

### Potting machine TM 2105



### **Operating instructions**

Issue date: 01.09.2014 / V1.4

Before the initial start-up, read and keep at the machine for future use.



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### 1 Product description

#### 1. Intended use

The Mayer TM 2105 potting machine may be used for planting and replanting plants with a minimum of working force and of time.

Other means of use of the machine, besides the ones listed here, are not permitted – and they are not the usage for intended purpose.

If the Mayer TM 2105 potting machine is not used in accordance with the regulations, the safe operation of the machine is not guaranteed.

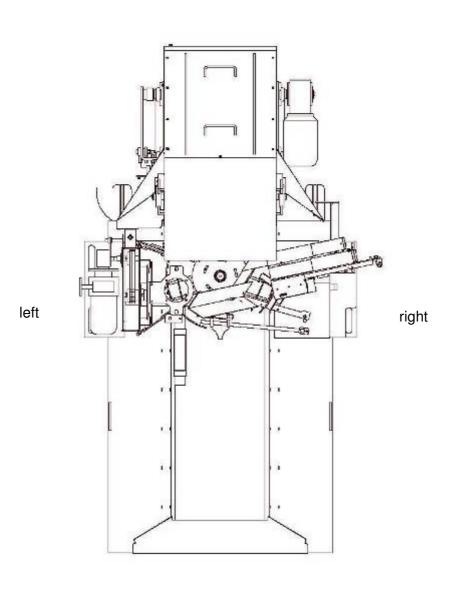
The usage for intended purpose involves the reading of the operating instructions, and the compliance of the regulations, specially safety regulations stated in it. Furthermore, every inspection and maintenance should be performed in specified time.

For damages that are originated from the usage for not the intended purpose, neither the manufacturer, nor the operator of the Mayer TM 2105 potting machine takes responsibility.

### 2. Structure

### Plan view of potting machine TM 2105

### back



front

### 3. Functional description

#### a) Working without automatic pot dispenser

When there is no pot dispenser installed then empty pots are loaded by one person on the turntable located on the right side of the machine when it is viewed from front side.

The turntable is moved intermittently counter clockwise.

The pots are forwarded under the elevator.

Plates are fixed on endless chains located in the elevator housing which take the soil from the hopper. When the plates reach the upper turning point the soil falls into pot being there.

A controlled conveyor belt is installed into the soil hopper which forwards the soil always towards the elevator.

The turntable is inched and a drilling motor being synchronous with the inching mechanism drills a hole into the soil that's inside the pot by means of a replaceable drill.

One or several person(s) standing around the machine may plant plants into the pots. Plant holding trays may be located either beside the machine or in a separate storing place or on top of the turntable.

A pot take-off is installed to remove the planted pots from the turntable and to push them on a conveyor belt connected to the machine.

### Warning!

When there is no automatic pot dispenser installed, special care shall be taken on section 2 "General safety instructions".



#### b) Working with automatic pot dispenser

When there is an automatic pot dispenser installed then feeding by hand is not necessary and one person may be saved.

Further instructions are detailed in Operation instructions of pot dispenser.

#### 4. Technical data

Make:	Mayer
Machine type:	Potting machine
Series:	TM 2105
Length / width / height:	235 / 150 / 205 cm
Weight:	560 kg
Working height:	approx. 95 cm
Power connection:	400V/50Hz, 5-pole
Power input:	2 kW
Pot size:	round pots from 8 to 20 cm diameter
Capacity of soil hopper:	0,6 m <sup>3</sup>
	1 m <sup>3</sup> / 1,5 m <sup>3</sup> on request
Production speed:	max. 2500 pots
Usable drill sizes:	3,5-13 cm
	larger drill diameter on request
Workplace related emission value:	73dB (A)

### Available accessories (for an additional charge)

- tray / flat filler modules
- changing cart
- support plate for young plant trays
- table for pot collection
- conveyor belts
- extended version
- soil hopper extension

#### Important note!

When placing repeat orders for accessories and spare parts, make sure to have information about the machine type and number at your hand!



### 5. EU declaration of conformity

According to Appendix IIA of the EU Machinery Directive (2006/42/EC)

Mayer GmbH & Co. KG The manufacturer:

Maschinenbau u. Verwaltung

Poststrasse 30

89522 Heidenheim | Germany

hereby attests that the machine described in

the following:

Make: Mayer

Model: Potting machine

Series: TM 2105 Year constructed: From 2014

fulfils the safety and health requirements of the

following EU Machinery Directive:

2006/42/EC

Harmonised standards applied:

	Safety of machinery, basic terminology, general guiding principles for organisation
Part 1 EN ISO 12100-1	Part 1: Basic terminology, methodology
Part 2 EN ISO 12100-2	Part 2: Guiding technical principles and specifications
EN ISO 13857	Safety distances to keep the upper limbs from reaching danger points
ISO 13854	Safety of machines, minimum distances to avoid any crushing of body parts
EN ISO 13849-1	Safety-related parts of control systems Part 1: General principles for design
EN ISO 14121	Principles for risk assessment
ISO 14119	Interlocking devices associated with guards
ISO 13850	EMERGENCY SHUT-OFF systems
IEC 60204-1	Electrical equipping of industrial machines Part 1: General requirements

Any design alterations that effect the technical specifications given in the Operating Instructions or the intended use, i.e. change the machine substantially, will invalidate this EU Declaration of Conformity.

Heidenheim, 01 September 2014

Dipl.-Ing. (TU) Arpad G. Meszaros Head of Development and Design

<sup>&</sup>lt;sup>1</sup> Graduate engineer (from a technical university)

### 2 General safety instructions

#### 1. Due diligence of the operating company

The Mayer TM 2105 potting machine was designed and built taking a danger analysis into consideration and after careful selection of the harmonised standards to be complied with as well as other specifications. It therefore meets the state of the art and guarantees a maximum degree of safety.

However, only if all the measures required for such are taken can this safety be achieved in actual operational practice. Planning these measures and checking their implementation is subject to the operating organisation's duty to take due care.

### The operating organisation must in particular guarantee that:

- ... the machine is only used in accordance with its intended use (cf. the Product description section).
- ... the machine is only operated when in flawless working order and, especially, that the working order of the safety equipment is regularly checked.
- ... the Operating Instructions are always available in legible condition and complete at the location where the machine is used.
- ... only sufficiently qualified and authorised personnel operate, service and repair the machine.
- ... these personnel are regularly instructed about all relevant matters concerning industrial safety and environmental



protection and that they know the Operating Instructions and especially the safety instructions they contain.

- ... none of the safety and warning signs attached to the machine are removed and that all remain legible.
- Users must obligate themselves only to ever operate the machine when it is flawless condition.
- No unauthorised conversions or alterations are allowed that influence the machine's safety.
- Only when it has stopped, must any work ever be carried out on the machine.



- Before beginning with any work on the machine, secure its drives and accessory parts against being switched on unintentionally.
- The protective devices may only be removed when the machine has been stopped.
- Local safety and accident-prevention regulations always apply to any operation of the machine.
- The machine may not be started if any safety devices are removed.
- In the working area the operator is responsible for other people.
- In case of non-compliance with any one of the points cited above, the manufacturer shall be released from all liability.

#### 1. Explanation of the safety symbols used

The safety symbols along with the text of the safety instructions are meant to point out unavoidable residual dangers that exist when dealing with this machine. These residual hazards relate to:

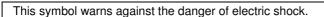
- People
- The machine
- · Other things and objects
- The environment

The following safety symbols are used in these Operating Instructions:

This symbol indicates that there are dangers to the machine, things and the environment, but that no dangers to people are to be expected.

If these instructions are not followed, it might result in malfunctions and damage to the machine. Property damage and environmental damage might also come about

This symbol identifies instructions contributing to better understanding of the machine information that helps you to use the machine in optimum fashion. This symbol does not identify safety instructions.









Be sure to also note that a safety symbol can never replace the text of safety instructions—the text of safety instructions must therefore always be read completely!

### 3. Basic safety precautions

### Always be sure that:

- ... tight-fitting working clothes are worn at all the workplaces.
- ... it is not allowed to wear chains, rings, bracelets or wristbands.
- ... for operationally relevant reasons, it is not possible to completely cover the compost hopper.
- ... it is not allowed to reach into the compost hopper (to push in more soil, for example), because when doing so there would be a danger of getting caught by the scraping chain.
- ... it is not allowed to get into the compost hopper while the machine is running.
- ... it is not allowed to reach into the turntable or pot dispenser while the machine is running.
- ... it is not allowed to reach into the drilling stand while the machine is running.
- ... it is not allowed to reach into the pot transfer while the machine is running.



### 4. Machine-related safety precautions

The workplaces are spread over various areas of the potting machine.

- a) Feeding pots into the rotating assembly (for a machine without pot dispenser) or feeding pots into the pot dispenser (for machines with pot dispenser) on the right side of the panel.
- b) Filling the soil hopper with substrate from the rear or from the right or left side.
- c) Potting plants on the front left of the panel, between drilling stand and pot transfer.

Alternatively, they can also be potted on the conveyor belts.

Responsibilities for the various activities must be clearly defined and complied with.

Unclear competencies represent a safety risk.

Persons who are engaged in putting single pots into the rotating assembly must have been given separate training, during which it was pointed out to them that there is a potential danger of being drawn into the machine if they got stuck at the rotating assembly.

For procedural reasons it is not possible for the rotating assembly to be covered.

When potting at the rotating assembly, there is a potential hazard of getting stuck in there due to carelessness or wearing further additional clothing or jewellery.

In case of malfunctions during the work flow it is forbidden to touch the running machine in order to resolve the malfunction. It must always be possible to access the emergency cut-off switch.

The emergency cut-off switch should always be located on the relevant workplace (during normal operation preferably on the panel, next to the right of the worker).

It is forbidden to climb onto the running machine.

The machine must be set up on even and solid surface so that it stands securely in place.

There is danger of life in case of a machine falling over.

The floor (workplaces at the machine and traffic routes) must be regularly cleaned from dirt and water in order to avoid danger of slipping.

Stumbling blocks in the form of cables connected to the energy supply systems must be avoided

All feed lines to the machine must be protected against damage.

Only a skilled electrician is allowed to carry out works on the electrical equipment.

#### Protection devices

- are fitted for the safety of operating personnel
- must in no case be changed, removed or evaded by modifications to the machine.



### 5. Demands on operating personnel

The machine may only be operated by personnel who have been trained for such, shown what is involved and are authorised to do so. These individuals have to know and act in accordance with the Operating Instructions. The respective authorisations for the operation personnel must be clearly prescribed.

In addition to this, special qualifications are required for the following activities:

Operation personnel being trained may at first only work with the machine under the supervision of an experienced individual. It should be confirmed in writing that the training has been successfully completed.

Only trained personnel may ever operate any of the control and safety equipment.

All individuals that carry out any activities with the machine have to read the Operating Instructions and confirm by their signature that they have understood the Operating Instructions.

### 3 Transport

To prevent damage to the machine as well as injuries while transporting the machine, it is absolutely necessary to comply with the following points:

- The transport work may only be carried out by individuals qualified to do so, complying with the safety instructions.
- The machine may only be lifted by the supporting points provided for such.
- Only the load-lifting devices and tackle specified here may be used to transport the machine.
- Be sure to also read the "General Safety Instructions" section.

When transporting the machine, the following special dangers must be expected:

- Suspended loads can drop, which would be a lethal danger – never go under suspended loads!
- If load-lifting equipment other than that specified here, severe damage to the machine may result.

#### 1. Transport

When the machine is transported special care shall be taken to avoid damage of the machine during loading or unloading.

During transport fixings according to type of transport shall be implemented.

Moisture condensation caused by temperature difference during transport as well as shocks during transport shall be avoided.

The machine shall be operated with usual care.

It is recommended to use a relevant attachment when loading or unloading the machine by means of a forklift



### 2. Handling

The potting machine is fitted with 2 rubber tyres on one axle on the front and 2 legs on the soil hopper. Due to this construction, the pot machine can be easily moved on a level surface by one person.

When the machine is moved, pay particular attention to the supply lines to the machine to prevent that the lines are damaged and/or ripped out of their couplings if the machine runs over them with the front wheels

If the machine is to be moved over an inclined plane, it is necessary:

- to completely empty the soil hopper,
- to make sufficient safety precautions in order to prevent the machine from accidentally rolling away.

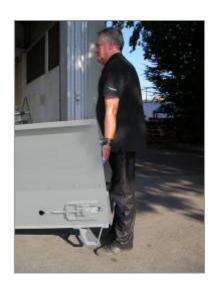
Such precautions may include:

- enough personnel
- to secure the wheels using a wedge
- and so on..

### 3. Storage

When the machine or its parts are not reassembled right after transport, then they shall be carefully stored on a protected area. It shall regularly be covered and protected against dust and moisture.

Tasks for putting out of operation are detailed in section 6.3.



### 4 Installation

#### 1. General notes

a)

To protect the machine against weather caused damages it is suggested to use and store it inside.

b)

Electrical connection: 400V/50Hz.

The machine must be connected to a socket which has a 0.03 amp residual current operated circuit breaker.

c)

Be sure that enough space is assured for feeding and filling pots. Same care shall be taken in case of machines connected in front of or behind it.

d)

In order to capacity of the machine to be used efficiently it is suggested the soil mixture, seedling, plants, pots, trays to be prepared on the best place and in sufficient quantity.

It is not suggested to under-estimate job to remove and transport the filled pots, since an insufficient solution may considerably decrease efficiency of the machine.

### 2. Installing the machine

A hard soil surface shall be provided under the machine to prevent the wheels and legs from sinking into the soil.





### 3. Measures for the machine's stability against overturning

There is no need to carry out other activity for erecting the machine than it is described in section 4.2.

### 4. Disassembly and disposal of the machine

After completion of its full time of operation, the machine must be duly separated from energy supply systems and disposed of according to valid legal regulations.

### 5 Initial start-up

It is absolutely necessary to comply with the following safety instructions for the initial start-up of the machine. This will prevent injury to individuals, damage to machinery and other property damage.

- The initial start-up may only be carried out by qualified individuals, complying with the safety instructions.
- Before the first start-up, check whether all the tools and parts not belonging in it have been removed from the machine.
- Before the first start-up, check the electrical connections.
- Activate all the safety equipment and EMERGENCY SHUT-OFF switches before the initial start-up.
- Also read the section "General Safety Instructions".

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### 1. Check prior to first start

Prior to starting up the machine, the following must be checked:

- · are all safety devices available?
- was the machine damaged during transport?
- all visible bolted joints must be checked for tight seat.
- Prior to putting the machine into operation, the machine's connecting cable and the cable of the emergency cut-off switch (if existing) must be checked for damages.



### 1. Starting the machine for the first time

After reassembly the machine shall be checked as per the following:

a)

Be sure not foreign materials, such as tools or similar, are left in the soil hopper, in the elevator or on the turntable.

b)

Put main switch of the machine to OFF ("Null") position before plug of the connection cable would be connected to the socket.

c)

When the machine is connected, put the switch to "1 ON" position.

d)

The turntable must start turning counter-clockwise when the "Start" key on the switch cabinet is pressed.

If the turntable does not start turning this way, have an electrician reverse the polarity of the connection cable in the plug. The elevator shovels should now move from the bottom to the top on the side of the elevator facing the soil hopper.

e)

In case of there were no problems found or unusual noises heard during test operation, the machine may be put into operation as it is described in section "Operation".



**Emergency stop** 



### 3. Stopping the machine

There are two ways provided to switch off the machine.

a)
In normal case by switch "Stop" mounted on the swinging cable.

b) In emergency case by "Emergency Stop" switch.

#### Note:

See also section "6.2 - Shutting down the machine"

### **6 Operation**

### 1. Normal operation

### a) Before starting operation the following shall be checked:

 Are pots, plants and soil mixture available in sufficient quantity?

Care about the following

- Soil transport
- Plant feeding and unloading
- Pot preparation
- Use the shortest transport routes

### b) Adjusting or shifting the pot turntable

• Release clamping lever above the box support.



 Open the pot receptacle by moving the pot holding disk.



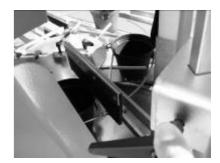
• Place the required pot on the pot support.



- Adjust the rear stop so that the pot is in the middle of the pot support.
- Move the pot holding disk again to close the pot receptacle so that there is a little space left on the sides between the pot and the clips of the pot holding disk.
- Retighten the clamping lever.



 Adjust pot scraper in such a way that excessive soil is scraped from the pot.



- Adjust lower scraper brush in such a way that it cleans the pot support.
- Adjust upper scraper brush in such a way that it cleans the clamps of the pot holding discs.



### c) Soil feeding and emptying the machine

The soil hopper contains 600 litres and can be fed in various ways without the work flow at the machine being disturbed or interrupted.

Feeding can take place:

- · manually by means of a shovel
- · using a wheelbarrow
- using a conveyor belt
- using a shovel loader

The remaining soil can be conveyed out of the machine by opening the soil flap. If the soil heap gets to high in front of the soil flap opening, the potting machine must be pulled back a bit. Cleaning of the elevator deflection also takes place by means of the soil flap opening.

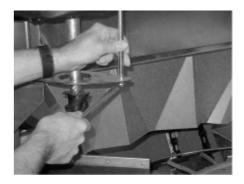


### d) Adjusting drill depth and pressure intensity of down holders

After the size of the soil drill and the down holder matching it are fixed, the drilling depth must be set according to the bale's height of the product to be potted.

During this, proceed as follows:

 Screw on down holder to the holding down bars using selflocking nuts.



• Set the drilling slide to lower position



- Apply a suitable spindle on the drill and slide them on shaft of the motor then fix them by means of a threaded pin
- Set roughly the required drilling depth by using an empty pot



- Drilling depth may be adjusted by shifting the rod in the sleeve and fixing them to each other by means of the threaded pin
- Then make a test drilling with pot filled up with soil and check the drilling depth, readjust if it is required



 When soft plastic, grided or Jiffy type pots are used, pressing force of the press plate shall be set by using clamping pieces

### e) Adjusting the speed of operation (hourly output)

In standard construction of the machine a filling capacity of 500-2500 pots per hour may be reached by using **infinitely variable drive**.

The infinitely variable adjustment process can only be effected when the machine is running. Turn the star handle on the electric motor to make the adjustment to higher or to lower speeds according to mark.

#### Adjustment:

• Turn clockwise: higher output

• Turn counter-clockwise: lower output

For initial work with the potting machine we recommend to start with a low hourly output until all workers have complete command of individual work steps.



#### f) Adjusting the soil amount

Supply of soil from the soil hopper to the elevator takes place by means of a continuous rubber conveyor belt, running on carrier rollers in the soil hopper.

Speed of the belt may be increased or decreased by rotating the star wheel as it is marked.

Before setting is started, clamping lever of spindle of the star wheel shall be loosened and when the required speed is set it shall be tightened. Thus the continuously moved elevator plates carry larger or smaller quantity of soil.

When quantity of soil is set, always make setting by only one or two rotations and then wait until 40-50 pots are filled. Then correction may be made if it is necessary.



Note:

Care shall be taken to set right the required soil quantity. Thus you save the elevator and it results in longer lifetime.

#### g) Setting compactness of the soil (in the pot)

Special feature of Mayer potting machines is to set compactness of the soil in the pot. This depends on:

- 1. Setting the filling quantity by setting the drawer.
- 2. Type and size of pressing plate.

#### Comment to 1:

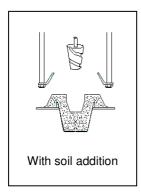
Filled in quantity may be set by drawer with adjustable height. Larger quantity of soil results in more compact filling while soil filling drawn down at edge of the pot results in loose filling.

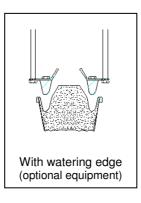


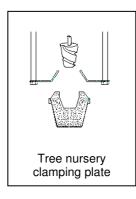
#### Comment to 2:

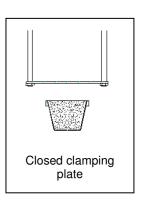
Function of the pressing plate is to hold the pot and to keep rest of the soil during drilling. When gap between outside diameter of the drill and hole of pressing plate (e.g. 6 cm dia. drill with pressing plate hole dia. of 7 cm) is small then only a few quantity of soil is removed and the filled soil is compact. When this gap is larger (e.g. 6 cm dia. drill with pressing plate hole dia. of 9 cm), larger quantity of soil is removed and the filled soil is less compact. The pressing plate with soil addition leaves a soil heap on the pot which may be compacted by repressing. Special accessories shall be used for special tasks and for special pots.

### Various designs of plates:









### 2. Shutting down the machine

There are two ways provided to switch off the machine.

a)

In normal case by pressing switch "Stop" mounted on the swinging cable.

In this case the machine may be restarted by pressing switch "Start".

b)

In emergency case by "Emergency Stop" switch.

When push button "Emergency Stop" is pressed the machine stops immediately and remains stopped. After "Emergency Stop" is eliminated the machine may be started by pressing push button "Start".

### 3. Measures prior to and after a longer shutdown

#### a) Before a long shutdown

- Clean carefully the machine.
- Grease and oil certain parts of the machine according to maintenance plan.
- Protect against dirt and moisture (to be covered)
- Disconnect the machine from power lines (electricity, compressed air)

#### b) After a long shutdown

- Grease and oil certain parts of the machine according to maintenance plan.
- Visually check the machine.
- · Connect the machine to required energy sources.
- Start the machine as it is described in section "Initial startup".

### 7 Malfunctions

To prevent damage to the machine as well as injuries while remedying malfunctions at the machine, it is absolutely necessary to comply with the following points:

- Only eliminate a malfunction if you have the qualification specified to do so.
- Also read the section "General Safety Instructions".
- When eliminating malfunctions with the machine, the following special dangers have to be expected:
- Accidentally switching on the power sources can result in injuries to people as well as damage to the machine.
- In case of unprotected manual operation, there is an increased risk of injuries through bruising.

### 1. Behaviour in case of malfunctions

If any malfunctions should occur while the machine is in operation, proceed as follows:

- 1. Stop the machine either using the STOP button or EMERGENCY SHUT-OFF, depending on the situation.
- When necessary for the safety of people or of the machine, immediately cut off the machine from the power system it has.
- 3. Troubleshooting > If necessary, then by qualified personnel
- 4. Error correction > If necessary, then by qualified personnel
- 5. Starting up the machine



### 2. Possible malfunctions and trouble shooting

### a) Mechanical malfunctions

Failure/Malfunction	Cause	Trouble shooting
Noise in the elevator	Jammed stone or wooden piece	Remove cause for malfunction
Rotating assembly has too much clearance.	Maltese cross or carrier bolt has been bent outwards	Replace maltese cross or carrier bolt.
	Chains are too loose	Retighten chains.
Erratic filling of pots	Matter in elevator	Remove source of interference.
	Soiled buckets	Clean buckets.
No soil supply	Soil hopper empty	Fill hopper.
	Broken return spring at switch neutral gear	Replace spring.
	Free wheel hub is defective	Replace free wheel hub
Pot supply interrupted	Wrong settings	Check settings.

### b) Electrical malfunctions

Failure/Malfunction	Cause	Trouble shooting
Motor protection switches off	Fault in electronics	Electronic parts shall be checked by a skilled electrician
	Mechanic overload	Remove the foreign material causing overload

### 8 Maintenance

When carrying out maintenance for the machine, it is absolutely necessary to comply with the following safety instructions. Doing so will prevent injuries to people, damage to the machine and other damage to property as well as the environment.

- Cleaning, lubricating and maintenance work may only be carried out by authorised operating personnel. The Operating Instructions must be complied with exactly.
- Only trained electricians may ever carry out any of the work on the machine's electrical equipment.
- Switch off all sources of voltage and secure the sources of voltage against them being accidentally switched back on.
- Release pressure of every unit that is under pressure.
- Only Mayer GmbH & Co. KG may ever manipulate the machine's control programme.
- All un-recycled operational materials, lubricants and supplies must be disposed of in an environmentally friendly manner.
- Also read the section "General Safety Instructions"

When carrying out maintenance on the machine, the following special dangers have to be expected.

- Installing incorrect spare parts or wearing parts can cause severe damage to the machine.
- Accidentally switching on the power source can result in severe bodily injuries and damage to the machine.
- There is a danger of getting injured on sharpedged machine parts/tools that are exposed.
- Lubricants or fertilisers that have escaped can result in caustic burns on direct contact with the skin.
- When unsecured manual operation is carried out, there is an increased risk of injury through crushing.

#### 1. General notes

We recommend an annual inspection of the entire machine by our customer service.

For service or repair work, order our customer service at one cour service workshops.



Spare parts have to meet the technical requirements of the machine's manufacturer. This is guaranteed with original spare parts from Mayer.

### 2. Inspection and preventative maintenance

#### 2.1 Elevator chains

Chains may be retensioned by means of tensioning bearings located on two sides of the elevator. Check regularly if the chains are tensioned properly. When the chain is too loose the plates may jam with edge of the housing.

Overtensioned chain requires an excess of driving power and causes too quick wear. When the chains are retensioned both of them shall have the same tightness. With the soil hopper being completely empty and the elevator being at the height of the pot holder, normal tension is available when the chain can be moved about 3-4 cm by hand.



Grease elevator chain prior to a longer shutdown!



### 2.2 Conveyor belt

Generally the conveyor belt requires no retensioning.



However if the belt should be readjusted caused for example by remedy works carried out on the machine, follow the process described below:

Tensioning of the belt may be adjusted by means of tensioning nuts located at end of soil hopper. It is important that both sides of the belt are tensioned by the same force.

Beyond the above care shall be taken on grooves of driving and guiding drum not to be filled up with soil. Regularly clean the grooves when it occurs.

Follow the maintenance schedule.





### 3. Maintenance schedule

Description	Interval	
Grease maltese cross and drive chains	quarterly	
Grease holding-down bar at drill	monthly	
Grease elevator chain (prior to a longer shutdown)		
Grease all bearings fitted with grease nipples	yearly	
Grease the guides for the drill bit slide	monthly	

### 9 Part list

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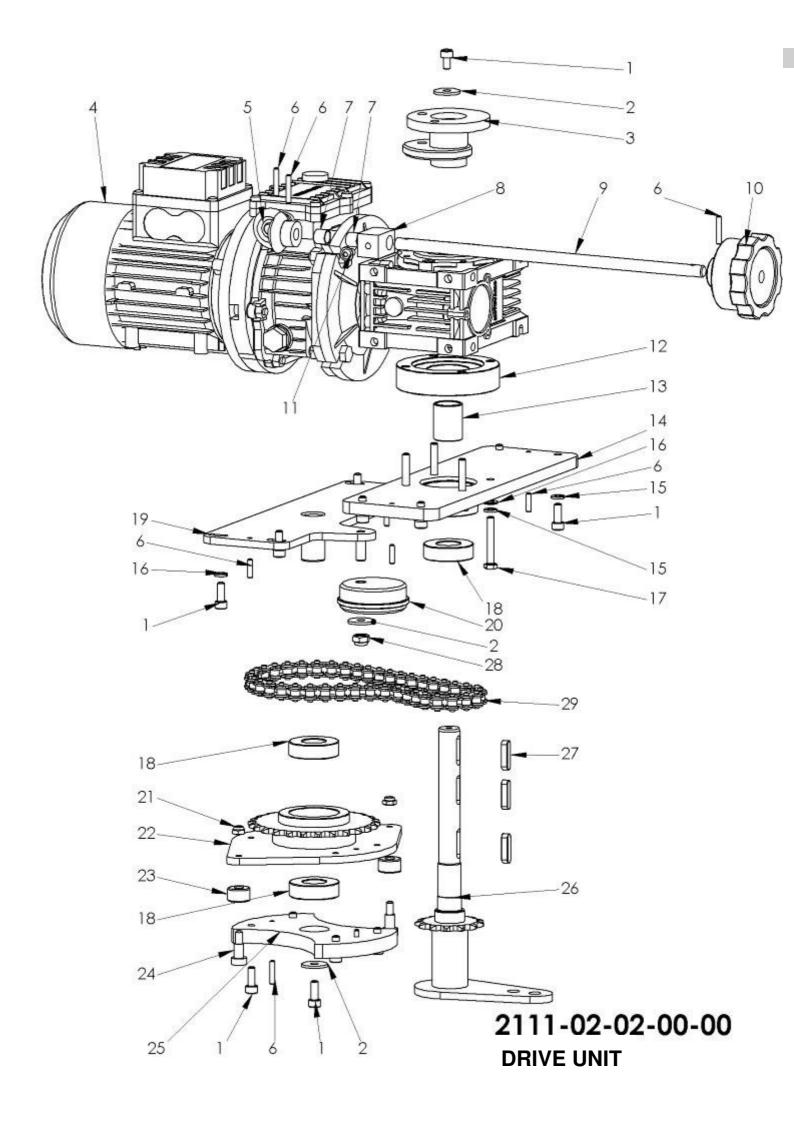
**Frame** 

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Blech <b>Plate</b>	2104-02-01-21-00	2
2	Gewindestück Threaded fitting	1011-41-01-08-04	3
3	4-Kt-Rohr Square pipe	2100-02-01-19-00	2
4	Bohrträger  Drill support	2110-02-01-03-00	1
5	Platte Plate	2110-02-01-12-00	1
6	Träger <b>Support</b>	2110-02-01-01-00	1
7	Halter Support	2110-02-01-05-00	1
8	4-Kt-Rohr Square pipe	2104-01-02-20-00	1
9	Rippe Feather	2110-02-01-10-00	1
10	Platte Plate	2110-02-01-09-00	1
11	6-Kt-Schraube <b>Hexagonal screw</b>	105 023/500 112	2
12	Lasche Connecting plate	2110-02-01-07-00	1
13	Winkel Plate	2110-02-01-02-00	4
14	Rippe <b>Feather</b>	2110-02-01-11-00	2
15	Rohr <b>Pipe</b>	2110-02-01-04-00	1
16	Rohr <b>Pipe</b>	2110-02-01-06-00	1

Antrieb 2111-02-02-00-00 **Drive unit** 

Pos.	Benennung <b>Description</b>	Artikelnummer Part number	Stück <b>Amount</b>
1	Zylinderkopfschraube	101 712/500 253	14
2	Cylinder-head screw U-Scheibe Washer	101 616/500 353	3
3	Steuerteil Controller	2111-02-02-05-00	1
4	Antriebsmotor  Dirving motor	2111-02-02-21-00	1
5	Kegelradsatz	2110-02-02-10-01	1
6	Spannhülse	101 817	9
7	DU-Buchse	102 303	2
8	<b>DU-Bushing</b> Lagerbock	2110-02-02-11-01	1
9	Stange Treaded bar	2111-02-02-09-01	1
10	Verstellrad		1
1	Linsenflachkopfschraube	112 567	1
12	Distanz	2111-02-02-16-01	1
13	Spacer Distanz	2111-02-02-20-01	1
14	Spacer Lagerflansch	2111-02-02-01-00	1
15	Bearing flange Federring Spring ring	101 604/500 075	12
16	U-Scheibe <b>Washer</b>	101 595/500 088	4
17	6-Kt-Schraube  Hexagonal screw	500 117	4

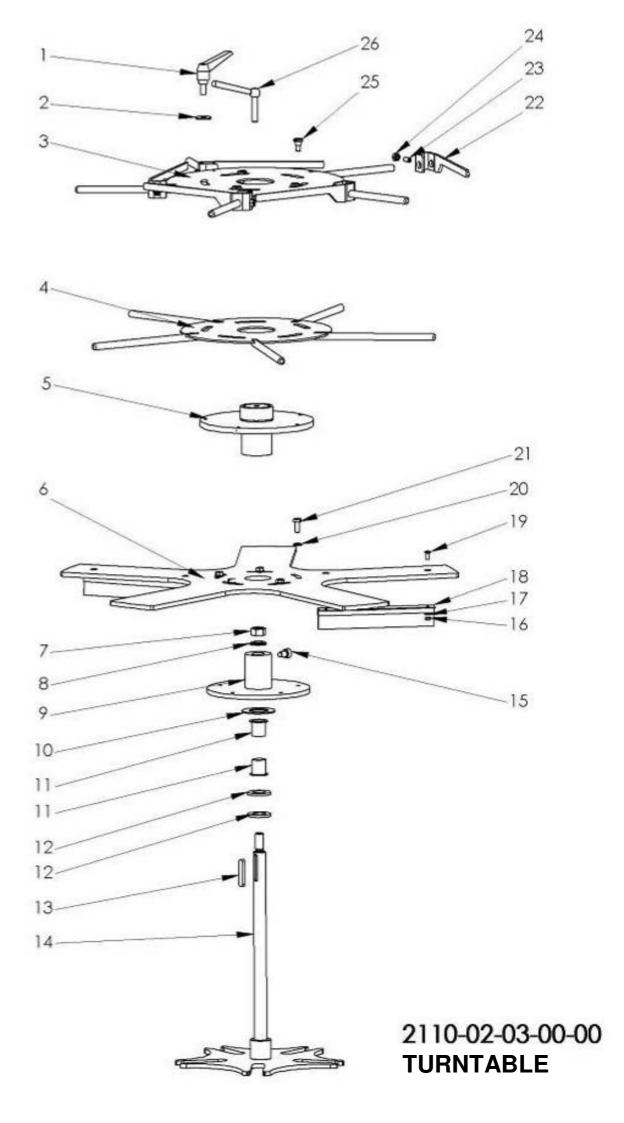
Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
18	Rillenkugellager Ball bearing	500 339	3
19	Lagerplatte  Bearing plate	2110-02-02-02-00	1
20	Kettenspanner Chain tensioning	2110-02-02-08-01	1
21	Selbstsichernde 6-Kt-Mutter Self locking nut	110 714/500 231	2
22	Kettenrad kpl. Sprocket-wheel, complete	2110-02-02-04-00	1
23	Rolle Roller	2104-02-02-13-03	2
24	Pass-Schraube <b>Set screw</b>		2
25	Treibscheibe	2110-02-02-06-01	1
26	Kettenrad kpl.  Sprocket-wheel, complete	2111-02-02-03-00	1
27	Pass-Feder Fastener	101 845/500 051	3
28	Selbsts. 6-Kt-Mutter Self locking nut	102 972/500 232	1
29	Ketten Chain		1



Drehtisch 2110-02-03-00-00 **Turntable** 

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Klemmhebel  Cylinder-head screw	113 999	1
2	U-Scheibe Washer	101 616/500 353	1
3	Topfauflage oben Upper pot support disk	2110-02-03-04-00	1
4	Topfauflage unten  Lower pot support disk	2110-02-03-03-00	1
5	Gleithülse kpl.  Sliding bushing, complet	2110-02-03-07-00	1
6	Topfauflage Pot holder	2110-02-03-06-01	1
7	Selbstsichernde 6-Kt-Mutter Self locking nut	113 697/500 233	1
8	U-Scheibe <b>Washer</b>	101 598/500 080	1
9	Topfauflage kpl. Pot holder complete	2110-02-03-02-00	1
10	Anlaufscheibe Washer disk	112 717/500 282	1
1	Gleitlager Sliding bearing	112 712/500 281	2
12	U-Scheibe <b>Washer</b>		2
13	Passfeder Feather key	113 703/500 052	1
14	Malteserkreuzwelle kpl. Spindle of Maltese cross	2110-02-03-01-00	1
15	Zylinderkopfschraube Cylinder head screw	101 719/500 258	1
16	6-Kt-Mutter <b>Hexagonal nut</b>	101 630/500 219	4
17	U-Scheibe Washer	101 593/500 086	4
18	Bürste Brush	2110-02-03-08-01	2

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
19	Senkschraube Counter sunk screw	101 783/500 196	4
20	U-Scheibe Washer	101 616/500 353	5
21	6-Kt-Schraube <b>Hexagonal screw</b>	101 767/500 122	5
22	Anschlag <b>Buffer</b>	2110-02-03-05-01	5
23	Nirosta-Druckstück Stainless pushin piece	112 826/501 569	5
24	6-Kt-Mutter  Hexagonal nut	105 083/500 221	5



Bohrstation 2110-02-02-00-00

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Drill				

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Motor <b>Motor</b>	101 900	1
2	6-Kt-Schraube  Hexagonal screw	109 878/500 169	4
3	6-Kt-Mutter  Hexagonal nut	101 688/500 222	20
4	Klemmstück Clamping piece	1010-04-01-14-04	2
5	Gewindestift Threaded pin	101 742/500 026	2
6	Gummipuffer Rubber buffer	102 263	4
7	Führungsrohr Guide pipe	1010-04-01-13-00	2
8	Druckfeder  Compression spring	1010-04-01-14-02	2
9	U-Scheibe Washer	101 596/500 089	4
10	Bohrmotorhalter  Motor support	2110-02-05-03-01	1
11	Federring	101 605/500 076	12
12	Spring ring Stange	1010-04-01-14-01	2
13	Bar Motorplatte	2110-02-05-02-00	1
14	Motor plate 6-Kt-Mutter	105 083/500 221	3
15	<b>Hexagonal nut</b> Platte <b>Plate</b>	2105-02-05-04-03	1
16	Platte	2105-02-05-04-04	1
17	Plate Gummiplatte	2104-02-05-04-05	1
18	Rubber plate U-Scheibe Washer	101 595/500 088	5

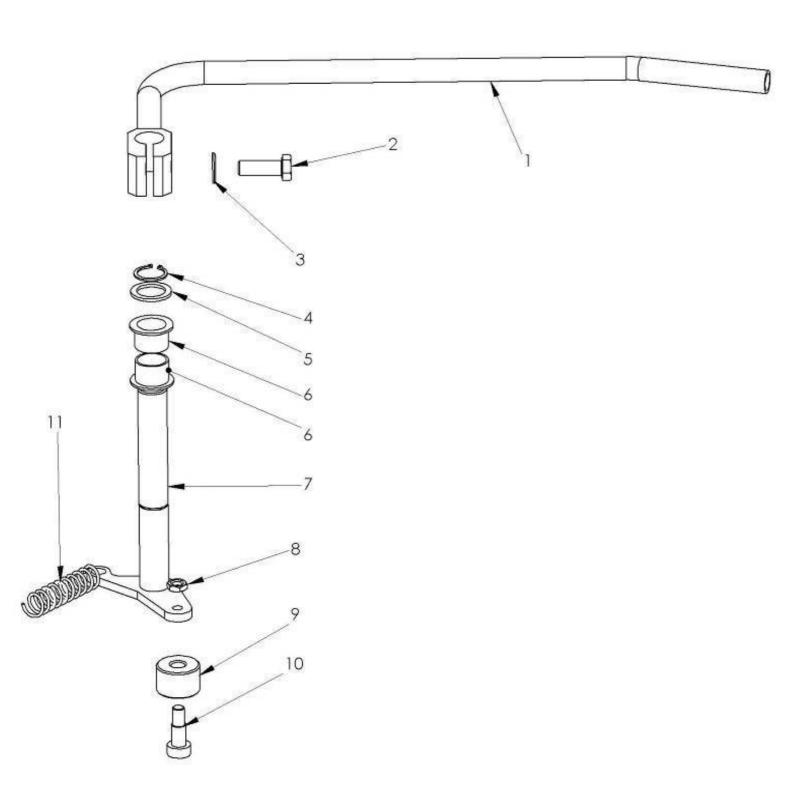
Pos.	Benennung <b>Description</b>	Artikelnummer Part number	Stück <b>Amount</b>
19	6-Kt-Schraube  Hexagonal screw	103 475/500 121	5
20	Selbstsichernde 6-Kt-Mutter Self locking nut	102 972/500 232	2
21	Bohrerschutz kpl.  Drill protection, complete	2100-02-05-08-00	1
22	Führung  Guide	2104-02-05-07-01	2
23	Zylinder-Schraube  Cylinder head screw	101 726	8
24	6-Kt-Mutter  Hexagonal nut	105 078/500 224	6
25	Rohr Pipe	2110-02-05-06-02	2
26	6-Kt-Schraube <b>Hexagonal screw</b>	105 028/500 857	2
27	U-Scheibe Washer	101 616/500 353	4
28	Selbstsichernde 6-Kt-Mutter Self locking nut	110 714/500 231	2
29	Schraube Screw	2110-02-05-06-03	2
30	Rillenkugellager  Ball bearing	501 054	4
31	Pleuel <b>Con-rod</b>	2110-02-05-06-01	1
32	Rohr Pipe	2110-02-05-07-00	2
33	Umlenkhebel <b>Washer</b>	2110-02-05-05-00	1
34	Rohr	2110-02-05-01-02	2
35	Pipe Gelenkkopf Rod end		2
36	Zylinder-Schraube	2110-02-05-01-03	2
37	Cylinder head screw Schubstange Driving bar	2110-02-05-01-01	1

Pos.	Benennung Description	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
38	Bolzen	2110-02-05-08-00	1
39	Pin Linsenflachkopfschraube Flange screw	112 567	1

### 2110-02-05-00-00 **DRILL** 13-14-15--3 19 -12 -21 11-29-27-25 27 26 24 27 30 24 34 38 32 30 36 36 35 24 37 24

Übergabe 2110-02-06-00-00 **Pot transfer** 

Pos.	Benennung	Artikelnummer	Stück
	Description	Part number	Amount
1	Übergabehebel	2110-02-06-03-00	1
	Transforming lever		
2	6-Kt-Schraube	101 699/500 183	1
	Hexagonal screw		
3	U-Scheibe	101 597/500 090	1
	Washer		
4	Sicherungsring	101 623/500 897	1
_	Retaining ring		
5	Stützscheibe	503 457	1
	Support disk		
6	DU-Buchse	102 879	2
	DU-Bushing		
7	Auswerferwelle kpl.	2110-02-06-02-00	1
	Shaft,complete		
8	6-Kt-Mutter	104 371/500 228	1
	Hexagonal nut		
9	Rolle	2110-02-06-01-01	1
	Roller		
10	Umbrako-Schraube	2110-02-06-01-02	1
	Umbrako Screw		
11	Zugfeder	1010-01-03-05-00	1
	Pull spring		
	· ·		



2110-02-06-00-00 POT TRANSFER

Topfführung Guide rail

2110-02-07-00-00

Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
6-Kt-Schraube	101 646/500 130	3
	101 010,000 100	Ū
	2100-02-07-01-00	3
Bracket		
Selbstsichernde 6-Kt-Mutter	1010 714/500 231	6
Self locking hexagonal nut		
6-Kt-Schraube	105 028/500 857	6
Hexagonal screw		
	2105-02-07-03-00	2
Lever II.		
Hebel III.	2105-02-07-04-00	1
Lever III.		
Flachstahl	2100-02-07-06-00	2
Steel plate		
Flachstahl	2100-02-07-07-00	1
Steel plate		
	Description  6-Kt-Schraube Hexagonal screw Träger Bracket Selbstsichernde 6-Kt-Mutter Self locking hexagonal nut 6-Kt-Schraube Hexagonal screw Hebel II. Lever II.  Hebel III. Flachstahl Steel plate Flachstahl	Description         Part number           6-Kt-Schraube         101 646/500 130           Hexagonal screw         2100-02-07-01-00           Bracket         2100-02-07-01-00           Self scking hexagonal nut         1010 714/500 231           6-Kt-Schraube         105 028/500 857           Hexagonal screw         2105-02-07-03-00           Lever III.         2105-02-07-04-00           Lever III.         2100-02-07-06-00           Steel plate         2100-02-07-07-00

2110-02-07-00-00 GUIDE RAIL

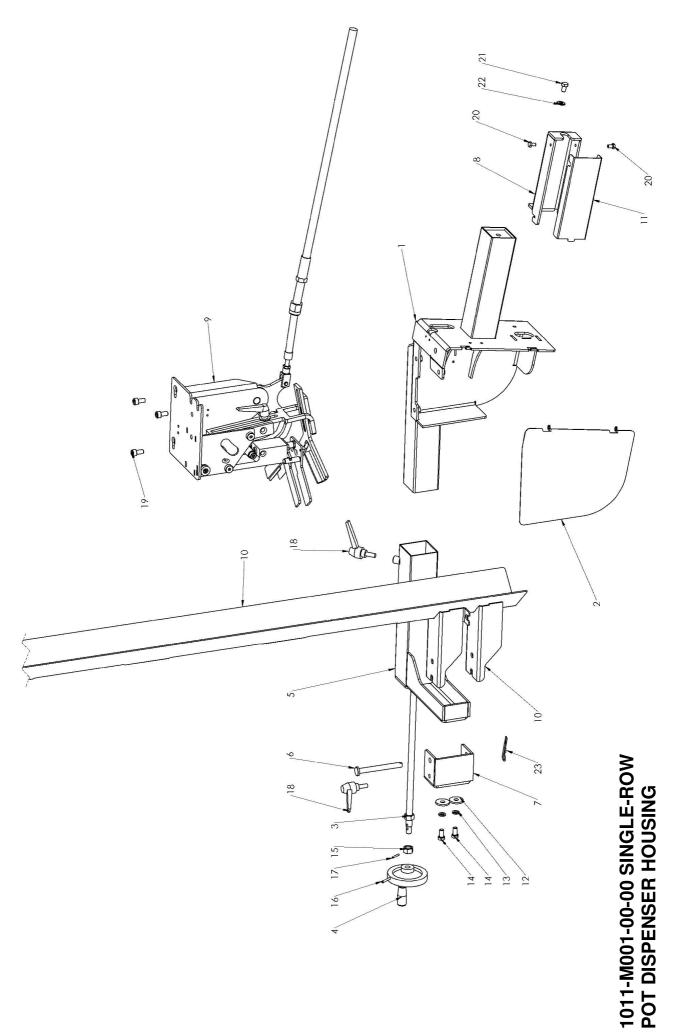
Abdeckung 2110-02-08-00-00 **Cover** 

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Deckel	2110-02-08-02-01	1
'	Cover II.	2110 02 00 02 01	'
2	Deckel	2110-02-08-03-01	1
	Cover III.		
3	Deckel	2110-02-08-01-01	1
	Cover I.		
4	Abdeckung	2110-02-08-05-01	1
	Cover IV.		
5	Deckel	2110-02-08-04-01	1
	Cover V.		
6	U-Scheibe	101 595/500 088	2
	Washer		
7	6-Kt-Schraube	103 475/500 121	2
	Hexagonal screw		
8	Linsenkopfschraube	112 576	23
	Flange screw		

### EINREIHENMAGAZIN GEHÄUSE 1011-M001-00-00 SINGLE-ROW POT DISPENSER HOUSING

Pos.	Benennung  Description	Artikelnummer Part number	Stück <b>Amount</b>
1	Gestell	1011-M001-01-00	1
2	<b>Frame</b> Tür	1011-M001-06-01	1
3	<b>Door</b> Spindel	1011-M001-03-00	1
4	Shaft Scheibenhandrad	502 048	1
5	Hand wheel Speicherblock Memory stack	1011-M001-02-00	1
6	Achse	1011-M001-04-01	1
7	Shaft Verstellung	1011-M001-05-00	1
8	Adjustment Blech Plate	1011-M050-01-01	1
9	Innenmodul rechts  Module inside right hand	1011-M006-00-00	1
10	Speicherwinkel Gr. 1 / Clamping size 1 Speicherwinkel Gr. 2 / Clamping size 2 Speicherwinkel Gr. 3 / Clamping size 3 Speicherwinkel Gr. 4 / Clamping size 4	1011-M021-01-00 1011-M022-01-00 1011-M023-01-00 1011-M024-01-00	1
11	Schutz Protection	1011-M050-01-02	1
12	U-Scheibe Washer	101 617/500 350	2
13	Federring	101 617/500 350	2
14	Spring ring 6-Kt-Schraube Hexagonal screw	105 027/500 113	2

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
15	6-Kt-Mutter <b>Hexagonal nut</b>	105 078/500 224	1
16	Spannhülse Clamp sleeve	101 817/500 004	1
17	Spannhülse <b>Clamp sleeve</b>	101 813/500 003	1
18	Klemmhebel Clamp lever	505 244	2
19	Zylinderschraube  Cylinder head screw	101 721/500 259	3
20	6-Kt-Schraube  Hexagonal screw	104 029/500 129	2
21	6-Kt-Schraube <b>Hexagonal screw</b>	106 208/500 111	1
22	U-Scheibe	101 596/500 089	1
23	Washer Federstecker Spring connector	102 508	1

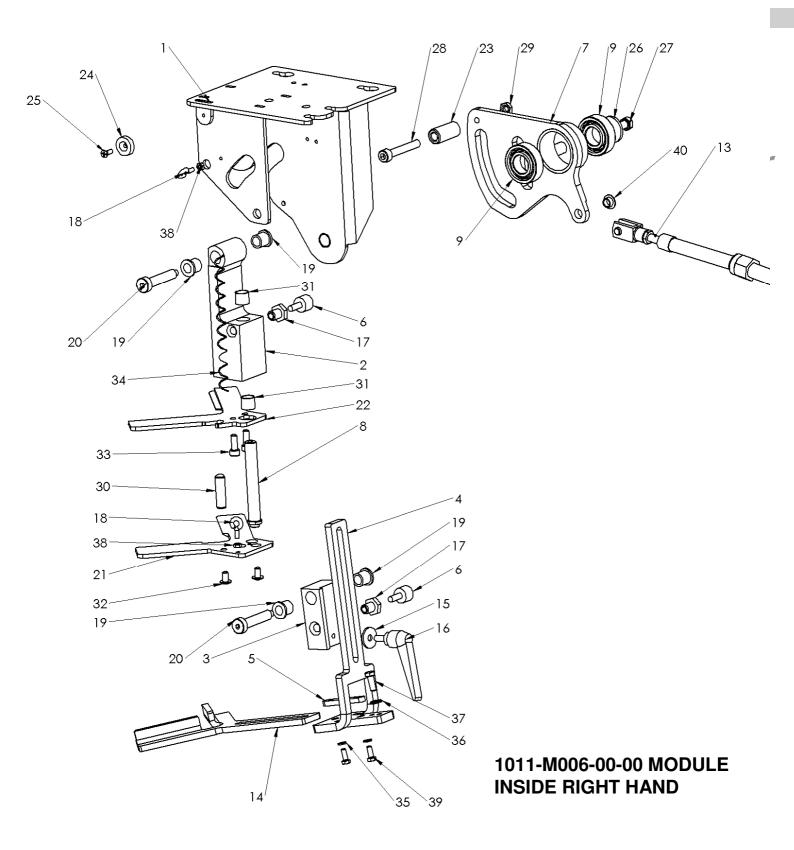


### INNENMODUL RECHTS 1011-M006-00-00 MODULE INSIDE RIGHT HAND

Pos.	Benennung <b>Description</b>	Artikelnummer Part number	Stück <b>Amount</b>
1	Gehäuse	1011-M006-01-00	1
0	Housing Backenhalter	1011 M000 00 01	4
2	Jaw support	1011-M006-03-01	1
3	Schwenkhalter	2601-M001-08-01	1
3	Swivelling bracket	2001-W001-00-01	•
4	Stellstück	1011-M006-05-01	1
•	Adjuster piece	1011 111000 00 01	·
5	Passfeder	1011-43-01-16-02	1
	Feather key		
6	Kurvenrolle	102 549/500 323	2
	Guide roller		
7	Steuerhebel	1011-M006-02-00	1
_	Control lever		
8	Achse	1011-M022-02-01	1
0	Shaft	100050/500 000	0
9	Rillenkugellager	108058/500 339	2
13	<b>Grooved ball bearing</b> Druck-Zug-Kabel		1
13	Push-Pull-Cable		
	Haltebacke unten Gr. 1 / <b>Retainer jaw size 1</b>	1011-43-06-06-01	
14	Haltebacke unten Gr. 2 / <b>Retainer jaw size 2</b>	1011-43-07-06-01	1
	Haltebacke unten Gr. 3 / Retainer jaw size 3	1011-43-08-06-01	
15	U-Scheibe <b>Washer</b>	101 616/500 352	1
16	Klemmhebel Clamp lever	115 645/506 451	1
17	Reduzierstück Reducing piece	1011-41-01-06-03	2
18	Ring bolt	106952	2

Pos.	Benennung <b>Description</b>	Artikelnummer Part number	Stück <b>Amount</b>
	Description	rait ilullibei	Amount
19	Bundlager Collar bearing	105995	4
20	Passschraube	1011-43-01-06-04	2
	Set-screw		
	Auswerfer Gr. 1 / Ejector size 1	1011-M021-03-01	
21	Auswerfer Gr. 2 / Ejector size 2	1011-M022-03-01	1
	Auswerfer Gr. 3 / Ejector size 3	1011-M023-03-01	
	Haltebacke oben Gr. 1 / Upper retainer jaw size 1	1011-43-06-14-01	
22	Haltebacke oben Gr. 2 / Upper retainer jaw size 2	1011-43-07-14-01	1
	Haltebacke oben Gr. 3 / Upper retainer jaw size 3	1011-43-08-14-01	
23	Rolle	1011-M006-04-01	1
20	Roller	1011 W000 0+ 01	·
24	Haltemagnet	505 748	1
	Holding magnet		·
25	Senkschraube	101 783/500 196	1
	Counter sunk screw		
26	U-Scheibe	101 617/500 35C	1
	Washer		
27	6-Kt-Schraube	105 027/500 113	1
	Hexagonal screw		
28	Zylinderschraube	505 120	1
	Cylinder head screw	404.074/500.000	
29	6-Kt-Mutter	104 371/500 228	1
20	Hexagonal nut	110670	4
30	Zylinderstift  Cylinder bolt	113670	1
	Cylinder bolt		
31	DU-Buchse	102 304/502 954	2
	DU-bushing		
32	Linsenkopfschraube	112 567/500 321	2
	Lense head screw		
33	Zylinderschraube	101 712/500 253	2
	Cylinder head screw		

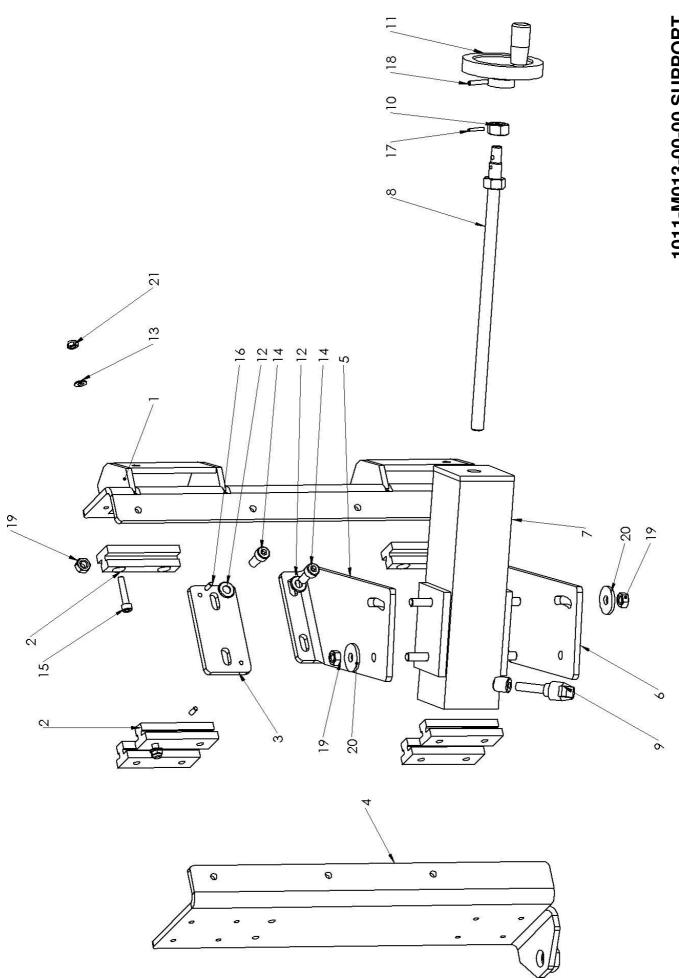
Pos.	Benennung	Artikelnummer	Stück
	Description	Part number	Amount
34	Zugfeder	1011-40-01-07-08	1
	Tension spring		
35	Federring	101 603/500 085	2
	Spring ring		
36	U-Scheibe	101 595/500 088	1
	Washer		
37	6-Kt-Schraube	101 767/500 122	1
	Hexagonal screw		
38	6-Kt-Mutter	101 630/500 219	2
	Hexagonal nut		
39	6-Kt-Schraube	101 639/500 127	2
	Hexagonal screw		
40	DU-Buchse	102 313/500 133	1
	DU-bushing		



### MAGAZINHALTER 1011-M013-00-00 SUPPORT FOR POT DISPENSER

	Pos. Benennung Description	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Träger <b>Mounting</b>	1011-M013-01-00	1
2	Gleitschiene <b>Guide rail</b>	2400-A061-05-04	6
3	Platte Plate	2400-M005-02-02	1
4	Träger	1011-M013-02-00	1
5	<b>Mounting</b> Platte <b>Plate</b>	1011-M013-03-01	1
6	Platte <b>Plate</b>	1011-M013-03-02	1
7	Fuß	1011-M013-04-00	1
8	Support Spindel Spindle	2400-M007-02-00	1
9	Klemmhebel Clamp lever	505 244	1
10		105 078/500 224	1
11	Scheibenhandrad	502 048	1
12	Hand wheel U-Scheibe Washer	101 596/500 089	6
13		101 595/500 088	12
14		101 722/500 264	6
15	-	101 715/501 748	12

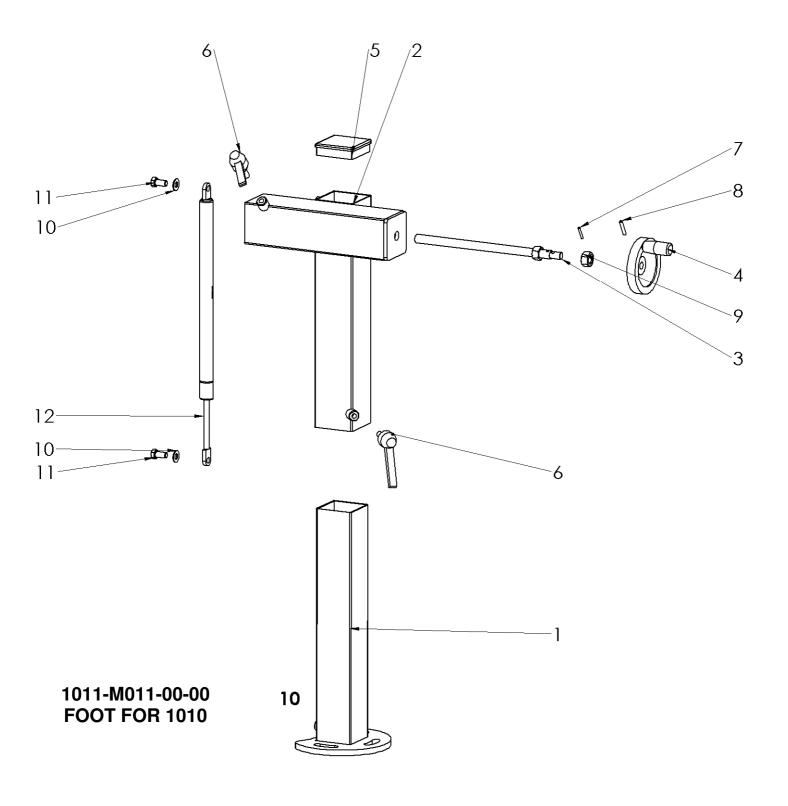
	Pos. Benennung	Artikelnummer	Stück
	Description	Part number	Amount
16	Spannhülse	101 815/501 184	2
	Clamp sleeve		
17	Spannhülse	101 813/500 003	1
	Clamp sleeve		
18	Spannhülse	101 817/500 004	1
	Clamp sleeve		
19	6-Kt-Mutter	101 688/500 222	5
	Hexagonal nut		
20	_	101 617/500 350	4
	Washer		
21	Selbstsichernde Mutter	110 714/500 231	12
	Self-locking nut		



# 1011-M013-00-00 SUPPORT FOR POT DISPENSER

### FUSS FÜR 1010 1011-M011-00-00 FOOT FOR 1010

	Pos. Benennung  Description	Artikelnummer Part number	Stück <b>Amount</b>
1	Fuß	1011-M011-02-00	1
	Foot		
2	Teleskop	1011-M011-01-00	1
	Telescope		
3	Spindel	1011-M011-03-00	1
	Spindle		
4	Scheibenhandrad	502 048	1
	Hand wheel		
5	Abdeckkappe	504 655	1
	Cover cap		
6	Klemmhebel	505 244	2
	Clamp lever		
7	Spannhülse	101 813/500 003	1
	Clamp sleeve		
8	Spannhülse	101 817/500 004	1
	Clamp sleeve		
9	6-Kt-Mutter	105 078/500 224	1
	Hexagonal nut		
10		101 596/500 089	2
	Washer		
11		105 027/500 113	2
	Hexagonal screw		
12	Gasfeder	115 160/505 767	1
	Gas spring		



Erdbehälter 2105-01-01-00-00

### Soil hopper

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	6-Kt-Schraube <b>Hexagonal screw</b>	101 767/500 122	52
2	U-Scheibe <b>Washer</b>	101 595/500 088	99
3	6-Kt-Mutter <b>Hexagonal nut</b>	105 083/500 221	70
4	Sterling  Adjusting ring	101 696	4
5	Rad <b>Wheel</b>	501 251	2
6	6-Kt-Mutter <b>Hexagonal nut</b>	101 688/500 222	6
7	U-Scheibe <b>Washer</b>	101 596/500 089	14
8	6-Kt-Schraube <b>Hexagonal screw</b>	103 475/500 121	23
9	Versteifung links Brace left	2105-01-01-21-02	1
10	6-Kt-Schraube <b>Hexagonal screw</b>	105 027/500 113	4
11	Verbindungsblech Connecting plate	2105-01-01-17-01	1
12	Träger links  Bracket left	2105-01-01-05-00	1
13	6-Kt-Schraube <b>Hexagonal screw</b>	105 028/500 857	8
14	Führung <b>Guide</b>	2104-01-01-05-07	4
15	Fuß <b>Foot</b>	2104-01-01-10-00	1
16	Zylinderkopfschraube  Cylinder head screw	101 721/500 259	4
17	Verbindung Connecting plate	2105-01-01-20-01	1
18	Leiste	2105-01-01-12-00	2

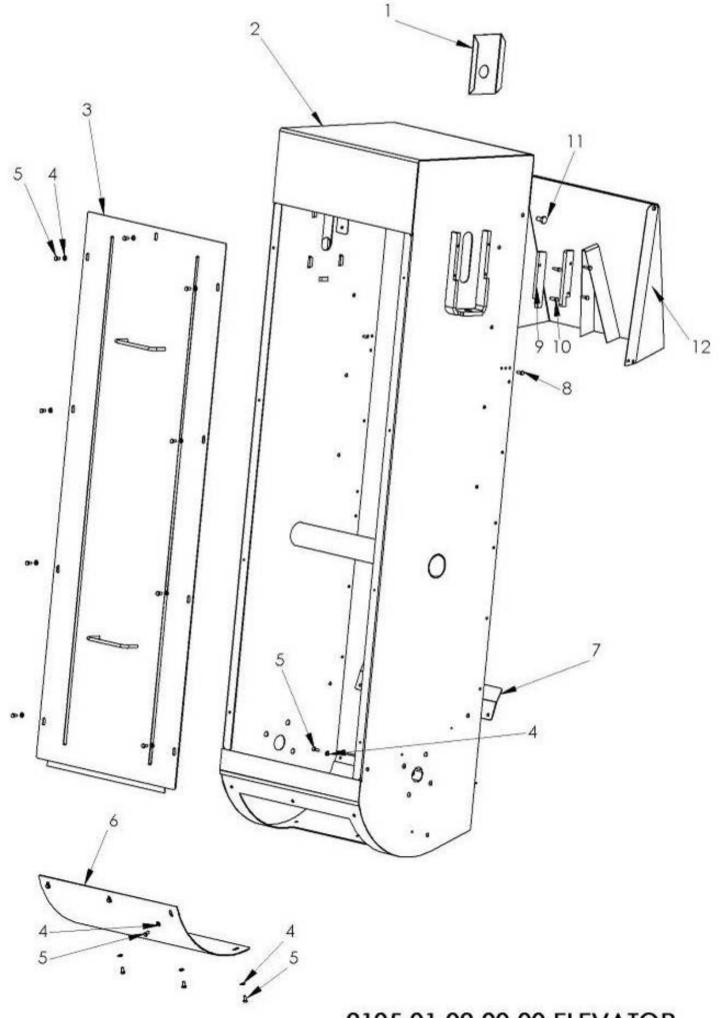
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Pos.	Benennung  Description	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
19	Gummi	2104-01-01-11-00	2
20	Rubber Verbindung Connecting plate	2104-01-01-07-01	1
21	Federring Spring ring	101 604/500 075	44
22	Träger rechts  Bracket right	2105-01-01-06-00	1
23	Abschlussblech Cover plate	2104-01-01-08-01	1
24	Seitenwand rechts Side wall right	2105-01-01-02-01	1
25	Versteifung rechts  Brace right	2105-01-01-21-01	1
26	Flachrundschraube	101 687/500 066	6
27	Half-round head screw Schutzblech rechts	2105-01-01-16-01	1
28	Protecting plate right Schutzblech links Protecting plate left	2105-01-01-15-01	1
29	U-Scheibe Washer	101 618/500 349	1
30	6-Kt-Schraube  Hexagonal screw	105 040/500 184	1
31	Seitenwand links Side wall left	2105-01-01-01	1
32	Schutzblech Protecting plate	2105-01-01-14-01	1

2105-01-01-00-00 SOIL HOPPER

### Elevator 2105-01-02-00-00 **Elevator**

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Schutz <b>Protection</b>	2105-01-02-09-00	2
2	Elevator-Gehäuse Elevator housing	2105-01-02-10-00	1
3	Elevator cover	2105-01-02-02-00	1
4	U-Scheibe <b>Washer</b>	101 595/500 088	19
5	6-Kt-Schraube  Hexagonal screw	103 475/500 121	19
6	Deckel Cover	2105-01-02-04-00	1
7	Leitblech Guiding plate	2105-01-02-05-01	1
8	6-Kt-Schraube  Hexagonal screw	101 767/500 122	2
9	Führung  Guide	2104-01-01-05-07	4
10	6-Kt-Schraube  Hexagonal screw	105 028/500 857	8
11	6-Kt-Schraube <b>Hexagonal screw</b>	105 025/500 173	2
12	Erdrutsche Soil chute	2105-01-02-03-00	1



2105-01-02-00-00 ELEVATOR

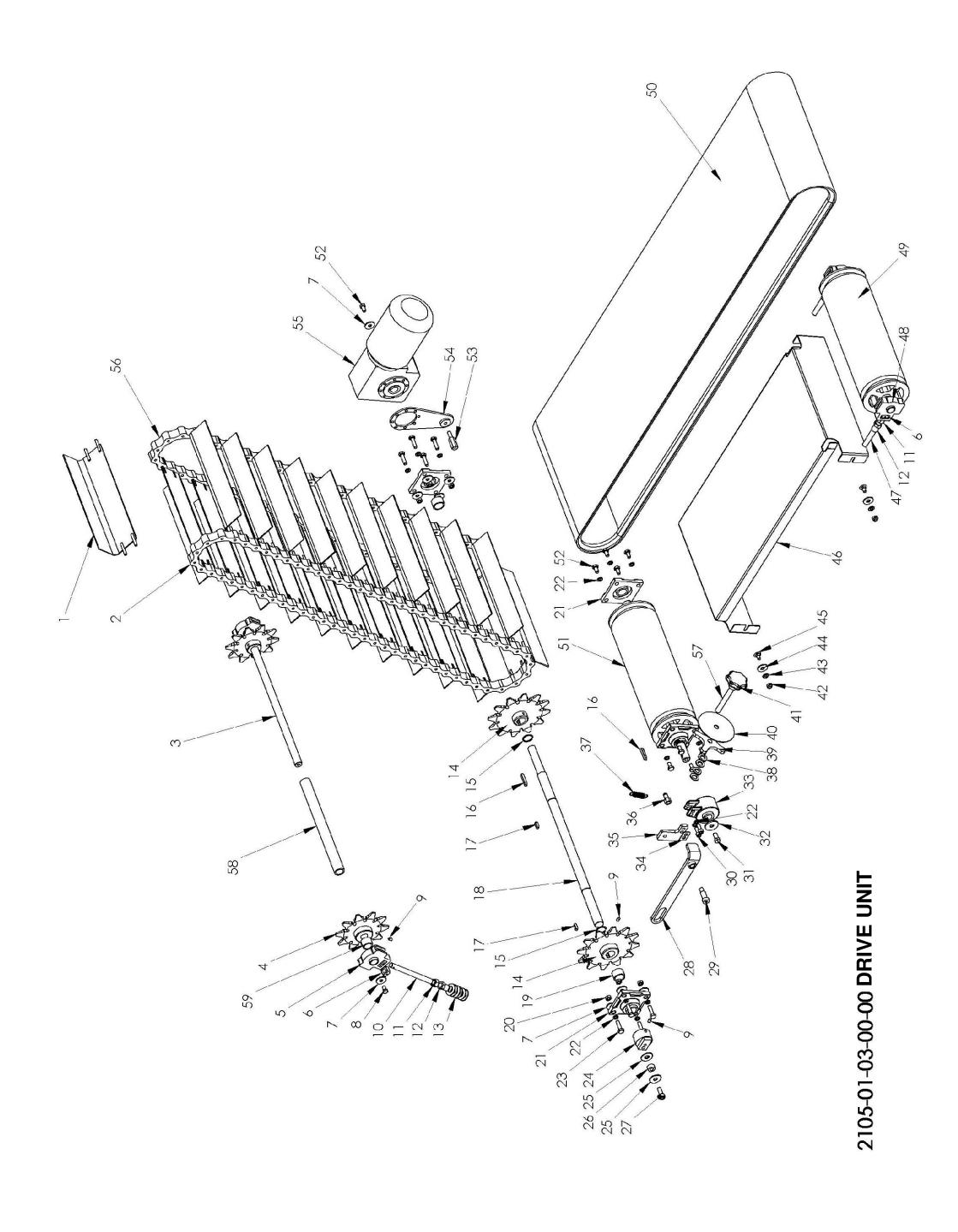
### Antrieb 2105-01-03-00-00 **Drive unit**

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
1	Schaufel <b>Shovel</b>	2104-01-03-06-00	17
2	Förderkette links  Conveyor chain left	2104-01-03-04-00	1
3	Spannwelle Tensioning shaft	2100-01-03-01-01	1
4	Spann und Umlenkrad Tensioning and Deflecting pulley	110 381	2
5	Spannlager Tensioning bearing	502 501	2
6	4-Kt-Mutter	101 638	4
7	Square nut U-Scheibe Washer	101 618/500 349	11
8	6-Kt-Schraube	105 038/500 175	2
9	Hexagonal screw Gewindestift Threaded pin	101 747/500 011	5
10	Spindel Spindle	2104-01-03-20-01	2
11	6-Kt-Mutter	101 614/500 230	4
12	Hexagonal nut Bundmutter	1010-01-03-09-03	4
13	Flanged nut Tellerfeder Disk spring	101 888	12
14	Antriebsrad  Driving pulley	102 151	2
15	Sicherungsring für Welle Retaining ring	101 624	2
16	Passfeder Fastoner	101 851/500 057	2
17	Fastener Passfeder Fastener	101 849/500 055	2

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
18	Antriebswelle <b>Drive shaft</b>	2104-01-03-02-01	1
19	Distanzrohr  Distance	2100-01-03-02-03	2
20	6-Kt-Mutter  Hexagonal nut	105 079/500 223	8
21	Flanschlager <b>Flange bearing</b>	102 182/500 475	4
22	Federring Spring ring	101 606/500 077	18
23	6-Kt-Schraube  Hexagonal screw	101 671/500 182	8
24	Exzenter  Excenter	1010-01-03-07-00	1
25	Distanzscheibe  Distance disk	1010-01-03-03-03	2
26	Nadellager <b>Needle bearing</b>	102 201	1
27	Zylinderkopfschraube  Cylinder head screw		1
28	Zugstange Towing bar	2105-01-03-08-00	1
29	Passschraube Set screw	101 873	1
30	Zylinderkopfschraube Cylinder head screw	101 729	2
31	6-Kt-Schraube Hexagonal screw	101 677/500 176	1
32	U-Scheibe Washer	101 619/501 530	1
33	Freilauf Free wheel hub	102 621	1
34	Distanz  Distance	2105-01-03-09-02	1
35	Lasche Plate	2104-01-03-09-01	1

Pos.	Benennung <b>Description</b>	Artikelnummer <b>Part number</b>	Stück <b>Amount</b>
36	Federbolzen Spring bolt	1010-02-02-02	1
37	Zugfeder Pull-spring	2104-01-03-15-00	1
38	U-Scheibe Washer	104 043/500 082	4
39	Kreuzgriff Cross handle	1010-02-02-08-03	1
40	Scheibe Disk	1010-02-02-08-02	1
41	Sterngriff Star handle	102 610	1
42	Selbstsichernde 6-Kt-Mutter Self locking hexagonal nut	112 833	4
43	U-Scheibe Washer	101 597/500 090	4
44	U-Scheibe Washer		4
45	Flachrundschraube Half round screw	101 690/500 110	4
46	Träger <b>Support</b>	2105-01-03-16-01	1
47	Spindel Spindle	2104-01-03-20-01	2
48	Spannlager Tensioning bearing	502 501	2
49	Spannrolle Tensioning roller	2100-01-03-26-00	1
50	Gummiband Rubber band	112 549	1
51	Antriebsrolle  Driving roller	2104-01-03-25-00	1
52	6-Kt-Schraube  Hexagonal screw	101 025/500 173	8
53	Drehmomentstütze	2104-01-03-11-02	1
54 55	Motor <b>Motor</b>	114950 / 501 252	1 1

Pos.	Benennung  Description	Artikelnummer Part number	Stück <b>Amount</b>
	2000p		7 0
56	Förderkette rechts	2104-01-03-05-00	1
	Conveyor chain right		
57	Gewindestange	1010-02-02-08-01	1
	Threadad bar		
58	Siederohr	2100-01-03-19-00	1
	Distance piece		
59	Siederohr	2100-01-03-18-00	2
	Distance piece		



### 10 Circuit diagrams for electric and pneumatic system

### 11 Guarantee

### Horticultural machinery and special machinery

We will accept liability for faults in the supplied goods and for any failure to provide features for the existence of which an express assurance had been given. In such a case we undertake – to the exclusion of all further claims – to improve or re-supply (at our discretion) free of charge any parts which have revealed themselves to be unserviceable or subject to a not inconsiderable impairment in serviceability due to faults in their material, manufacturing process or design within twelve months (or within six months for multi-shift operation) of their arrival on the customer's premises. For parts which we do not manufacture ourselves (e.g. motors), we can only accept liability for the same scope and length of time which the subcontractor has accorded to us.

Any replaced parts shall become our own property. No warranty claims can be accepted if the fault occurs as a result of the customer having mistreated or neglected the products delivered by us, made modifications or undertaken repairs incorrectly or without our prior approval, or had third parties undertake such work.

The customer's entitlement to assert claims due to faults shall in all cases lapse six months following a complaint made within the required time period, however no sooner than the end of the compulsory warranty period. We are not responsible for correcting faults unless the customer has fulfilled its obligations due to us up to the point when the fault became apparent.



### Changes in the design and shape of horticultural machinery and equipment

We reserve the right to make changes in design and shape, in particular with regard to deviations from the drawings and descriptions etc. during the delivery period, provided that the purchased object is not thereby significantly altered, rendered less effective or reduced in value and the customer can reasonably be expected to accept the modifications.

You have chosen to purchase a product of true quality.

We wish you every success with your product.

We would be most grateful if you would recommend our products to others.

Thank you

Your Mayer-TEAM