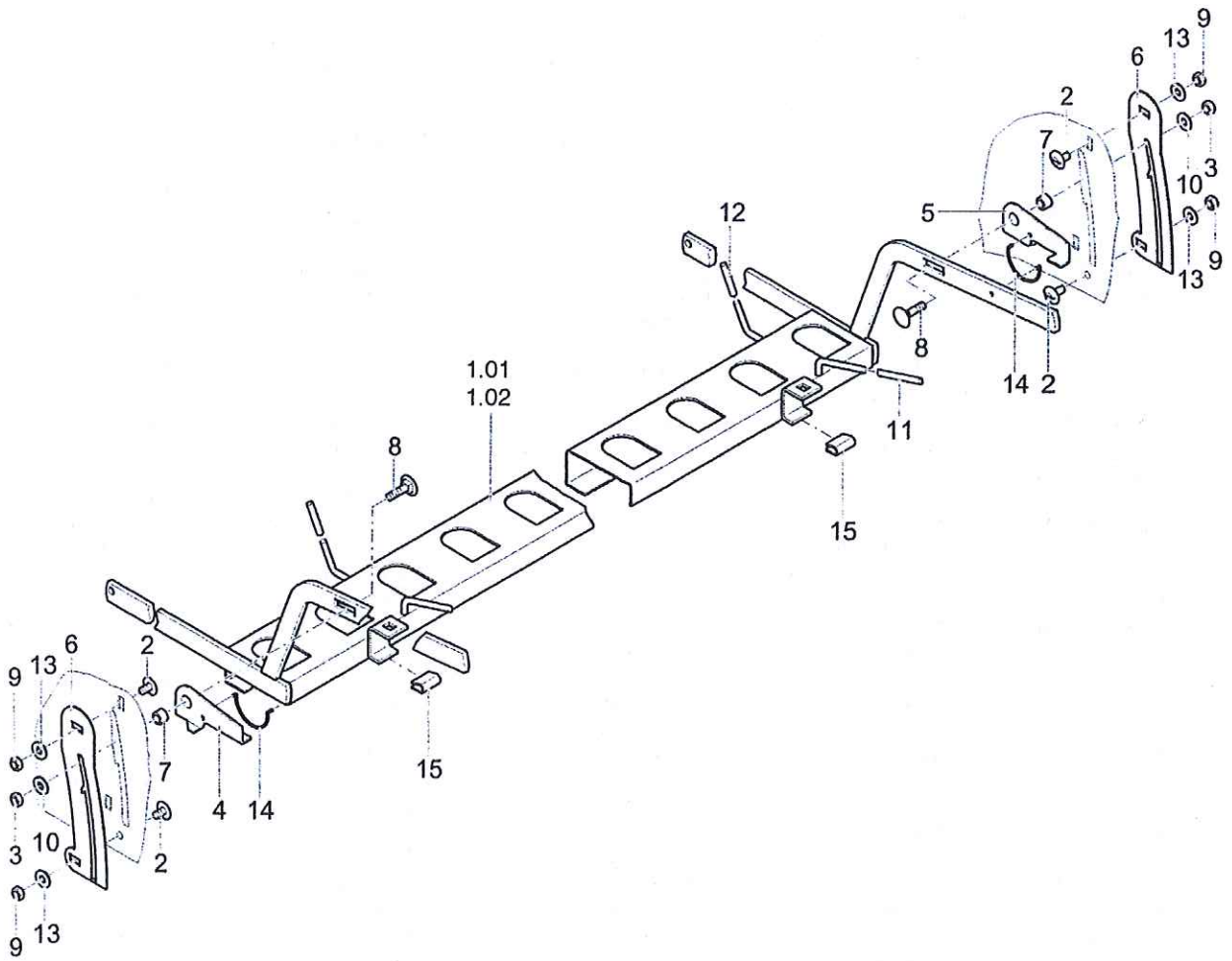
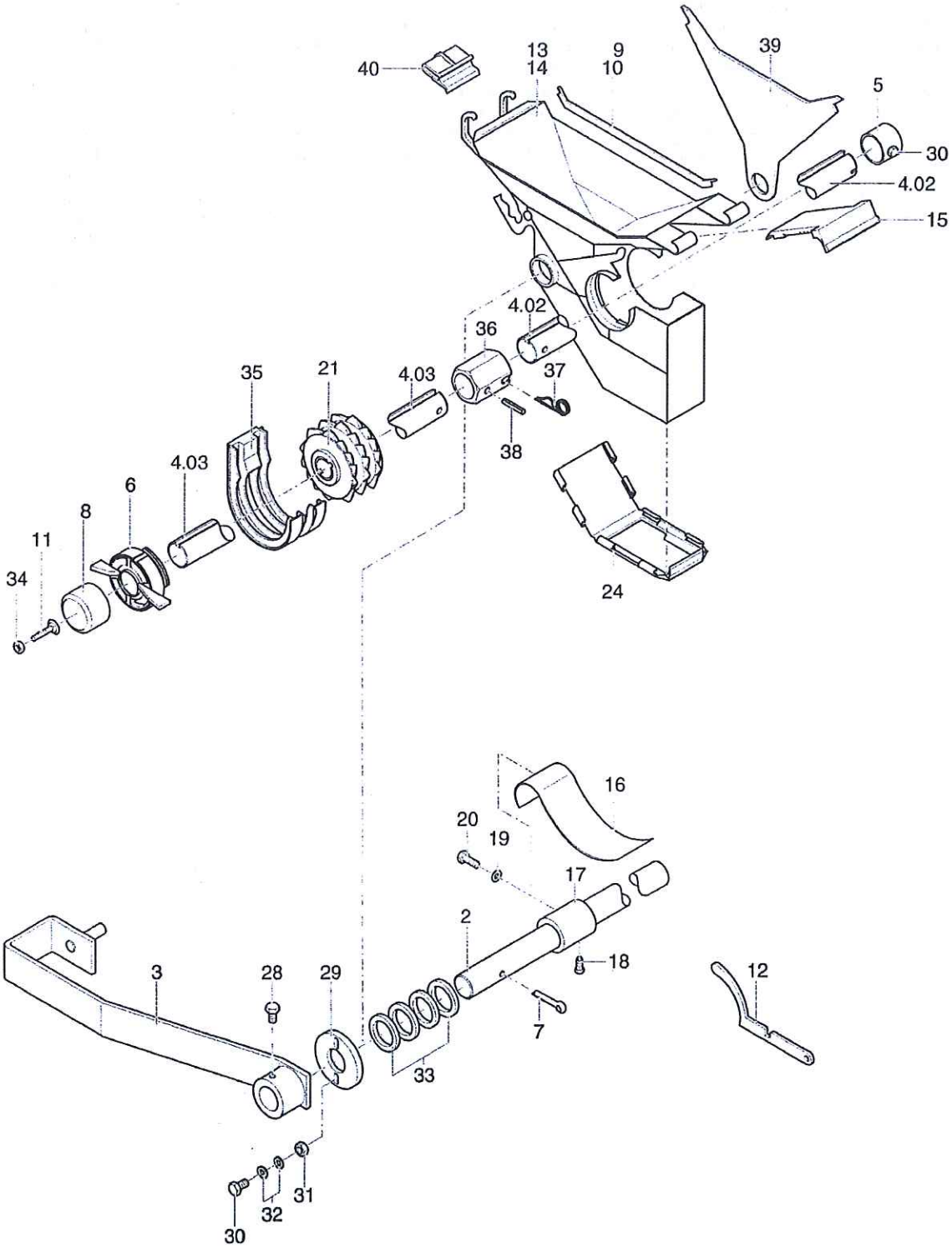
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1.1	P0086015045	Såkasse 1000 L	Hopper	Saatkasten	Trémie
1.2	P0086016025	Såkasse 1400 L	Hopper	Saatkasten	Trémie
2	P7991067803	Såkasse låg	Hopper cover	Kastendeckel	Couvercle
5	P7991061122	Bakke 1636	Calibration tray	Mulde	Auget
6	P7991069020	Tætning 1636	Seal	Dichtungsprofil	Joint
7	P7991061123	Bakke 1756	Calibration tray	Mulde	Auget
8	P7991069013	Tætning 1756	Seal	Dichtungsprofil	Joint
9	P00173122	Spændestift 5x40	Rollpin	Spannstift	Goupille mecanindus
10	P7991060040	Håndtag holder	Crank holder	Kurbelhalter	Support
11	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
12	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
13	P00103021	Stålsætskrue M6x16	Hexagon screw	Schraube	Vis de pression
14	P00162157	Skive A 8,4	Washer	Scheibe	Rondelle
15	P7991063102	Tensile bolt M8x16	Tensi lock bolt	Tensilockschraube	Vis Tensi
16	P00120157	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
17	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
19	P00162157	Skive A 6,4	Washer	Scheibe	Rondelle
20	P7991069901	Tætning 450	Seal	Dichtungsprofil	Joint
21	P7991069906	Tætning 1740	Seal	Dichtungsprofil	Joint
22	P7991112062	Profil	Grid	Stellhebelblech	Reglette
23	P7991110113	Plade	Cover	Deckel	Couverture
25	P7990011103	Håndtag	Handle	Handgriff	Poignee
26	P7991112061	Profil	Grid	Rastenblech	Reglette
27	P00103045	Stålsætskrue M8x30	Hexagon screw	Schraube	Vis de pression
28	P7991088410	Bræddebolt M8x16	Cup square bolt	Flachrungschraube	Vis J
29	P7991060037	Dæksel	Lid lock	Deckelsicherung	Eclisse
30	P797976DB6316A	Pladeskrue M6,3x16	Sheet metal screw	Blechschraube	Vis H
31	P7991087401	Låg	Cap	Adbeckkappe	Chapeau
32	P7991087402	Låg	Cap	Adbeckkappe	Chapeau
33	P7991087403	Bøsning	End coupling	Verschlußstopfen	Bouchon
34	P00108143	Stålbolt M10x25	Screw M	Schraube	Vis M
35	P00120160	Låsemøtrik M10	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
36	P79440DR11A	Skive R 11	Washer	Scheibe	Rondelle
37	P7991065701	Beslag	Bridge	Brücke	Traverse
38	P7991060411	Glidebøsning	Glide bush	Führungshülse	Entretoise
39	P7991060415	Fjeder	Spring	Feder	Ressort
40	P797337D48A	Blindnitte 4x8	Blind rivets	Blindniet	Popnitte
42	P7991113111	Beskyttelsesskærm	Protection plate	Schutzblech	Protection
43	P7991064002	Holder	Mounting	Halter	Support
44	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
45	P00120157	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
46	P00120158	Skive A 8,4	Washer	Scheibe	Rondelle
47	P797337D38AL	Blindnitte 3x8	Blind rivets	Blindniet	Popnitte
48	P7991064003	Skrue	Pressure fastener	Druckverschluß	Fermoir
52	P7991067513	Cylinder	Gas strut	Gasfeder	Verin amortisseur
53.1	P7991067511	Endestyk	Latch	Federanlenklasche	Eclisse de ressort
53.2	P7991067512	Endestyk	Latch	Federanlenklasche	Eclisse de ressort
54	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
55	P00162158	Skive A 8,4	Washer	Scheibe	Rondelle
56	P00103043	Stålsætskrue M8x20	Hexagon screw	Schraube	Vis de pression
60	P00495775	Skala transfer	Decal	Aufkleber	Etiquette
61	P7999980222	Transfers for indsåning	Calibration	Adbrehhinweis	Étalonnage
62	P00495760	Transfers høj frø indhold	Decal	Aufkleber	Etiquette
63	P00495761	Transfers lav frø indhold	Decal	Aufkleber	Etiquette

Hopper holder



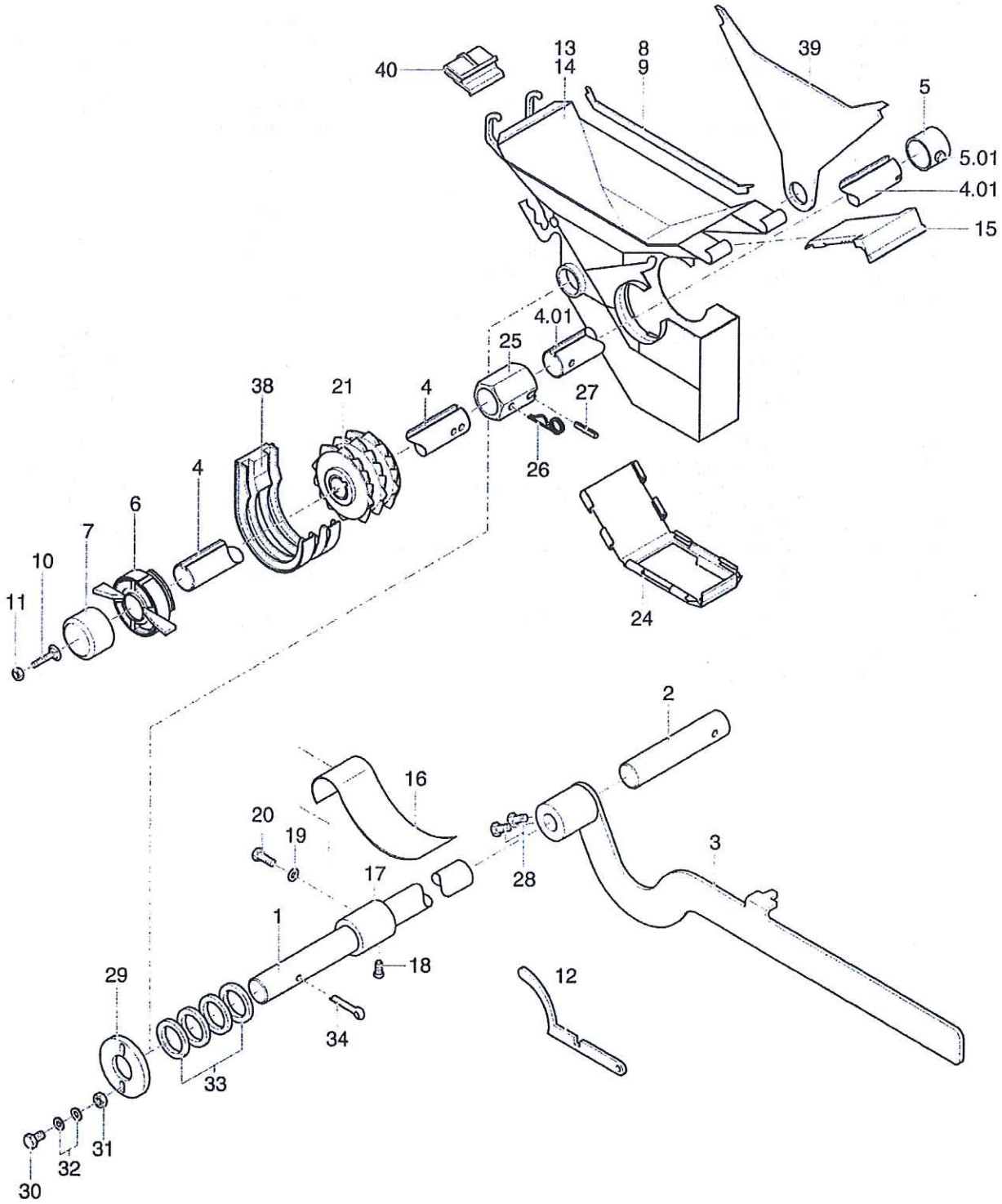
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1.1	P7991112303	3m. holder	Holder	Saatleitungshalter	Support
1.2	P7991112306	4m. holder	Holder	Saatleitungshalter	Support
2	P7991088410	Bræddebolt M8x16	Cup square bolt	Flachrungschraube	Vis J
3	P00122005	Låsemøtrik M8 DIN 985	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
4	P7991112231	Beslag, venstre	Latch, left	Riegel, link	Verrou, gauche
5	P7991112232	Beslag, højre	Latch, right	Riegel, rechts	Verrou, droite
6	P7991112233	Indstillingsplade	Adjustment plate	Einstellblech	Tole de réglage
7	P7991112234	Afstandsbøsning	Distance pipe	Distanzrohr	Tube de distancer
8	P00108146	Bræddebolt M8x30	Cup square bolt	Flachrungschraube	Vis J
9	P00120159	Låsemøtrik M8 DIN 934	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
10	P799021DA84A	Skive A 8,4 DIN 9021	Washer	Scheibe	Rondelle
11	P7991087001	Slange 95	Hose	Maschinenschlauch	Gaine
12	P7991087002	Slange 74	Hose	Maschinenschlauch	Gaine
13	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
14	P7991112235	Fjeder	Spring	Riegelfeder	Ressort
15	P7991068908	Beskyttelse	Protection	Kantenschutz	Protection

Distribution 3m.



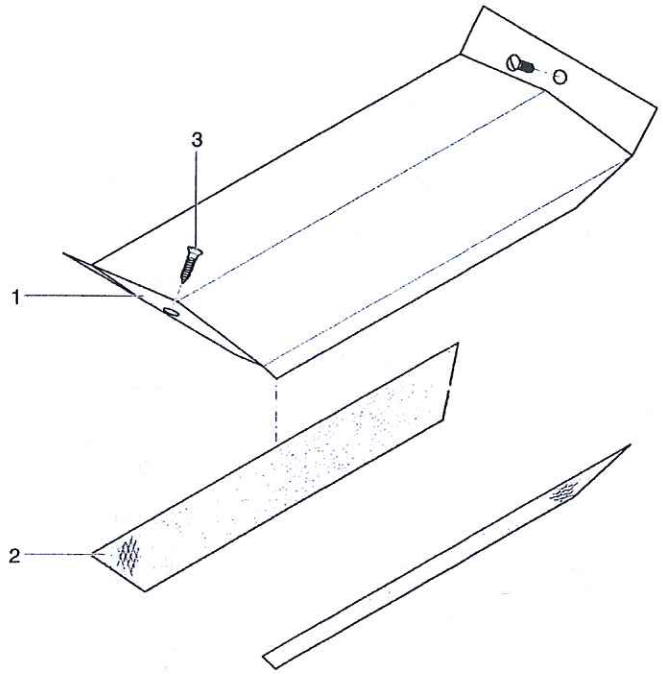
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
2	P7991069701	Aksel	Bottom flap shaft	Klappenwelle	Arbre des linguets
3	P7991061700	Håndtag	Stellhebel	Levier	Lever
4.2	P7991062011	Trækaksel, højre	Metering shaft, right	Säwelle, rechts	Arbre doseur, droite
4.3	P7991062010	Trækaksel, venstre	Metering shaft, left	Säwelle, link	Arbre doseur, gauche
5	P79705DA20A	Ring A 20	Set collar	Stellring	Bague de reglage
6	P7991060114	Kugleleje	Bearing	Säwellenlager	Palier
7	P7994D425A	Split 4x25	Cotter pin	Splint	Goupille
8	P7991062311	Pressure cap	Pressure cap	Druckkappe	Butée
9	P7991060043	Afstandsplade	Spacer	Ausgleichsblech	Cale
10	P7991060044	Afstandsplade	Spacer	Ausgleichsblech	Cale
11	P00108146	Bræddebolt M8x30	Cup square bolt	Flachrungschraube	Vis J
12	P7991060045	Justeringsstykke	Calibration gauge	Justierlehre	Cale de reglage
13	P7991069201	Tragt 80	Funnel	Sägehäuse	Carter
14	P7991069200	Tragt 100	Funnel	Sägehäuse	Carter
15	P7991060121	Ventil	Shutter	Absperrschieber	Trappe de vid.
16	P7991060112	Bundklap	Bottom flap	Bodenklappe	Linguet
17	P7991060113	Bøsning	Bush	Buchse	Bague
18	P00103040	Stålsætskrue M8x12	Hexagon screw	Schraube	Vis de pression
19	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
20	P00103019	Stålsætskrue M6x8	Hexagon screw	Schraube	Vis de pression
21	P7991097421	Såhjul	Seed wheel	Särad	Roue de distribution
24	P7991060126	Bundstykke	Extension	Aufsatztrichter	Clips
28	P79561DB816PA	Pladeskrue	Sheet metal screw	Blechschraube	Vis H
29	P7991060119	Leje låg	Bearing cap	Lagerdeckel	Chapeau de palier
30	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
31	P00122004	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
32	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
33	P79988D16221	Afstandsskive 16x22x1	Shim ring	Passscheibe	Rondelle
34	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
35	P7991060046	Reducerings ringe	Fine seed fingers	Reduziereinsatz	Carter de réduction
36	P7991062014	Bøsning 27	Bush	Hülse	Bague
37	P7991011387	Hårnålesplit 3x75	Spring cotter pin	Federvorstecker	Goupille
38	P00173142	Spændestift 6x32	Rollpin	Spannstift	Goupille mecanindus
39	P7991060041	Profil	Grid	Steg	Reglette
40	P7991060049	Klemme	Terminal	Klammer	Plot de branchement

Distribution 4m.

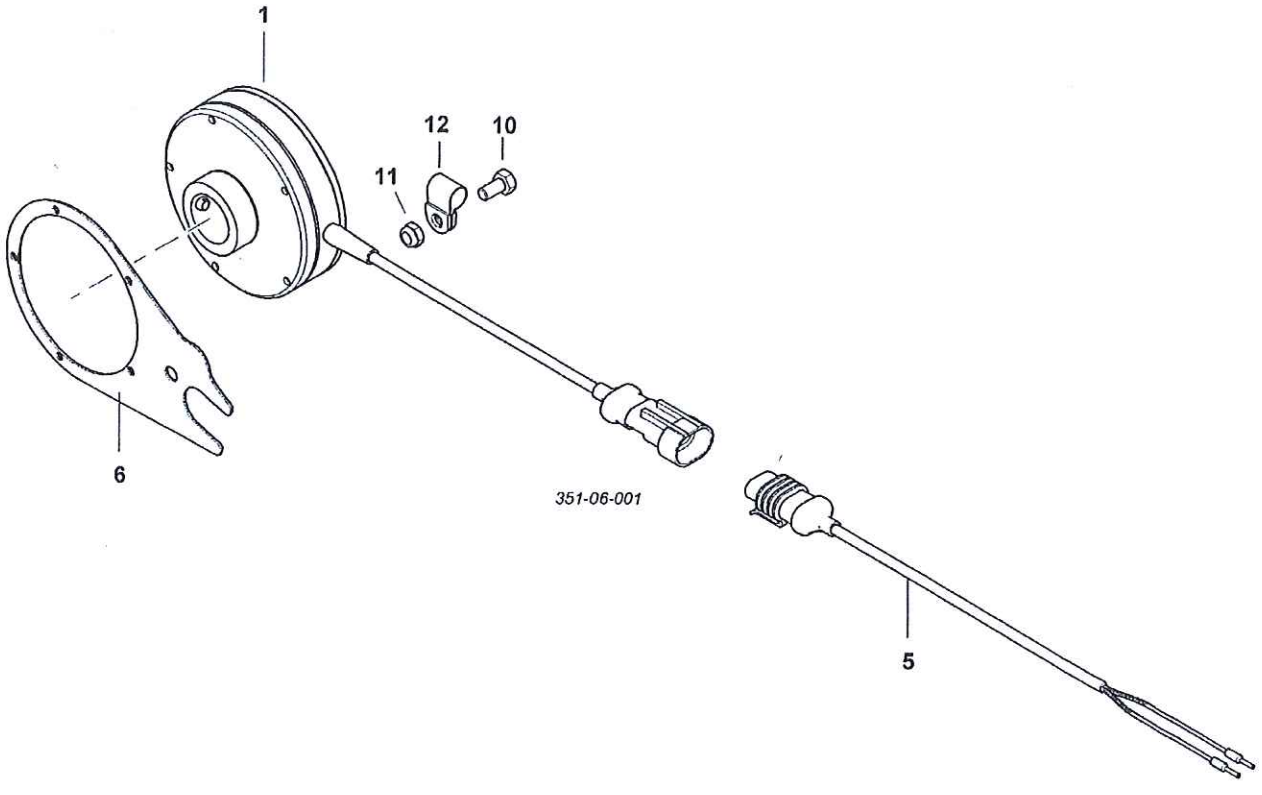


Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991069701	Aksel	Bottom flap shaft	Klappenwelle	Arbre des linguets
2	P7991099705	Aksel	Bottom flap shaft	Klappenwelle	Arbre des linguets
3	P7991112601	Håndtag	Stellhebel	Levier	Lever
4	P7991062010	Trækaksel, venstre	Metering shaft, left	Säwelle, link	Arbre doseur, gauche
4.1	P7991062011	Trækaksel, højre	Metering shaft, right	Säwelle, rechts	Arbre doseur, droite
5	P79705DA20A	Ring A 20	Set collar	Stellring	Bague de reglage
5.1	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
6	P7991060114	Kugleleje	Bearing	Säwellenlager	Palier
7	P7991062311	Pressure cap	Pressure cap	Druckkappe	Butée
8	P7991060043	Afstandsplade	Spacer	Ausgleichsblech	Cale
9	P7991060044	Afstandsplade	Spacer	Ausgleichsblech	Cale
10	P00108146	Bræddebolt M8x30	Cup square bolt	Flachrungschraube	Vis J
11	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
12	P7991060045	Justeringsstykke	Calibration gauge	Justierlehre	Cale de reglage
13	P7991069201	Tragt 80	Funnel	Sägehäuse	Carter
14	P7991069200	Tragt 100	Funnel	Sägehäuse	Carter
15	P7991060121	Ventil	Shutter	Absperrschieber	Trappe de vid.
16	P7991060112	Bundklap	Bottom flap	Bodenklappe	Linguet
17	P7991060113	Bøsning	Bush	Buchse	Bague
18	P00103040	Stålsætskrue M8x12	Hexagon screw	Schraube	Vis de pression
19	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
20	P00103019	Stålsætskrue M6x8	Hexagon screw	Schraube	Vis de pression
21	P7991097421	Såhjul	Seed wheel	Särad	Roue de distribution
24	P7991060126	Bundstykke	Extension	Aufsatztrichter	Clips
25	P7991062014	Bøsning 27	Bush	Hülse	Bague
27	P7991011387	Hårnålesplit 3x75	Spring cotter pin	Federvorstecker	Goupille
28	P79561DB816PA	Pladeskrue	Sheet metal screw	Blechschraube	Vis H
29	P7991060119	Leje låg	Bearing cap	Lagerdeckel	Chapeau de palier
30	P00103021	Stålsætskrue M6x12	Hexagon screw	Schraube	Vis de pression
31	P00122004	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
32	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
33	P79988D16221	Afstandsskive 16x22x1	Shim ring	Passscheibe	Rondelle
34	P7994D425A	Split 4x25	Cotter pin	Splint	Goupille
38	P7991060046	Reducerings ringe	Fine seed fingers	Reduziereinsatz	Carter de réduction
39	P7991060041	Profil	Grid	Steg	Reglette
40	P7991060049	Klemme	Terminal	Klammer	Plot de branchement

Cap

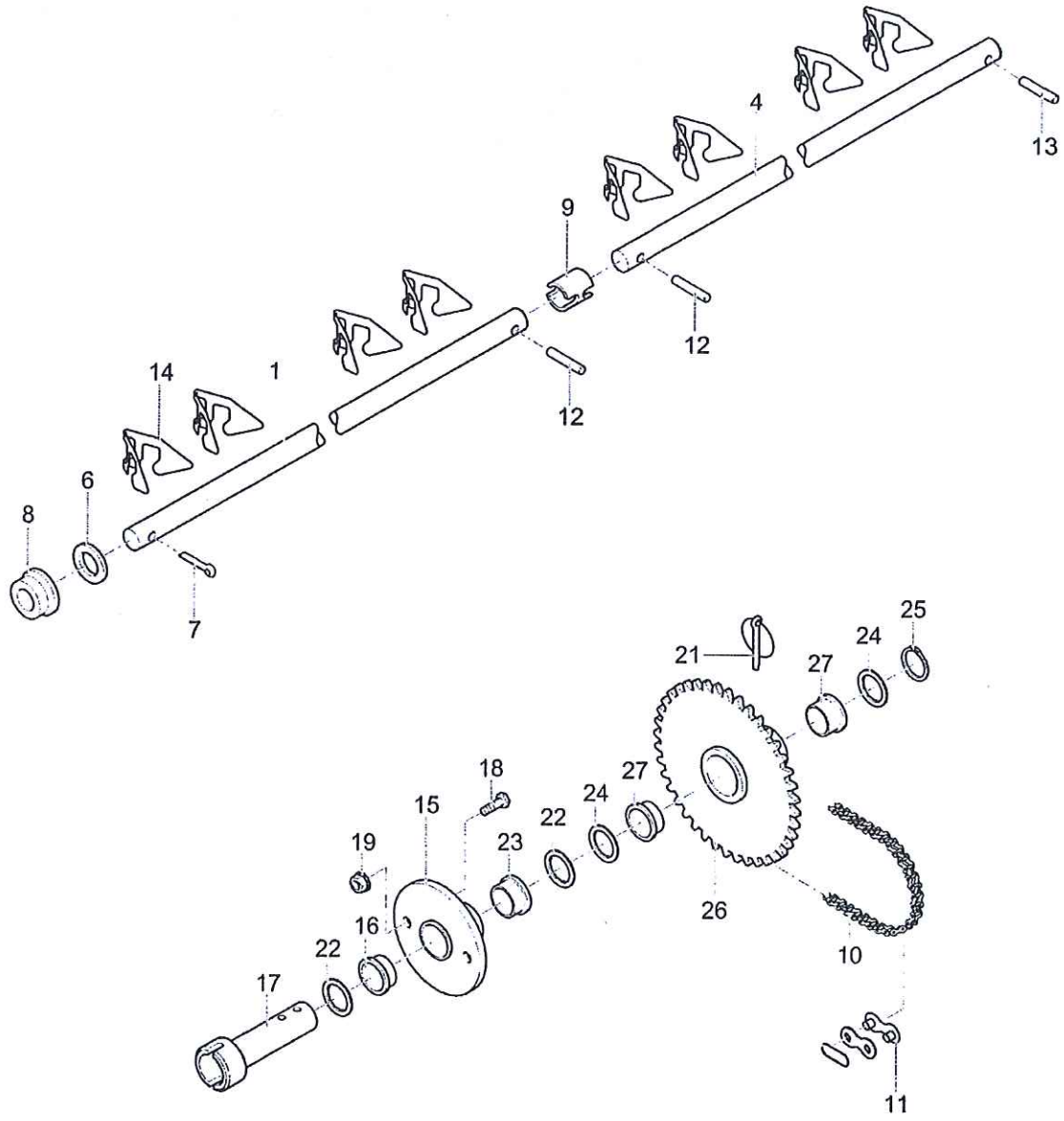


Magnetic switch



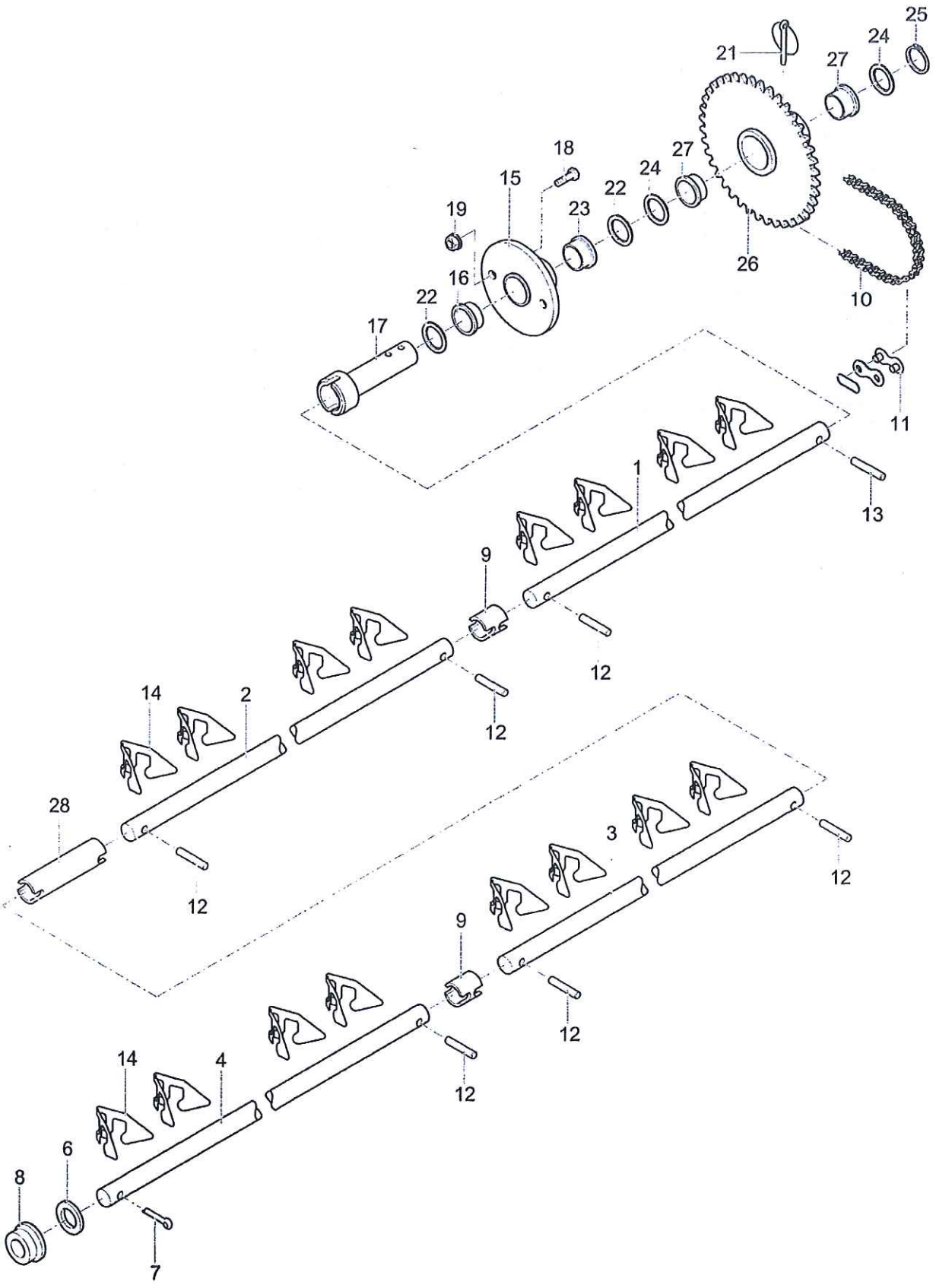
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
Låg for doserings tragt • Cap • Verschluss • Bouchon					
1	P7991067711	Låg	Cover	Verschluß	Piéce de fermeture
2	P7991067712	Pakning	Seal	Flachdichtung	Joint plat
3	P797981DB3565A	Pladeskrue	Bolt	Linsenblechschraube	Vis
Magnetisk sensor • Magnetic switct • Schlingfederkupplung • Elektro-Vanne					
1	P00853730010	Komplet sensor	Switch cpl.	Schlingfederkuppund kpl.	Elektro-Vanne
5	P00853730160	Kabel	Cable	Anschlußkabel	Cable
6	P00853730380	Skærm	Bracket	Verdrehsichrung	Fourchette
10	P79933D510PA	Stålsætskrue M5x10	Hexagon screw	Schraube	Vis de pression
11	P00122003	Låsemøtrik M5	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
12	P00448587	Minispændebøjle	Steel Hose Straps	Rohrschelle	Collier pour tubes

Shaft 3m.



Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991113703	Aksel 1307	Shaft	Welle	Arbre
4	P7991113704	Aksel 1205	Shaft	Welle	Arbre
6	P791441D15A	Skive 15 DIN 1441	Washer	Scheibe	Rondelle
7	P7994D425A	Split 4x25	Cotter pin	Splint	Goupille
8	P7991060116	Bøsning 16/22/30x15	Bush	Buchse	Bague
9	P7991060115	Leje 30	Bearing	Mittellager	Palier
10	P7991113610	Kæde 81	Chain	Kette	Chaine
11	P798187D08B1E	Samleled	Chain link	Verbindungsglied	Raccord
12	P791473D520	Spændestift 5x20	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
13	P791473D525	Spændestift 5x25	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
14	P7991113551	Finger	Agitator finger	Rührfinger	Doigt agitateur
15	P7991062001	Leje	Bearing	Lager	Palier
16	P7991113215	Bøsning GSM 2023 15	Bush	Buchse	Bague
17	P7991062201	Aksel	Axle	Achse	Pont
18	P00103041	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
19	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
21	P7991089701	Ringsplit 4,5x40	Lynch pin	Klappsplint	Goupille
22	P79988D20281A	Afstandsring	Shim ring	Passscheibe	Rondelle
23	P7991059800	Bøsning BB2012	Bush	Bundbuchse	Bague
24	P79988D202805A	Afstandsring	Shim ring	Passscheibe	Rondelle
25	P00157018	Låsering 20x1,2	Circlip	Sicherungspring	Segment d'arret
26	P7991113603	Tandhjul, 24 tands	Sprocket	Kettenrad	Pignon
27	P7991089002	Bøsning GFM 2023 16	Bush	Bundbuchse	Bague

Shaft 4m.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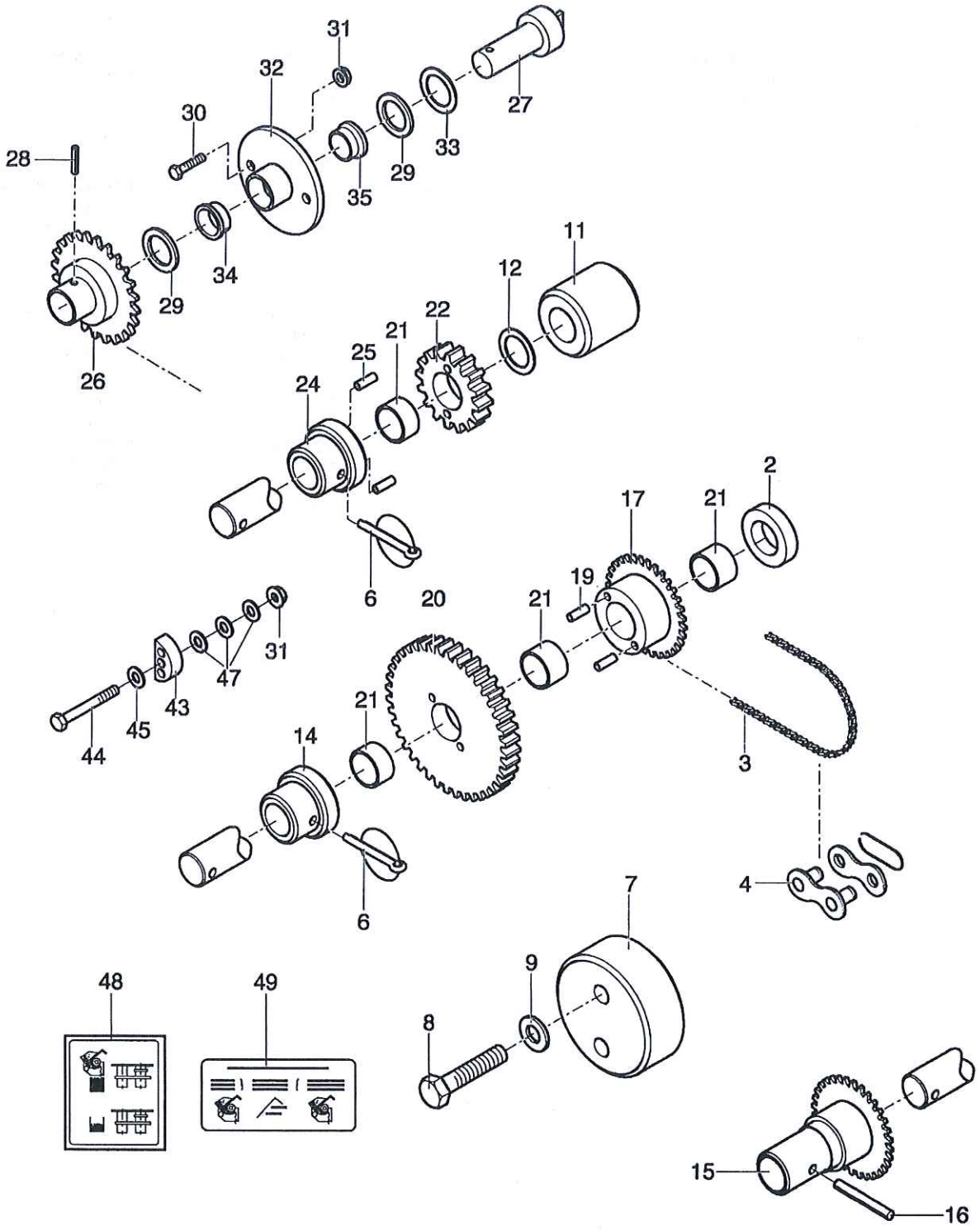
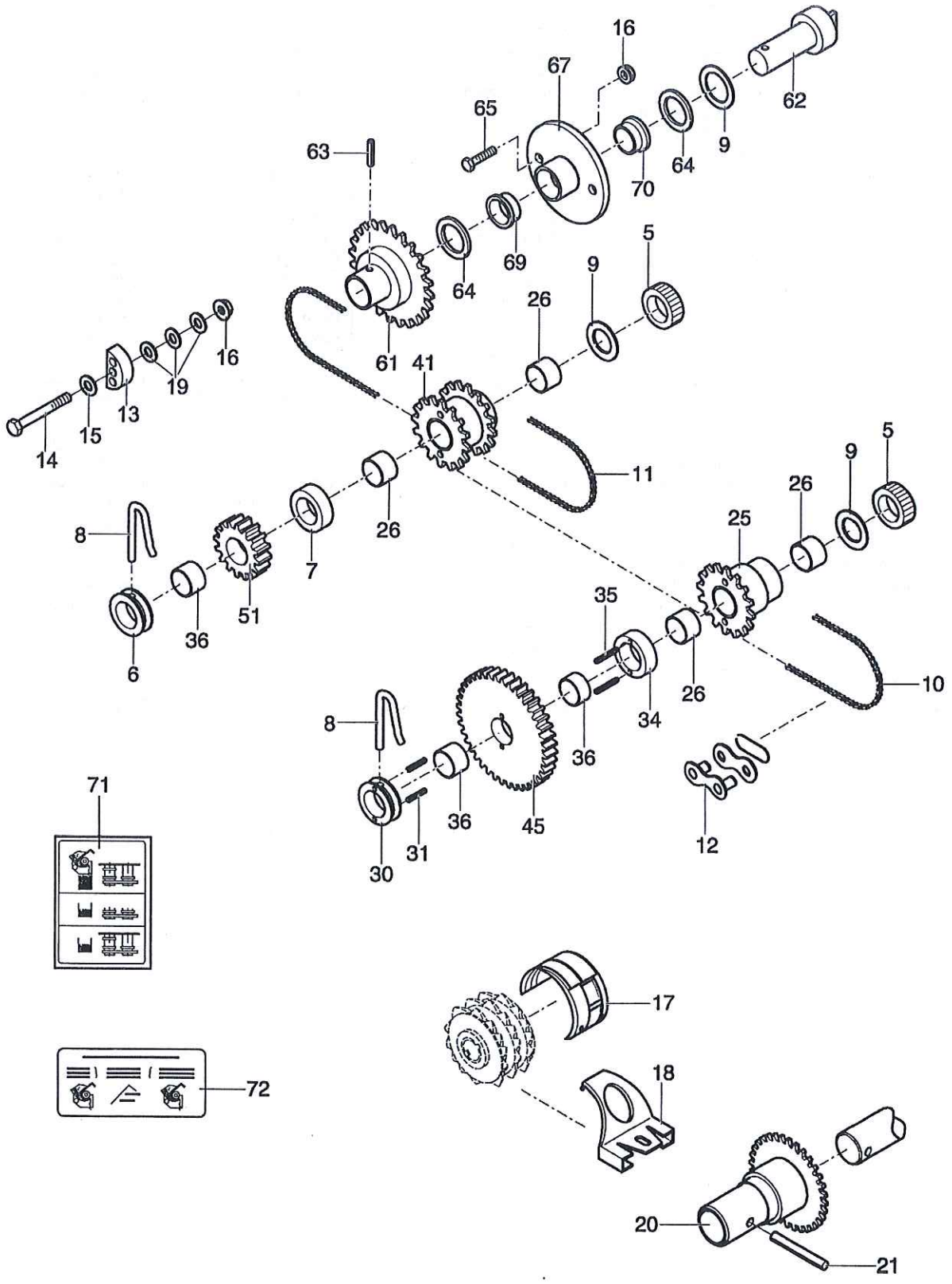
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991113705	Aksel 888	Shaft	Welle	Arbre
2	P7991113706	Aksel 904	Shaft	Welle	Arbre
3	P7991113707	Aksel 774	Shaft	Welle	Arbre
4	P7991113708	Aksel 913	Shaft	Welle	Arbre
6	P791441D15A	Skive 15 DIN 1441	Washer	Scheibe	Rondelle
7	P7994D425A	Split 4x25	Cotter pin	Splint	Goupille
8	P7991060116	Bøsning 16/22/30x15	Bush	Buchse	Bague
9	P7991060115	Leje 30	Bearing	Mittellager	Palier
10	P7991113610	Kæde 81	Chain	Kette	Chaine
11	P798187D08B1E	Samleled	Chain link	Verbindungsglied	Raccord
12	P791473D520	Spændestift 5x20	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
13	P791473D525	Spændestift 5x25	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
14	P7991113551	Finger	Agitator finger	Rührfinger	Doigt agitateur
15	P7991062001	Leje	Bearing	Lager	Palier
16	P7991113215	Bøsning GSM 2023 15	Bush	Buchse	Bague
17	P7991062201	Aksel	Axle	Achse	Pont
18	P00103041	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
19	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
21	P7991089701	Ringsplit 4,5x40	Lynch pin	Klappsplint	Goupille
22	P79988D20281A	Afstandsring	Shim ring	Passscheibe	Rondelle
23	P7991059800	Bøsning BB2012	Bush	Bundbuchse	Bague
24	P79988D202805A	Afstandsring	Shim ring	Passscheibe	Rondelle
25	P00157018	Låsering 20x1,2	Circlip	Sicherungspring	Segment d'arret
26	P7991113603	Tandhjul, 24 tands	Sprocket	Kettenrad	Pignon
27	P7991089002	Bøsning GFM 2023 16	Bush	Bundbuchse	Bague
28	P7991113552	Leje 95	Bearing	Mittellager	Palier

Lower discharge system



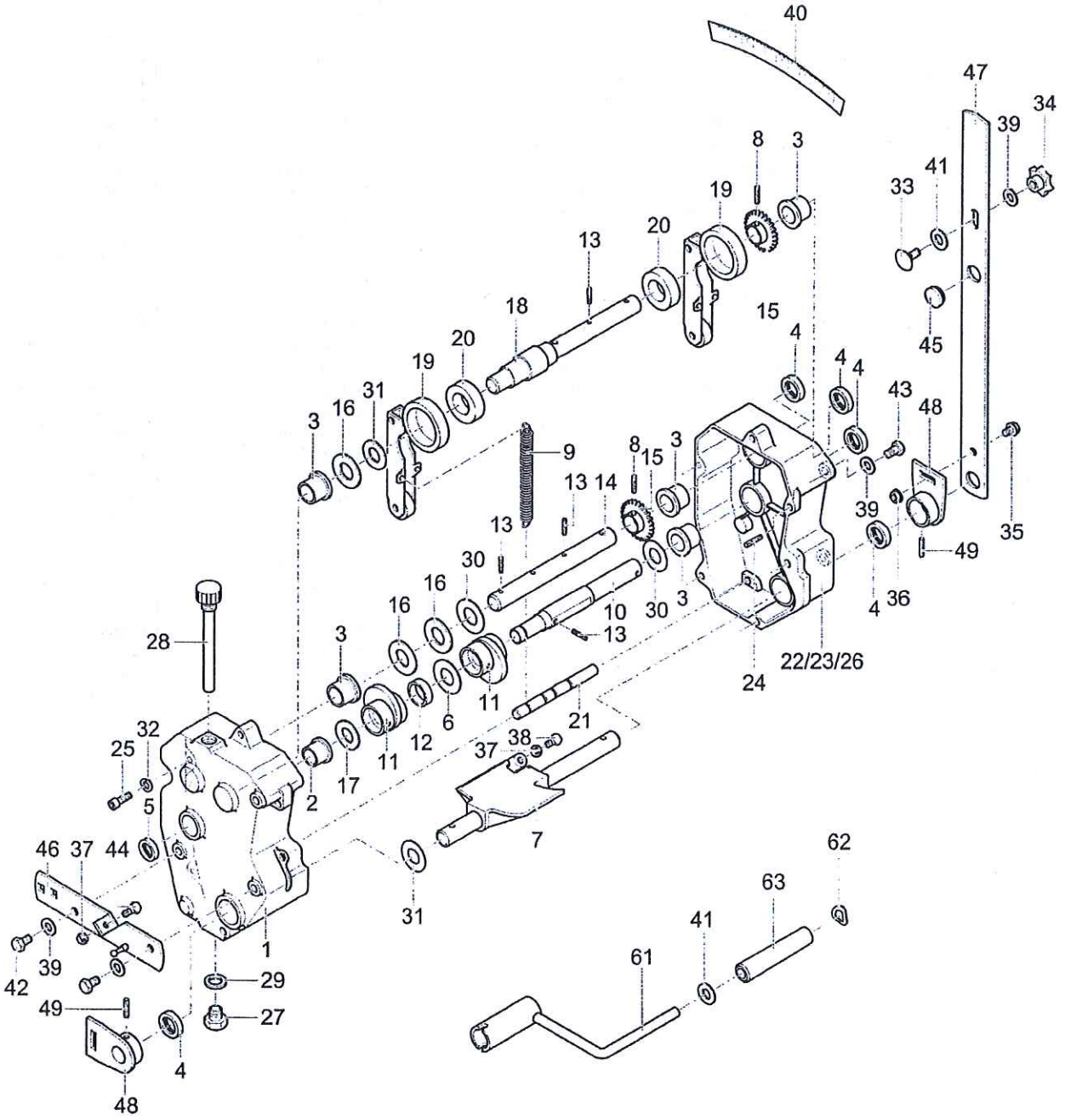
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
2	P797989DB22A	Skive B22 DIN 7989	Washer	Scheibe	Rondelle
3	P7991062904	Kæde 77	Chain	Kette	Chaine
4	P798187D08B1E	Samleled	Chain link	Verbindungsglied	Raccord
6	P7991089701	Ringsplit 4,5x40	Lynch pin	Klappsplint	Goupille
7	P7991113214	Spændeskive	Tension washer	Spannerscheibe	Tendeur
8	P00103069	Stålsætskrue M10x50	Hexagon screw	Schraube	Vis de pression
9	P00162159	Skive A10,5 DIN 9021	Washer	Scheibe	Rondelle
11	P7991112911	Bøsning	Bush	Buchse	Bague
12	P79988D202805A	Afstandsring	Shim ring	Passscheibe	Rondelle
14	P7991013024	Bøsning	Butting ping	Anlaufring	Douille
15	P7991063902	Tandhjul	Sprocket	Kettenrad	Pignon
16	P00173122	Spændestift 5x40	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
17	P7991113201	Tandhjul, 14 tands	Sprocket	Kettenrad	Pignon
19	P791474D412	Spændestift	Straight grooved pin	Steckkerbstift	Goupille canelee
20	P7991113212	Tandhjul, 37 tands	Sprocket	Zahnrad	Pignon
21	P7991113213	Bøsning GSM 2023 10	Bush	Buchse	Bague
22	P7991113216	Tandhjul, 18 tands	Sprocket	Ritzel	Pignon
24	P7991113211	Bøsning	Butting ping	Anlaufring	Douille
25	P791474D412	Spændestift	Straight grooved pin	Steckkerbstift	Goupille canelee
26	P7991061900	Tandhjul	Sprocket	Antreiebskettenrad	Carter d'entrainement
27	P7991061801	Aksel	Shaft	Welle	Arbre
28	P00172964	Spændestift 5x30	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
29	P79988D20281A	Afstandsring	Shim ring	Passscheibe	Rondelle
30	P00103041	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
31	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
32	P7991062001	Leje	Bearing	Lager	Palier
33	P79988D202805A	Afstandsring	Shim ring	Passscheibe	Rondelle
34	P7991113215	Bøsning GSM 2023 15	Bush	Buchse	Bague
35	P7991059800	Bøsning BB2012 EP	Bush	Buchse	Bague
43	P7991065199	Spændeanordning	Tensioner	Kettenspanner	Kit a tension
44	P00103284	Stålsætskrue M8x45	Hexagon screw	Schraube	Vis de pression
45	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
47	P799021DA84A	Skive A 8,4 DIN 9021	Washer	Scheibe	Rondelle
48	P7999980214	Transfers	Decal	Aufkleber	Etiquette
49	P7999980231	Transfers	Decal	Aufkleber	Etiquette

Upper discharge system



Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
5	P797989DB22A	Skive B22 DIN 7989	Washer	Scheibe	Rondelle
6	P7991066617	Bøsning	Butting ping	Anlaufring	Douille
7	P7991117491	Afstandsbøsning	Distance pipe	Distanzrohr	Tube de distancer
8	P7991117492	Fjeder 4,5	Spring	Feder	Ressort
9	P79988D202805A	Afstandsring	Shim ring	Passscheibe	Rondelle
10	P7991013025	Kæde, 24 led	Chain	Kette	Chaine
11	P7991062906	Kæde, 68 led	Chain	Kette	Chaine
12	P798187D08B1E	Samleled	Chain link	Verbindungsglied	Raccord
13	P7991065199	Spændeanordning	Tensioner	Kettenspanner	Kit a tension
14	P00103284	Stålsætskrue M8x45	Hexagon screw	Schraube	Vis de pression
15	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
16	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
17	P7991060117	Beskyttelsesskærm	Cover	Abdechung	Panneau
18	P7991060118	Klemme PC 2805	Clamp	Federraste	Verrou
19	P799021DA84A	Skive A 8,4 DIN 9021	Washer	Scheibe	Rondelle
20	P7991063902	Tandhjul	Sprocket	Kettenrad	Pignon
21	P00173122	Spændestift 5x40	Rollpin	Spannstift	Goupille mecanindus
25	P7991065401	Tandhjul A2	Sprocket	Ausgangskettenrad	Pignon
26	P7991089010	Bøsning GSM 2023 20	Bush	Buchse	Bague
30	P7991066615	Bøsning	Butting ping	Anlaufring	Douille
31	P791474D412	Spændestift	Straight grooved pin	Steckkerbstift	Goupille canelee
34	P7991117493	Bøsning	Twin-driver	Doppelmitnehmer	Bague d'entrainement
35	P00171608	Spændestift 4x20	Rollpin	Spannstift	Goupille mecanindus
36	P7991113213	Bøsning GSM 2023 10	Bush	Buchse	Bague
41	P7991064801	Doublet tandhjul	Sprocket	Doppelkettenrad	Pignon double
45	P7991113212	Tandhjul, 37 tands	Sprocket	Zahnrad	Pignon
51	P7991113216	Tandhjul, 18 tands	Sprocket	Ritzel	Pignon
61	P7991061900	Tandhjul	Sprocket	Kettenrad	Pignon
62	P7991061801	Aksel	Shaft	Welle	Arbre
63	P00172964	Spændestift 5x30	Rollpin	Spannstift	Goupille mecanindus
64	P79988D20281A	Afstandsring	Shim ring	Passscheibe	Rondelle
65	P00103041	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
67	P7991062001	Leje	Bearing	Lager	Palier
69	P7991113215	Bøsning GSM 2023 15	Bush	Buchse	Bague
70	P7991059800	Bøsning BB2012	Bush	Bundbuchse	Bague
71	P7999980219	Transfers	Decal	Aufkleber	Etiquette
72	P7999980230	Transfers	Decal	Aufkleber	Etiquette

Gearbox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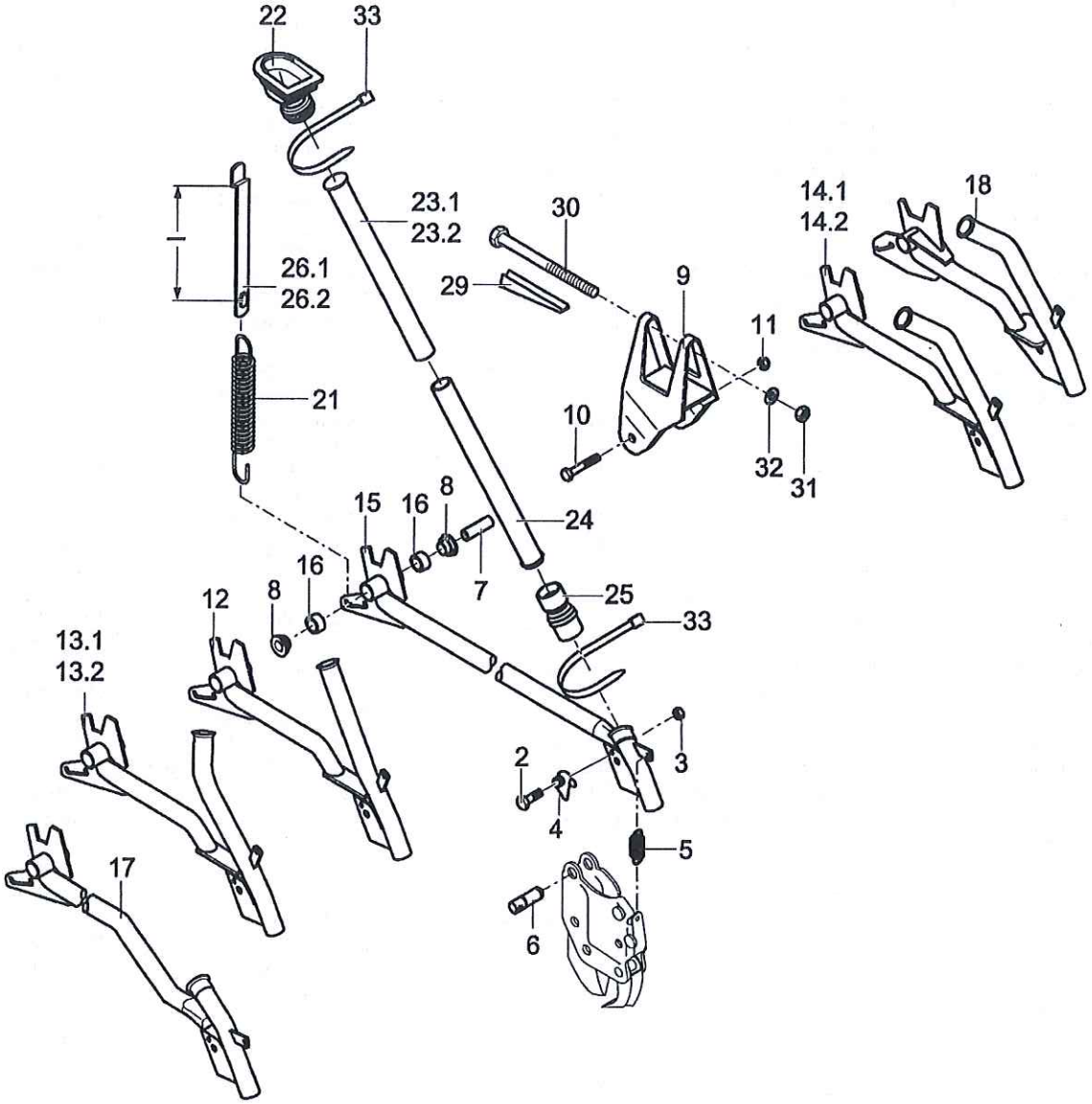
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991019311	Gearkasse låg	Cover	Gehäusedeckel	Couvercle
2	P7991060116	Bøsning 16/22/30x15	Bush	Buchse	Bague
3	P7991013031	Bøsning 20/26/32x25	Bush	Buchse	Bague
4	P793760D20307	Pakning 20x30x7	Seal	Wellendichtring	Joint
5	P793760D15247	Pakning	Seal	Wellendichtring	Joint
6	P79988D253505	Afstandsring 25x35x0,5	Shim ring	Passscheibe	Rondelle
7	P7991063010	Aksel	Cam	Kurvensegment	Chemin de roulement
8	P00173142	Spændestift 6x32	Rollpin	Spannstift	Goupille mecanindus
9	P7990012610	Fjeder Z-090	Extension spring	Zugfeder	Ressort
10	P7991063008	Indgangs aksel	Input shaft	Eingangswelle	Arbre d'entrée
11	P7990012603	Kamaksel	Cam shaft	Getriebenocken	Came
12	P7991013015	Bøsning	Bush	Zwischenbuchse	Bague
13	P00173081	Spændestift 4x30	Rollpin	Spannstift	Goupille mecanindus
14	P7991013019	Udgangs aksel A1	Output shaft	Ausgangswelle	Arbre de sortie
15	P7991013017	Tandhjul, 23 tands	Sprocket	Kettenrad	Pignon
16	P7991063044	Afstandsring 21x32x2	Shim ring	Passscheibe	Rondelle
17	P7991063046	Afstandsring 17x32,5x1,5	Shim ring	Passscheibe	Rondelle
18	P7991063043	Udgangs aksel A2	Output shaft	Ausgangswelle	Arbre de sortie
19	P7991013035	Bøsning	Freewheel	Frilaufgruppe	Basculeur
20	P7991013036	Bøsning	Bush	Buchse	Bague
21	P7991013087	Fjeder holder	Spring holder	Federhalter	Support
22	P7991063003	Pakning	Sealing compound	Dichtungsmasse atmosit	Joint
23	P7991019210	Gearhus	Housing	Gehäuseteil	Carter
24	P797346D1220	Spændestift 12x60	Rollpin	Spannstift	Goupille mecanindus
25	P00104948	Stålsætskrue M8x50	Hexagon screw	Schraube	Vis de pression
26	P7991013060	Olie	Gear oil	Getriebeoel	Huile
27	P7991087218	Bolt	Hexagon head plug	Verschlussschraube	Bouchon filete
28	P7991063005		Breather plug	Entlüftungsschraube	Reniflard
29	P797603DA162015C	Bounded seal	Bounded seal	Gesprungene Dichtung	Joint lié
30	P7991063045	Afstandsring 21x32x1	Shim ring	Passscheibe	Rondelle
31	P79988D202802A	Afstandsring 20x28x0,2	Shim ring	Passscheibe	Rondelle
32	P79127DA8A	Fjederskive A8	Spring washer	Federring	Rondelle ressort
33	P00108143	Stålsætskrue M10x25	Hexagon screw	Schraube	Vis de pression
34	P796336D6310	Fingerskrue M10 DIN 6336	Knob	Sterngriff	Maneton
35	P7991063102	Tensile bolt M8x16	Tensi lock bolt	Tensilockschraube	Vis Tensi
36	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
37	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
38	P00103045	Stålsætskrue M8x30	Hexagon screw	Schraube	Vis de pression
39	P00162159	Skive A 10,5 DIN 9021	Washer	Scheibe	Rondelle
40	P7999980180	Skala	Scale	Getriebeskala	Graduation
41	P00162160	Skive 13 DIN 125	Washer	Scheibe	Rondelle
42	P00103064	Stålsætskrue M10x25	Hexagon screw	Schraube	Vis de pression
43	P00100919	Stålsætskrue M10x20	Hexagon screw	Schraube	Vis de pression
44	P00103047	Stålsætskrue M8x40	Hexagon screw	Schraube	Vis de pression
45	P7991087401	Dæksel	Cap	Abdeckkappe	Chapeau
46	P7991063200	Arm	Stop	Anschlag	Bras
47	P7991063101	Flange	Lever	Hebel	Levier
48	P7991013011	Beslag	Shift plate	Stellblech	Support
49	P00173142	Spændestift 6x32	Rollpin	Spannstift	Goupille mecanindus
61	P7991066402	Håndsving	Handle	Abdrehkurbel kurz	Manivelle
62	P7991087101	Fjederskive	Spring washer	Federring	Rondelle ressort
63	P7991066413	Håndtag	Handle	Griff	Poignee

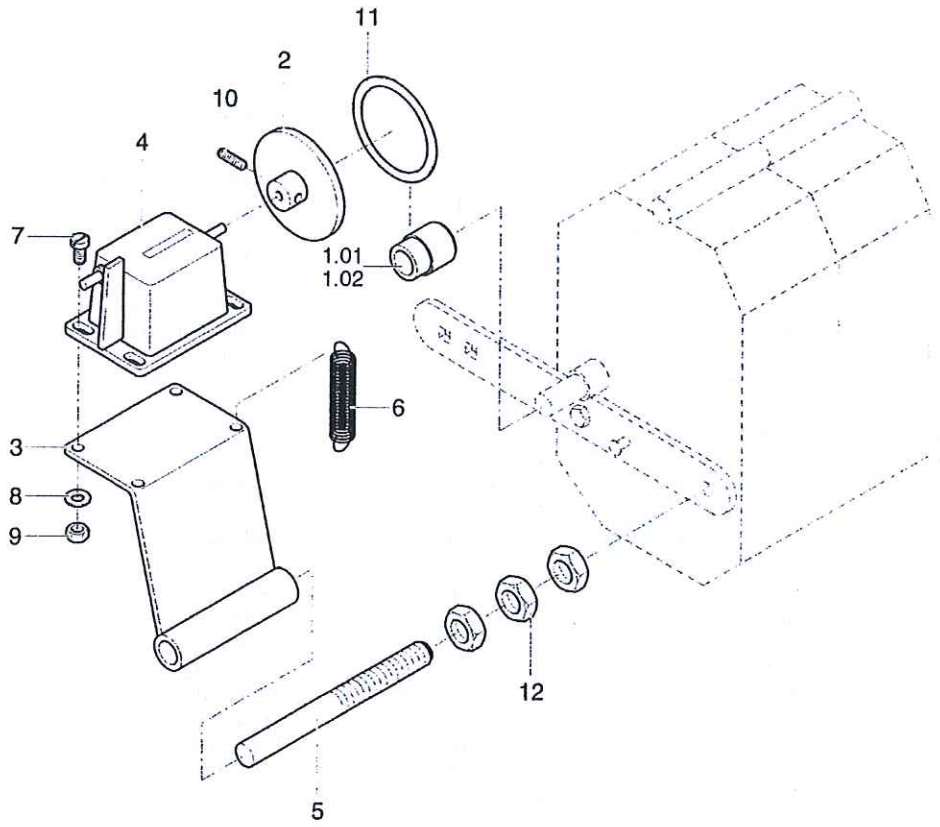
Coulter arm



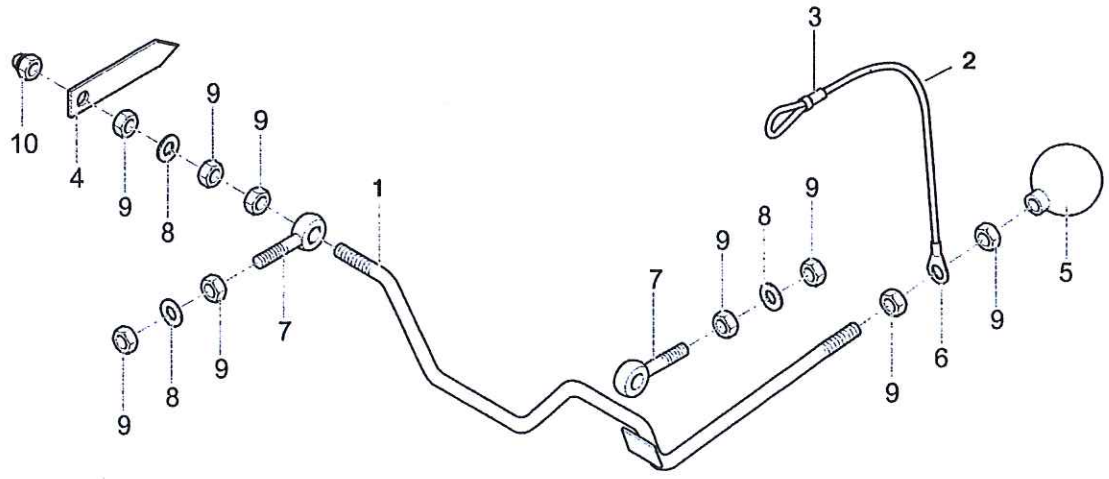
l = 249 for lang såskærs arm / long coulter arms / für lange Drillhebel / pour bras de levier long
l = 200 for kort såskærs arm / short coulter arms / für kurze Drillhebel / pour bras de levier court

Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
2	P00103282	Stålsætskrue	Hexagon screw	Schraube	Vis H
3	P00122005	Låsemøtrik	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
4	P7990021301	Fjeder	Retention spring	Scharsicherungsfeder	Ressort
5	P7990020009	Fjeder	Retention spring	Zugfeder scharhaltefeder	Ressort
6	P7991072514	Skrue	Counter pin	Scharabsteckbolzen	Brouche
7	P7990020004	Indvendig bøsning	Inner bush	Scharlagerinnenhuelse	Bague
8	P7990020003	Leje	Pivot	Scharlager kunststoff	Palier
9	P7991114101	Hængsel	Hinge	Scharnier	Charni're
10	P79931D1095Pa	Bolt	Bolt	Sechskantschraube	Vis
11	P00122006	Møtrik	Nut	Sechskantmutter	Écrou H
12	P00853451100	Såskærs arm	Coulter arm	Drillhebel	Bras de levier
13.1	P00853451200	Såskærs arm 298	Coulter arm	Drillhebel	Bras de levier
13.2	P00853451400	Såskærs arm 298 / 50	Coulter arm	Drillhebel	Bras de levier
14.1	P00853451300	Såskærs arm 298	Coulter arm	Drillhebel	Bras de levier
14.2	P00853451500	Såskærs arm 298 / 50	Coulter arm	Drillhebel	Bras de levier
15	P00853451000	Såskærs arm 507	Coulter arm	Drillhebel	Bras de levier
16	P7991089014	Bøsning GSM 2024 15	Bush	Buchse	Bague
17	P00853451700	Såskærs arm 507 / 40	Coulter arm	Drillhebel	Bras de levier
18	P00853451600	Såskærs arm 298 / 40	Coulter arm	Drillhebel	Bras de levier
21	P7991115023	Fjeder Z-224x	Extension spring	Zugfeder	Ressort
22	P7991070103	Tragt	Funnel	Einlauftrichter	Ecoulement
23.1	P7991115107	Sårør 550	Seed pipe	Saatleitung	Tube inox
23.2	P7991115105	Sårør 1020	Seed pipe	Saatleitung	Tube inox
24	P7991070105	Teleskoprør 405	Telescopic seed pipe	Teleskoprohr	Tube plastique
25	P7991070106	Muffe	Collar	Manschette	Raccord
26.1	P7991115024	Fjeder holder 200	Spring latch	Federlasche	Lamé ressort
26.2	P7991115025	Fjeder holder 249	Spring latch	Federlasche	Lamé ressort
29	P7991071531	Kile	Cotter	Keil	Clavette
30	P00103334	Stålsætskrue M12x120	Hexagon screw	Schraube	Vis de pression
31	P00120161	Låsemøtrik M12	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
32	P00162160	Skive A 13 DIN 125	Washer	Scheibe	Rondelle
33	P7990067002	Kabelbindere	Strip	Kabelbinder	Attache-cable

Hectare counter

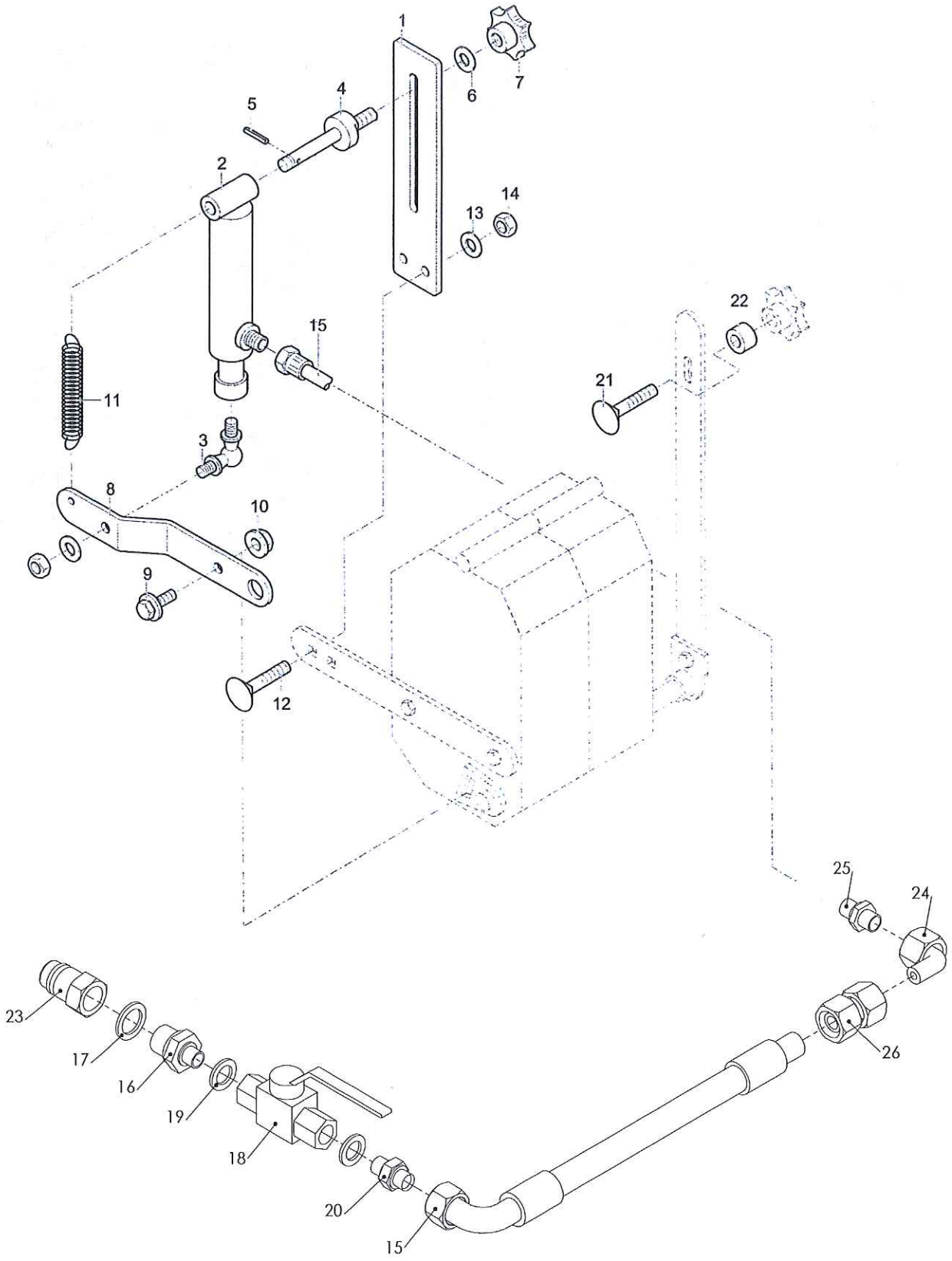


Low level indicator



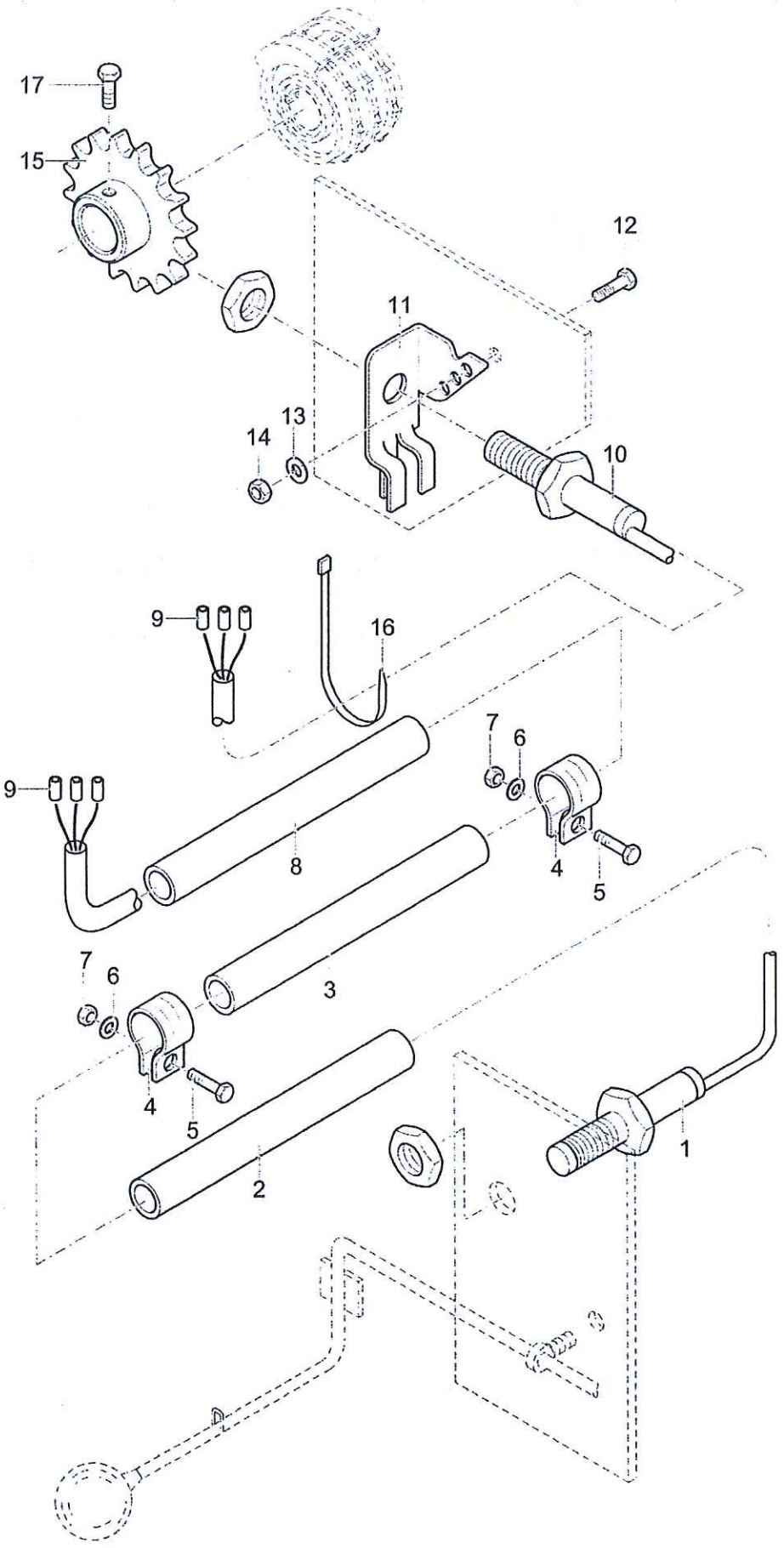
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
Hektar måler • Hectare counter • Hektarzaehler • Compteur hectares					
1.1	P7991099510	3m. afstandsbøsning	Driving sleeve	Aufsatzwelle	Bague
1.2	P7991099512	4m. afstandsbøsning	Driving sleeve	Aufsatzwelle	Bague
2	P7991099610	Tællehjul	Counter wheel	Zählerrad	Roue
3	P7991040312	Beslag	Bracket	Konsole	Console
4	P7990042003	Tæller	Counter	Umbrehungszaehler	Compte tours
5	P7991099640	Aksel	Shaft	Gewindeachse	Tige filetée
6	P7991040315	Fjeder A1,2x13x25A	Tensionspring	Zugfeder	Ressort
7	P7984D48PA	Bolt	Bolt	Zylinderschraube	Vis
8	P00165306	Fjederskive	Spring washer	Federring	Rondelle ressort
9	P79934D4PA	Låsemøtrik M4	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
10	P79914D46A	Stopskrue M4x6	Locking ring	Gewindestift	Clavette filetée
11	P7991099611	Ring	Ring	Rundring	Joint torique
12	P00120160	Møtrik M10	Nut	Mutter	Écrou
Niveauindikator • Low level indicator • Fuellstandsanzeige • Indicator de niveau					
1	P7991112507	Gevindstang	Threaded rod	Gewindestange	Tige filetée
2	P7991099803	Wire 555	String	Kordelschnur	Ficelle
3	P7946228D10A	Ærme	Multicore cable end	Aderendhülse	Fiche electrique
4	P7990044802	Indikator	Indicator	Zeiger	Indicateur
5	P7990044805	Flyde bold	Hostalen ball	Hostalen kugel	Flotteur
6	P7991012311	Kabelsko L-RC6 DIN46237	Cable lug	Kabelschuh	Anneau
7	P79444DB640SA	Øjeskrue	Eye screw	Augenschraube	Vis a oeil
8	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
9	P00120157	Møtrik M6	Nut	Mutter	Écrou
10	P00125126	Topmøtrik M6	Cover nut	Hutmutter	Écrou a chapeau

Seedrate control



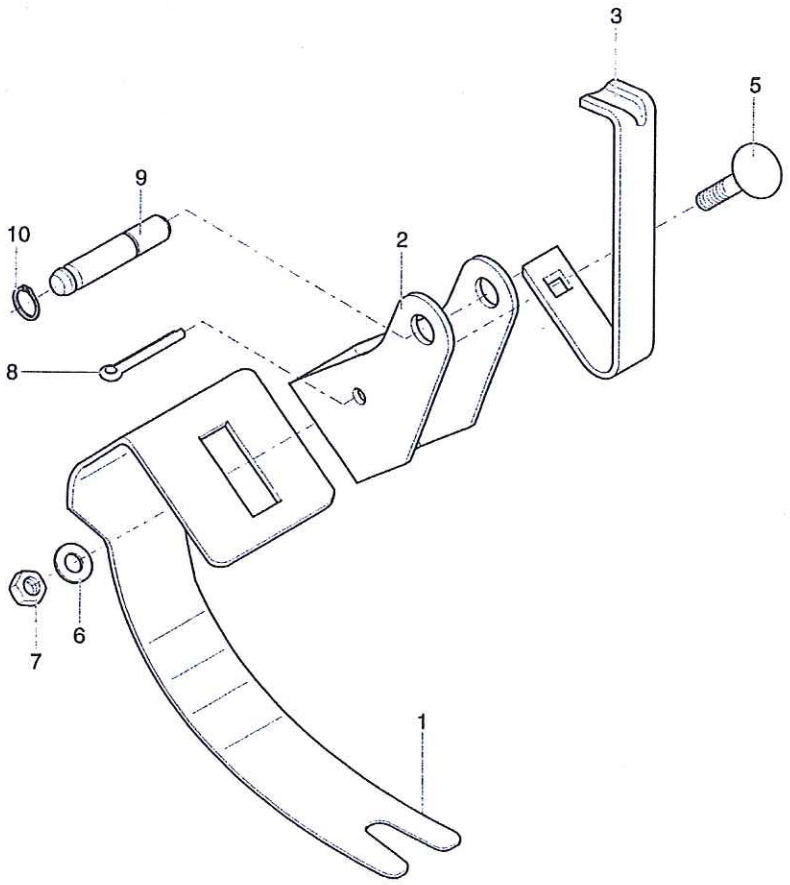
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991096310	Profil	Grid	Steg	Reglette
2	P7981630508	Hydraulisk cylinder	Hydraulics cylinder	Hydraulisch Zylinder	Hydraulique vérin
3	P7971802D16	Vinkelnippel DIN71802	Angle joint	Winkelgelenk	Rotule
4	P7991096311	Skrue	Screw	Klemmschraube	Vis de serrage
5	P791481D550	Spændestift 5x50	Straight grooved pin	Zylinderkerbstift	Goupille mecanindus
6	P79125DA105A	Skive A 10,5 DIN 125	Washer	Scheibe	Rondelle
7	P796336D6310	Fingerskrue M10 DIN 6336	Knob	Sterngriff	Maneton
8	P7991096312	Flange	Lever	Hebel	Levier
9	P7991063102	Tensile bolt M8x16	Tensi lock bolt	Tensilockschraube	Vis Tensi
10	P7991063103	Tensile møtrik M8	Tensi lock nut	Tensilockmutter	Écrou Tensi
11	P7990041702	Fjeder CF-155	Extention spring	Zugfeder	Ressort
12	P79603D825PA	Bræddebolt	Cup square bolt	Flachrungschraube	Vis J
13	P79125DA84A	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
14	P79934D8PA	Møtrik M8 DIN 934	Nut	Mutter	Écrou
15	0454900	3m. hydraulik slange	Hydraulic hose	Hydraulikschlauch	Tuyau hydraulique
	0454930	4m. hydraulik slange	Hydraulic hose	Hydraulikschlauch	Tuyau hydraulique
16	0444490	Brystnippel ½"x¼"	Hexagon nipple	Brustnippel	Raccord
17	0449070	Bounded seal ½"	Bounded seal	Gesprungene Dichtung	Joint lié
18	0442340	Blokkuglehane ¼"x¼"	Valve block with tap	Ventilblock mit Hahn	Robinet
19	0444501	Bounded seal ¼"	Bounded seal	Gesprungene Dichtung	Joint lié
20	0444500	Brystnippel ¼"	Hexagon nipple	Brustnippel	Raccord
21	P79603D1035PA	Bræddebolt M10x35	Cup square bolt	Flachrungschraube	Vis J
22	P7991013043	Afstandsbøsning	Distance bush	Distanzbuchse	Entretoise
23	0444020	Lynkobling ½"	Quick-coupling	Schnelle Koppelung	Accouplement rapide
24	0446678	Vinkelnippel ø8	Flareless Compression	Winkelgelenk	Rotule
25	0446700	Brystnippel ø8x¼"	Hexagon nipple	Brustnippel	Raccord
26	0447520	Omvendt samler ø8	Tube Union	Riemenschloß	Pièce de Raccord

Monitoring unit



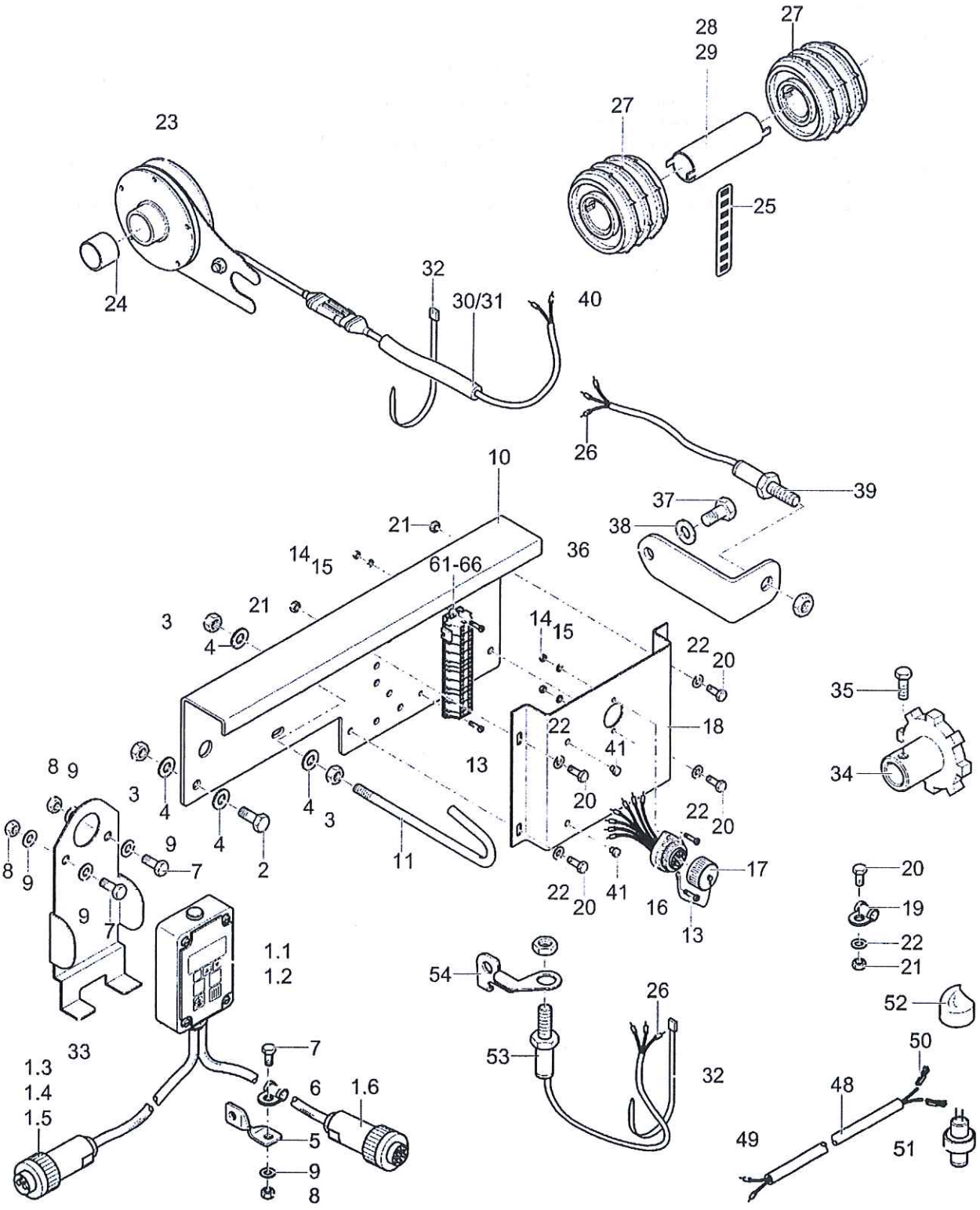
Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991097830	Føler	Switch	Näherungsschalter	Capteur
2	P7991097601	Slange 100	Protection tube	Kabelschutzrohr	Gaine
3	P7991097826	Slange	Protection tube	Kabelschutzrohr	Gaine
4	P7990041707	Minispændebøjle	Steel Hose Straps	Norma-rohrschelle	Collier
5	P00103022	Stålsætskrue M6x16	Hexagon screw	Schraube	Vis de pression
6	P00162157	Skive A 6,4	Washer	Scheibe	Rondelle
7	P00120157	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
8	P7991097602	Slange 2200	Protection tube	Kabelschutzrohr	Gaine
9	P7946228D05A	Kabler 0,5	Multicolore cable	Aderenhuelse 0,5	Fiche electrique
10	P7990041838	Føler	Switch	Näherungsschalter	Capteur
11	P7991097900	Sensor beslag	Sensor holder	Säwellensensorhalter	Support
12	P00103004	Stålsætskrue M5x16	Hexagon screw	Schraube	Vis de pression
13	P00162156	Skive A 5,3	Washer	Scheibe	Rondelle
14	P00120156	Låsemøtrik M5	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
15	P7991107403	Føler hjul	Release plate	Sensorgeber	Emetteur
16	P7990067008	Kabelbindere	Strip	Kabelbinder	Attache-cable
17	P79933D510PA	Stålsætskrue M5x10	Hexagon screw	Schraube	Vis de pression

Depth limiter



Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991072511	Ski	Ski	Gleitschuh	Patin
2	P7991072512	Holder	Mounting	Halter	Support
3	P7991072513	Fjeder	Spring	Feder	Ressort
5	P00108911	Stålsætskrue M8x16	Hexagon screw	Schraube	Vis de pression
6	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
7	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
8	P7994D550A	Split 5x50	Cotter pin	Splint	Goupille
9	P7991072509	Skrue	Counter pin	Scharabsteckbolzen	Brouche
10	P00157010	Låsering	Circlip	Sicherungsring	Segment d'arret

Multitronic



Pos nr. Picture Bild nr. Dessin	Del nr. Part nr. Teil nr. No. De piéces	Benævnelse	Desciption	Beschreibung	Désignation
1	P7991127235	Multitronic II computer	Multitronic II drill	Multitronic II Saemonitor	Boitier Multitronic
1.3	P7991097114	Kabel samler 3-poler	Cable connector	Stecker	Fiche droite
1.4	P7991107233	Sikring	Fuse	Multifuse-sicherung	Coupe-circuit
1.5	P7990121215	Kabel stik	Cable stick	Kabelstecker	Fiche de contact
1.6	P7990121214	Kabel	Cable can	Kabeldose	Boite de cable
2	P00103043	Stålsætskrue M8x20	Hexagon screw	Schraube	Vis de pression
3	P00120159	Låsemøtrik M8	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
4	P00162158	Skive A 8,4 DIN 125	Washer	Scheibe	Rondelle
5	P7991097308	Beslag	Latch	Zuglasche	Eclisse
6	P7991097302	Kabelklemme	Clamps	Schelle rohrschelle	Collier
7	P00103022	Stålsætskrue M6x16	Hexagon screw	Schraube	Vis de pression
8	P00120157	Låsemøtrik M6	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
9	P00162157	Skive A 6,4 DIN 125	Washer	Scheibe	Rondelle
10	P7991107312	Multitronic beslag II	Hook	Konsole	Support
11	P7991097428	Gevindstang	Threaded rod	Gewindestange	Tige filetée
13	P7984D312PA	Cylinderskrue	Bolt	Zylinderschraube	Vis
14	P79934D3PA	Møtrik	Nut	Sechskantmutter	Écrou H
15	P00162155	Skive A 3,2 DIN 125	Washer	Scheibe	Rondelle
16	P7991107220	Stik	Plug	Verteilerkasten	Prise de courand
17	P7991107224	Stik låg CA 00 SD 2	Guard	Schutzkappe	Tole de protection
18	P7991107313	Beskyttelse plade	Guard plate	Schutzblech	Ecran
19	P7991097303	Kabelklemme	Clamps	Schelle rohrschelle	Collier
20	P00103004	Stålsætskrue M5x16	Hexagon screw	Schraube	Vis de pression
21	P00120156	Låsemøtrik M5	Self-locking hexagon nut	Selbstsichernde Mutter	Écrou H
22	P00162156	Skive A 5,3 DIN 127	Washer	Scheibe	Rondelle
23	P00853730010	Magnetisk sensor	Magnetic switch	Schlingfederkuppling	Elektro-Vanne
24	P7991097827	Afstandsbøsning	Spacer sleeve	Distanzhülse	Bague d'entrainemt
25	P7999980182	Transfers	Decal	Aufkleber	Etiquette
26	P7946228D05A	Flerfarvet kabel 0,5 m.	Multicolore cable	Aderendhuelse	Fiche electrique
27	P7991097421	Såhjul	Seed wheel	Särad	Roue de distribution
28	P7991097424	Afstandsbøsning 100	Spacer sleeve	Distanzhülse	Bague d'entrainemt
29	P7991097422	Afstandsbøsning 80	Spacer sleeve	Distanzhülse	Bague d'entrainemt
30	P7991097603	Slange 1500	Protection tube	Kabelschutzrohr	Gaine
31	P7991097604	Slange 1000	Protection tube	Kabelschutzrohr	Gaine
32	P7990067008	Kabelbindere 196x2,5	Strip	Kabelbinder	Attache-cable
33	P7991107319	Computer beslag	Multitronic holder	Saemonitorhalter	Support
34	P7991107401	Føler hjul	Release plate	Sensorgeber	Emetteur
35	P00103019	Stålsætskrue M6x8	Hexagon screw	Schraube	Vis de pression
36	P7991107315	Sensor holder	Sensor holder	Sensorhalter	Support de capteur
37	P00100919	Stålsætskrue M10x20	Hexagon screw	Schraube	Vis de pression
38	P00162159	Skive A 10,5 DIN 9021	Washer	Scheibe	Rondelle
39	P7990041838	Sensor IFL4-12-01P	Switch	Näherungsschalter	Capteur
40	P7946228D10A	Flerfarvet kabel	Multicolore cable	Aderendhuelse	Fiche electrique
41	P7991087402	Låg	Cap	Abdeckkappe	Chapeau
48	P7991107317	Kabel	Connection cable	Verbindungsleitung	Cable
49	P7946228D15A	Flerfarvet kabel 1,5 m.	Multicolore cable	Aderendhuelse	Fiche electrique
50	P7990041871	Kabelsko L-RB 63	Cosse plate	Flachsteckhuelse	Pipe
51	P7990016082	Tryk kontakt	Restrictor valve	Druckschalter	Claped de pression
52	P7990016084	Plast låg N97019	Guard	Schutzkappe	Tole de protection
53	P7991097824	Sensor	Switch	Näherungsschalter	Capteur
54	P7991127199	Sensor holder	Sensor holder	Sensorhalter	Support de capteur
61	P7991097511	Samlemuffe 4	Binder	Leiter klemme	Borne de cable
62	P7991097512	Samlemuffe 4	Binder	Leiter klemme	Borne de cable
63	P7991097513	Samlemuffe 2	Binder	Leiter klemme	Borne de cable
64	P7991097514	Samlemuffe 2	Binder	Leiter klemme	Borne de cable
65	P7991097515	Ophængs profil	Connecting plate	Anschlussplatte	Plaque de raccord
66	P7991097516	Kabelsko bro	Inlaid bridge	Einlegebruecke	Pont d'insertion

Notes