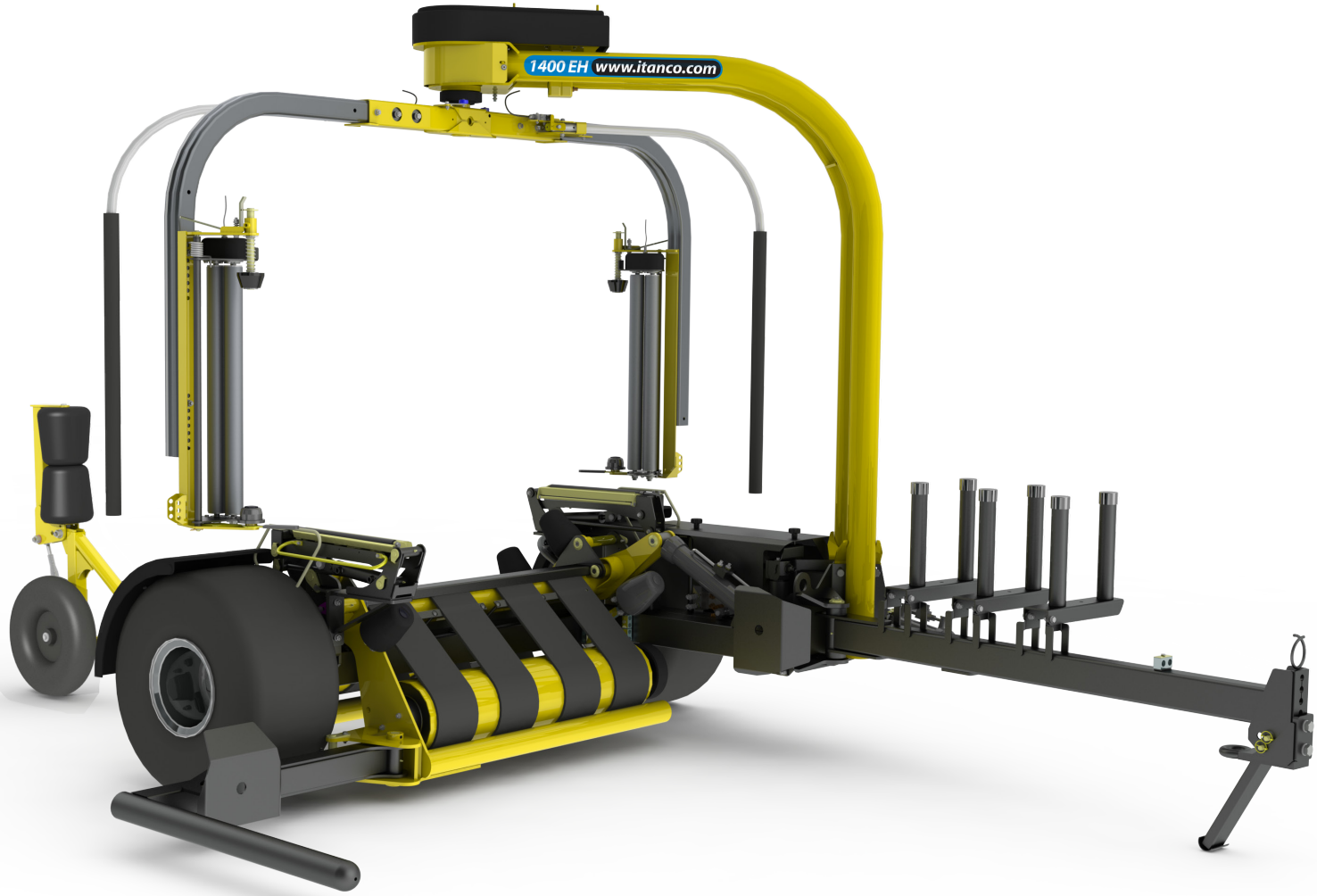
1400 EH - Autowrap

Innovation in Agricultural Machinery



OPERATOR'S handbook

1400/V.01-17-ENG

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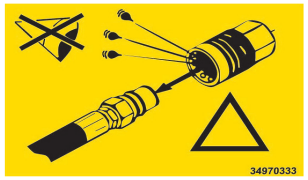
Read Operators Manual
Prior to using machine

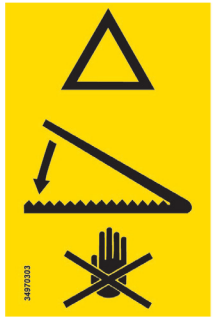
Ensure wrapping arms
do not exceed 30 RPM

Ensure all nuts & bolts have
been tightened prior to
operating the machine

Danger from rotating
Prestretcher

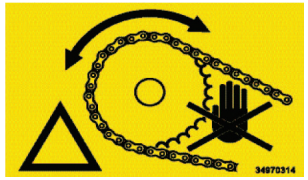


Warning, all hoses are
constantly under pressure



Danger keep hands
clear of sharp blades

Danger stay at a safe distance
whilst machine is in operation



Do not open or remove
Safety Guards while the machine
is connected to the tractor

Tanco Autowrap Ltd congratulates you on your choice of the TANCO AUTOWRAP 1400 bale wrapping machine. We are certain you will be satisfied with the machine, and that you will have the pleasure of your investment for many years.

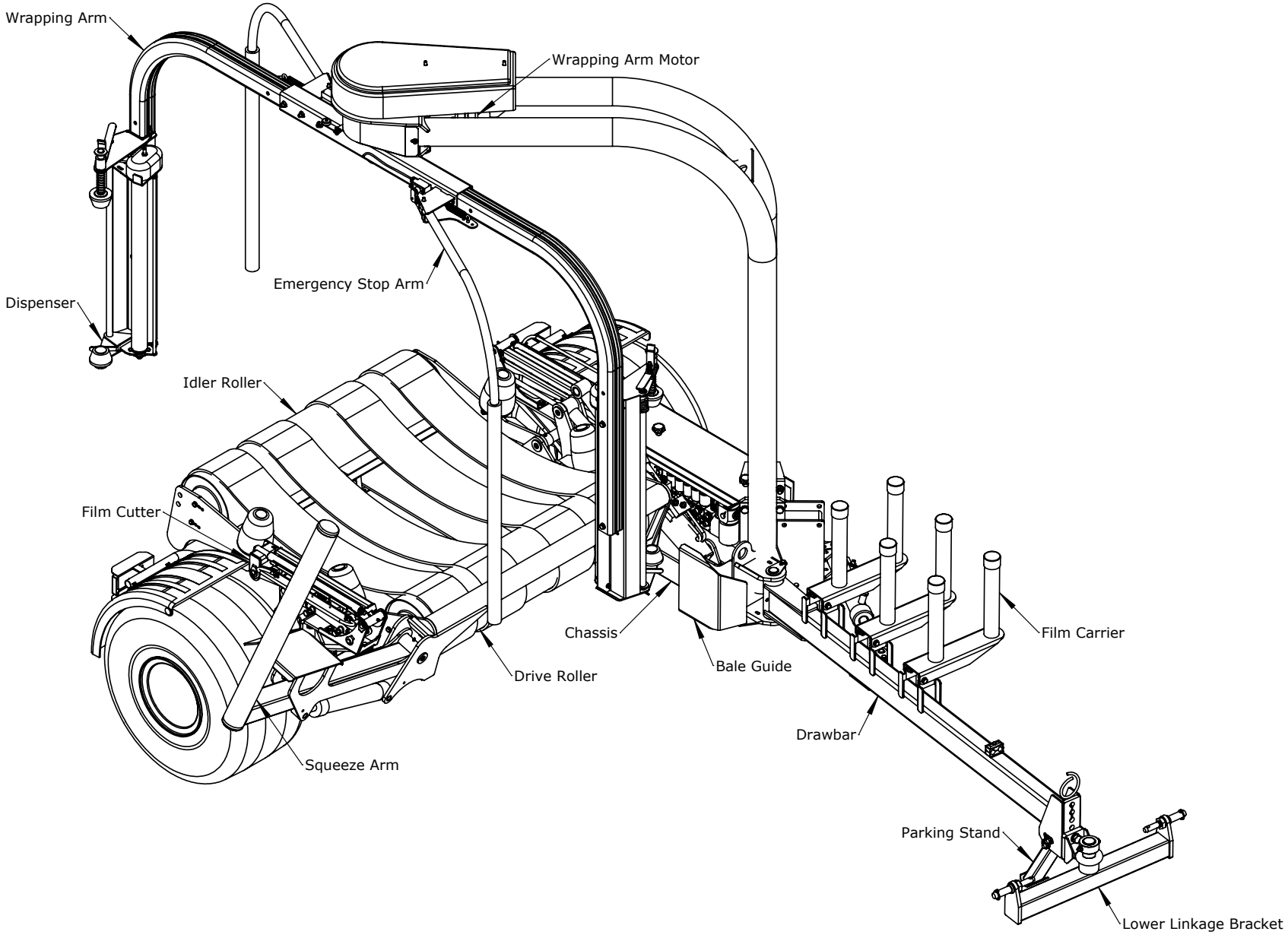
The TANCO AUTOWRAP 1400 is an efficient, high capacity bale wrapping machine. Its low centre of gravity and unique split table design ensures that power consumption is kept to a minimum without compromising output; this is a patented system.

This machine is hydraulically driven by the tractor's hydraulic system and is controlled from the tractor cab by an automatic control unit. The machine is trailed directly behind the tractor for transport and offset to the right for working in the field. It loads the bale on the wrapping table in the same direction as it is discharged from the baler. The wrapped bale can be either dropped conventionally to the ground or with the fitting of an optional 'End Tip Ramp' the bale can be dropped on its end.

TANCO AUTOWRAP 1400 is designed to wrap bales of grass, hay or straw, with nominal diameter of 1.1 - 1.5m, and weights up to (1400kg). The machine was developed and has been improved since it's beginning in 2008, and is now a very reliable and safe machine with high security built in.

This manual is meant to explain how TANCO AUTOWRAP 1400 is setup, attached to tractor, used and how it works, and shall together with the spare part's list be a reference for maintenance and troubleshooting. So take good care of this book; it is a part of the machine.

Read carefully through this manual, and especially the safety instructions, before starting the machine. Follow the instructions thoroughly, if problems should occur, check the troubleshooting guide to try to establish the problem. Ask your dealer for advice before you attempt anything that may make the problem worse.


Wrapping Arm
Wrapping Arm Motor
Emergency Stop Arm
Dispenser
Idler Roller
Film Cutter
Chassis
Bale Guide
Film Carrier
Drive Roller
Drawbar
Squeeze Arm
Parking Stand
Lower Linkage Bracket

Technical Specifications	1400 Autowrap
Height	2710mm
Width	2660mm
Length (min.)	3940mm
Weight	1250 kg
Wrapping Arm Speed (Recommended)	30 R.P.M
Wrapping Arm Speed (max)	35 R.P.M.
Maximum Bale Diameter	1500mm
Maximum Bale Weight	1400 kg
Pre-Stretchers	750mm
Hydraulic Connection	1pcs Single Working + Free Return
Oil Pressure	180 bar
Oil Amount (Max / Min)	60 lts/min / 30 lts/min)
Maximum Counter Pressure	10 bar
Electrical Connection	12 V DC

NB: Tanco Autowrap Ltd. reserves the right to modify the construction and/or technical specifications without warning and without rights to changes on already delivered products

Tanco Autowrap Ltd does not take responsibility for damages that may occur to machine, persons or other equipment, because of the machine NOT being used as described in this manual, or because of the safety precautions NOT being followed.

Emergency Stop
The Tanco Autowrap 1400 is equipped with a so-called emergency stop on the wrapping arm. This device stops all functions momentarily, but is per definition not an emergency stop, because it does not shut down the inputs. But it has the same function, so we have decided to call it an emergency stop in this manual.

Safety Equipment
Before using the machine, make sure that all guards and covers are securely fitted. The machine must not be operated if a function does not work as described later in this manual.

Become Familiar with the Operations of the Machine
If you are unsure how to operate the machine properly, either use of or maintenance to your Tanco Autowrap, please contact your Tanco Autowrap dealer.

Adjustments / Maintenance
Turn off the tractor and discharge the oil pressure before performing any adjustment or maintenance on the machine. Remember that a well maintained machine is a safe machine.

 IMPORTANT!
Always make sure nobody is in the hazard area of the wrapping arm when the machine is in-use.

The machine must not be operated by persons who do not know enough about how to safely operate the machine, or by persons under the age of 16 years.

Dangerous Areas
Tanco Autowrap Ltd. has given the safety to the operator the highest priority, but it is still impossible to secure oneself of every danger area on the machine. Therefore we have highlighted below some of the dangers that can occur when using the 1400 Tanco Autowrap Bale Wrapper.

Impact of the Wrapping Arm
During the wrapping process the arm rotates with a speed of 30-35 revolutions per minute around the bale. On the arm is mounted a Film dispenser unit with a plastic roll. The speed on this can give a person serious injuries if one enters the working area of the wrapping arm. To reduce this danger we have mounted an emergency stop device on the wrapping arm; this stops all movement when something comes in the way of it. It is very important that this protection always works and that it should not under any circumstances be disconnected.

Squeeze Danger Between the Main Frame & Wrapping Arm
As explained earlier, we have a wrapping arm with a Dispenser and a plastic roll. During every revolution the wrapping arm passes the main frame. Here there may occur a squeeze danger if a person stands to close to the main frame when the wrapping arm passes. The distance between the main frame and the wrapping arm is not large enough to give place for a person. Between the pre-stretcher and the bottom frame there can also be a squeeze danger.

Squeeze Danger Between the Stationary Arm & Wrapping Arm
During the main wrapping process the wrapping arm moves around a stationary arm. Every time the wrapping arm passes the stationary arm there is a squeeze danger that can be dangerous for the fingers. The distance between the stationary and the wrapping arm is between 25-40 mm. (See Fig. 4.1).

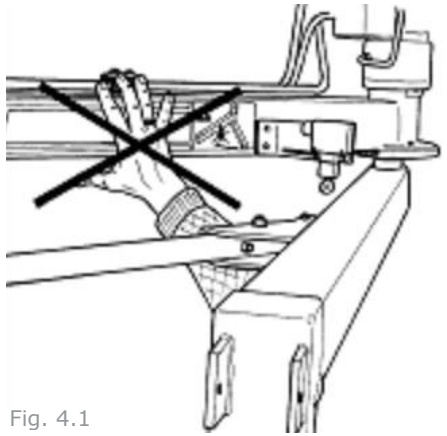


Fig. 4.1

Impact of Bale Squeeze Arm
During the bale loading process the bale squeeze arm moves both vertically and horizontally, beware of the danger and keep clear of this area whilst the machine is running.

Impact Danger when Machine is being changed from Transport to Working Position at the Drawbar
When the machine is being changed from transport to the working position it rotates out to the right and when it is being put back into transport it rotates back to the left, beware of the danger and keep clear of this area whilst the machine is running; especially if the squeeze arm is in the open position.

Squeeze Danger Caused by Plastic Automation
At the end of the wrapping process the plastic is cut and held tight until the start of the next wrapping process. When the cutter arm moves down to lock the plastic, there can occur a squeeze danger between the cutter arm and the cutter holder. The cutter blade that cuts the plastic is very sharp; ensure to keep hands away from the cutter. (See Fig 4.2).

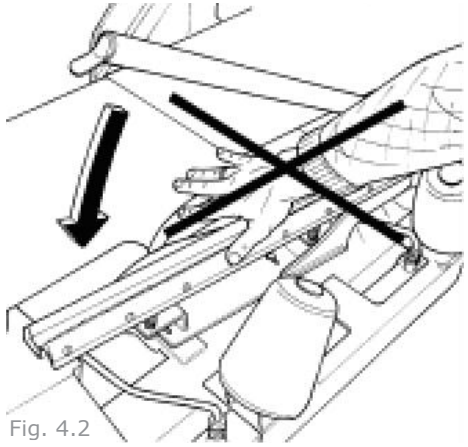


Fig. 4.2

⚠ Connecting heavy working implements often has an overall negative effect on the tractor's driving and braking capacity.

Transporting
When transporting on a public road there are certain safety measures that must be taken:

1. Ensure the machine is in the transport position.

2. Ensure the squeeze arm is fully closed.

3. Ensure that the wrapping arm is not parked overhanging the sides of the machine.

4. Ensure that the lights are connected and functioning correctly

5. It is recommended that the film rolls be taken off the dispensers for road transport and put on the film carriers on the drawbar. This reduces stress on the machine and reduces the danger of the rolls being accidently falling off on the public road.

6. The machine is wide (2660mm) even in transport position, be aware of this especially on narrow roads.

Bale Wrapping Principles
The advantages of round bale silage are many, and include fewer feed units, a flexible harvesting system, large capacity and the possibility of selling feed units.

In principle, the same fermentation processes occur whether the fodder is placed in a silo or pressed into bales and packed in plastic, i.e. lactic acid fermentation in anaerobic conditions. The oxygen in the bale must be exhausted before fermentation begins. The grass should be dried to approximately 30-40% solid content. The solid content can be determined by twisting the grass by hand. If drops of liquid are forced out of the grass, the solid content is less than 25%. Low solid content (wet grass) can lead to increased butyric acid fermentation if preservatives are not added to the grass. If the solid content is too high, (over 50%), normal fermentation will not take place and there will be enough oxygen in the bale to produce mould fungus.

The Baler
It is vital that the baler produces compact, well-formed bales, as misshapen bales can be difficult to wrap. Wrapping will also often take longer, thereby increasing the amount of plastic used.

Difficult Bales
When a misshapen bale is wrapped, it will have a tendency to move outwards or inwards on the roller. If the bale begins to move outwards, the machine must be lifted slightly at the rear edge to get the bale to rest against the support roller on the main frame. It can therefore be useful to use a hydraulic top link to make this adjustment easier. (See Chapter 5; 'Hitch Height').

If the bale to be wrapped is conical you must ensure that the sharp end is pointed at the tractor. It will then be easier to get the bale to lie correctly during packing. It is easy for such a bale to "turn" forward in the direction in which it is pointing, and therefore lie against the support rollers. If the bale is lying on a slope it must be picked up from the lower side. A hydraulic top link will again be advantageous.

Types of Plastic
A good type of plastic with good adhesive properties, and which is recommended for bale wrapping, must be used. The thickness of the plastic foil should be at least 25 µ. (25/1,000 mm). In order that the plastic tightens sufficiently around the bale, it is stretched before being wrapped, so it is somewhat thinner when it is put on the bale. With short-term storage (up to eight weeks) it is recommended that bales have a minimum of four layers of plastic at the thinnest points, with at least 52-53% overlap.

For long-term storage, or when the grass is wet when it is wrapped, the bale should have 90-100 µ plastic (six layers) and the same amount of overlap. If thinner plastic is used, more layers should be applied. If it is very hot the plastic will be stretched further, and more layers should be applied. It is better to have slightly too much than too little plastic on the bale. From experience, light colored plastic produces slightly lower temperatures within the bale, and tends to improve feed quality.

Storage Location
Care should be taken in finding a suitable location for the storage of bales. The storage location should preferably be prepared before the bales are laid out. An elevation close to well-drained roads is recommended. If the wrapped bales are simply placed on stubble there is a danger of the plastic being pierced. A tarpaulin or a thin layer of sand should therefore be laid where the bales are to be stored over the winter.

Bales should be stored in the shade as far as possible. This reduces the danger of air leakage in the bales. A bale which is stored in sunlight and which therefore undergoes greater swings in temperature "pumps in" a great deal of air in comparison to a bale stored in the shade. According to "Teknik for Lantbruket" [Technology for Agriculture] in Sweden, a bale stored in the shade has only 40% of the air leakage of a bale which is stored in sunlight.

Stacking / Protection
If bales are hard and well formed, they can be stacked vertically, but loose and misshapen bales with low solid content should not be stacked higher than one layer, as this could easily cause deformity and the danger of runoff will be increased.

Bales can also be stored on their sides. The layer of plastic is thicker here, providing greater protection against piercing.

Bales should be covered with a tarpaulin or a fine-mesh net to protect against birds and small rodents. If the plastic is pierced, it must be sealed with weatherproof, hard-wearing tape, preferably under the outermost layer of plastic. Ensure that the hole is adequately sealed.

For Best Wrapping Results...
1. Harvest the grass early.
2. Ensure the grass is driedout to 30-40% solid content. If there is a danger of rain, bale and wrap the grass anyway.
3. Take care not to mix any earth in with the grass.
4. Use a baler that produces even, firm bales. Bales 1.2mtrs in width and with a diameter of 1.2-1.5mtrs are preferred sizes.
5. Wrap the bales as soon after baling as possible; never more than two hours afterwards.
6. Use a good plastic type, applying six layers of plastic. This removes the need to use preservatives.
7. Store bales in the shade to reduce the danger of air leakage.

Mounting of the Machine

⚠ Be careful! There is a danger of being crushed when working implements are fitted and connected. Carry out the fitting procedures slowly and carefully, and use separate and approved lifting equipment to make the work easier. Note the section on safety precautions and pay attention to the various safety decals displayed on different parts of the bale wrapper.

Attaching to the Tractor
The 1400 can be either connected to the tractor lower links using Linkage Attachment or by removing this it can be attached to the tractor hitch using the Hitch Eye.
If the lower link bracket is used the Hitch Eye should be attached in the lowest position; this will allow greater movement.

If attached to the tractor hitch it is recommended that the machine is attached to the Clevis Hitch rather than the Pick-Up Hitch. This gives more clearance between the Drawbar and the tractor's back wheels. The Drawbar does not run directly behind the tractor. In transport the Drawbar runs nearer the left wheel so the minimum turning circle to the left is reduced. In the working position this is the case for turning to the right. When the machine is attached to the tractor the Drawbar Leg must be folded up to the Drawbar by removing the Drawbar Pin; swing the Drawbar Leg upwards and fit the Drawbar Leg Pin to Position B. (See Fig. 6.1).

When attached to the tractor the machine should sit level, at this the squeeze arm will have 10cm approximate clearance with the ground when in the fully lowered position. Set linkage height to achieve this.

Adjust the linkage stabilizers to limit the lateral movement.

⚠ If attached to the hitch change the hitch eye mounting position to set the correct height.

Ensure the Hitch Eye Fixing Bolts are securely tightened.

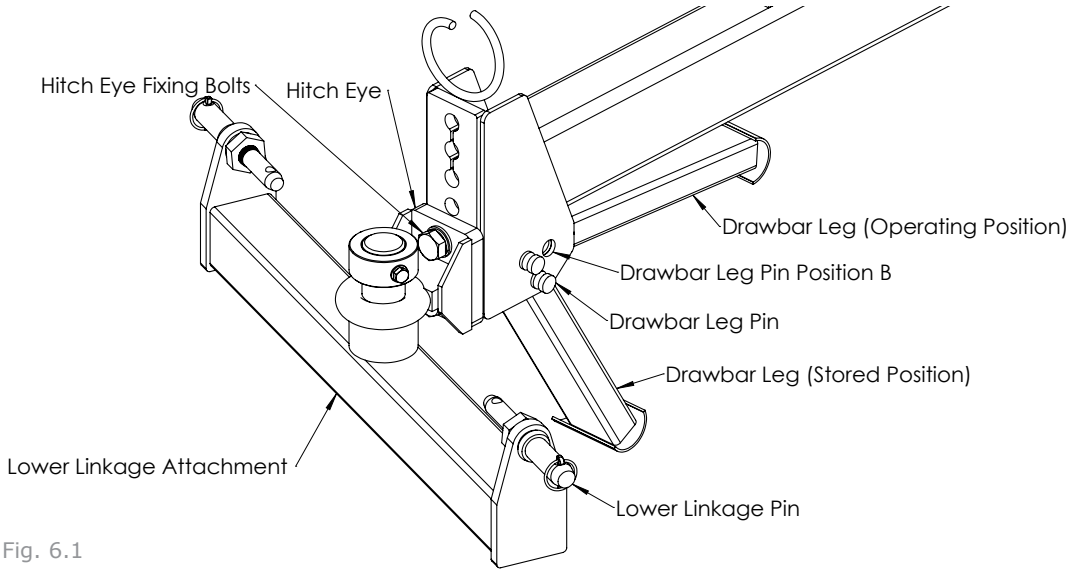


Fig. 6.1

1400 Control Box

The control unit consists of the emergency stop button, a control cable, a fuse and a battery cable. The control unit should be attached to a suitable place in the tractor cab using the suction pad provided.

The Remote Control Unit is not Shock Proof, make sure that is fastened to a soft pad that secures a non-vibratting foundation.

Electrical Connection
The electric supply for the machine's remote control and electro-hydraulic components must come directly from the tractors' 12 volt battery.

The electric wires from the battery must have an area measurement of min. 2,5 mm2. Connection to other contacts on the tractor can cause risk of malfunction and is not recommended.

Note:
Brown leader goes to the Battery's Possitive Pole
Blue leader goes to the Battery's Negative Pole

Hydraulic Connection
The hydraulic hoses between machine and tractor are equipped with 1/2" ISO Male Quick-Couplers. Ensure the oil pressure has been discharged before you connect the oil hoses using the tractor's hydraulic lever.

To make sure that the bale wrapper works properly, the tractors' oil pressure has to be at least 180 bar. The oil flow should be 15 - 25 liters per minute. The return pressure on the return must be as low as possible, and not exceed 10 bar. This should be measured with a gauge. It is recommended to use one single-working hydraulic outlet and arrange a free return circuit to the oil tank.

If you are unsure of what oil pressure the tractor gives, or what oil pressure the bale wrapper receives, please contact your machinery dealer. Generally all tractors have got some counter-pressure in their hydraulic return systems. Some tractors have more than others.

Note:
The Hose with the Red Cap shall be connected to pressure 'P' and Hose with Blue Cap to the return 'T'.

Open & Closed Center Hydraulics
The 1400 hydraulic system can be set up for tractors with Open or Closed Center Hydraulics.

Open Centre Hydraulics
Most tractors have a hydraulic system that gives a continuous output which flows through the valve on the machine and back to tank when no function is operating (Open center).

Note:
The TANCO AUTOWRAP 1400 is set-up for open centre on leaving the factory.

Close Centre Hydraulics
Some tractors (John Deere) have a hydraulic system that require the valve on the machine to allow no flow when no function is operating (Closed Center).
The hydraulic valve can easily be configured to operate in this way.

Simply push and twist the Manual Override on the Master Valve. (See Fig. 6.2)

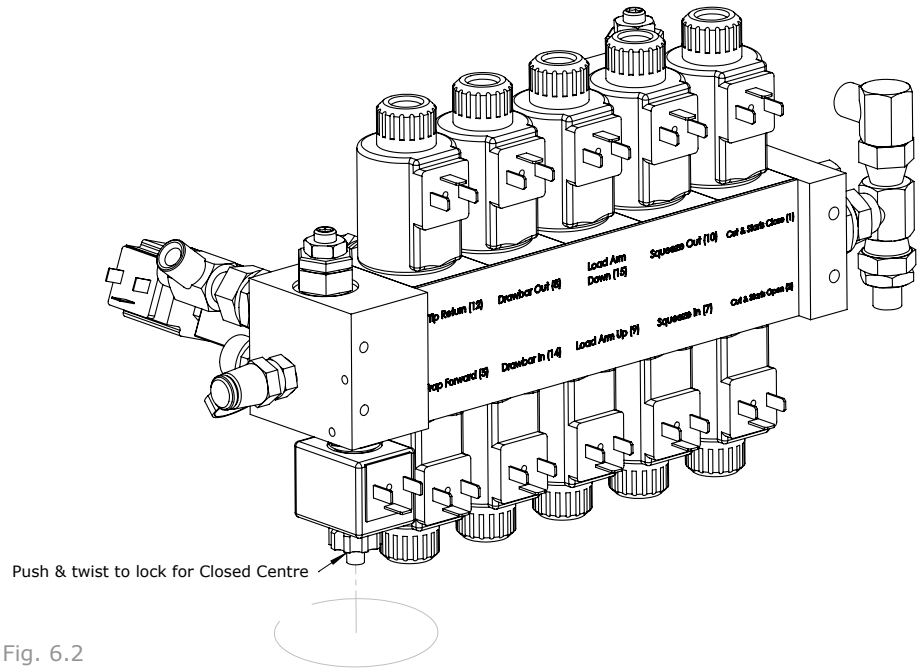


Fig. 6.2

LS Hydraulics
Many modern tractors have a "Load Sensing" (LS) Hydraulic System. This is most efficient as the pump remains on standby, pumping no oil until it gets a signal from the machine. It is possible to run this machine on a load sensing tractor with the standard valve.

Configure the valve for open centers and if possible adjust the flow from the tractor to give ~30 lts/min. This however means that the tractor is constantly pumping and you do not get the benefit of the efficiency of your load-sensing pump.

Tanco Autowrap strongly recommend that if you are running the machine on tractor with LS Hydraulics you fit the optional Load-Sensing Block (see Hydraulic Circuit). With this block fitted a Load sensing signal is transmitted in the form of hydraulic pressure via a hose for the LS Port on the LS Entry Block to the LS Connection on the tractor.

Note:
The LS Entry Block can be configured also to run on any other hydraulic system, open or closed center.

Check List:
Before using the machine it is recommended to follow this check list:

1. Make it a habit to discharge the oil-pressure before connection or disconnection of the hydraulic hoses. (By operating the hydraulic control lever inside the tractor). (Use the tractors hydraulic control lever).

2. Return-oil should be led directly to tank. Beware that if the counter pressure is too high, the security valve on the main block will release some oil. (See Chapter 9).

3. Hose with BLUE CAP = RETURN OIL.

4. Hose with RED CAP = PRESSURE.

5. Tie up loose hoses and Connection Cables so that no squeeze damages occur.

6. Remove the locking bolt that holds the wrapping arm to the frame during transport.

7. Start the tractor and try out the functions. A bale is not required for this test.

8. Check all connections, hoses and couplings. If there is any oil-leakage, it should be rectified immediately.

If any problems should occur, it is most likely that the failure is in the quick-couplers on the tractors pressure and return-connections.

Make sure that both the male and female-couplers opens properly for the oil flow, check these carefully. The best thing to do is to exchange the quick-coupling on the return side and arrange a "free return".

Your Tanco Autowrap Bale Wrapper has been tested in practical operation in approximately 2 hours at the factory.

Emergency Stop (See Fig. 6.3)
This machine is equipped with a safety guards on the Wrapping Arms, and its operation must be tested before work itself is started.

The Emergency Stop is to prevent the Wrapping Arm from damaging people and objects, when the machine is started and during the wrapping process. It consists of two safety arms that run in front of the film dispensers. When tripped they activate an electric switch, which gives a signal to the control box to activate the emergency stop.

When testing this function, start the Wrapping Arm, hold out an arm or any obstacle. The wrapping arm shall now stop before it hits the arm. Great care must be taken when testing this function.

To restart the machine the obstacle must be removed and the arm must be returned to its original position. The Auto Switch on the control box must be activated again. The wrapping may start again.

⚠ IMPORTANT!
GIVEN THE VELOCITY AND MOMENTUM OF THE ARM IT IS IMPOSSIBLE TO STOP THE WRAP ARM IMMEDIATELY. THE EMERGENCY STOP ARM IS PROVIDED TO HELP REDUCE THE RISK OF SERIOUS INJURY AND GREAT CARE MUST BE TAKEN WHEN OPERATING THIS MACHINE.

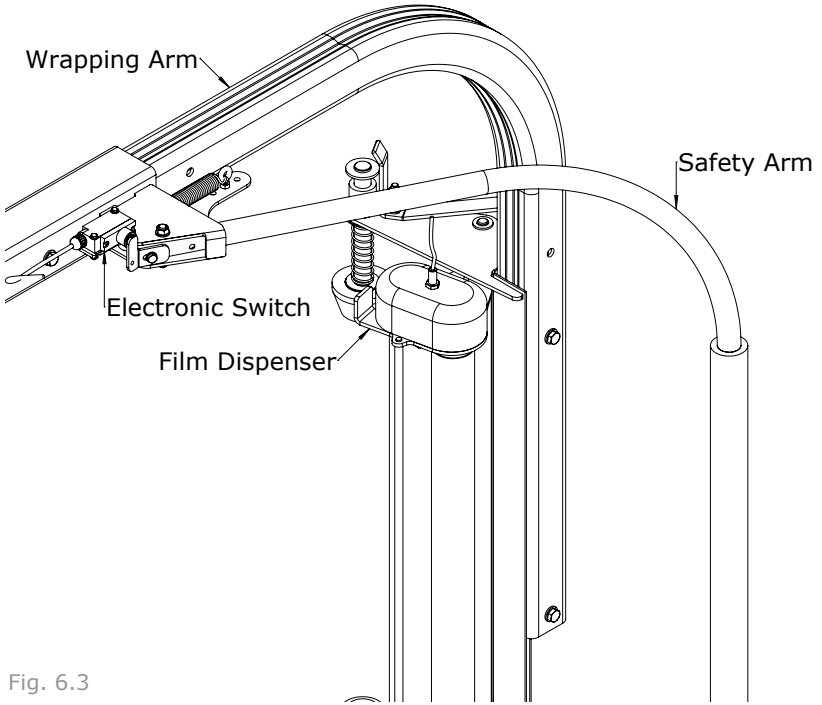


Fig. 6.3

Mounting of Plastic Film (See Fig. 6.4 & 6.5)
When loading a plastic roll, first ensure the Top Cone is pushed up to the latched position, then push back the Dispenser Insert until held in position by the Bottom Latch.

Place the Roll on the Bottom Cone and release the Top Latch.
⚠ BEWARE OF FINGERS!

Pull the film between the rollers on the Dispenser Insert in the direction of the arrow, as shown below. (See also the sticker on the dispenser).

Release the Bottom Latch and allow the rollers to lie against the roll of film.
Pull the film from the roll and tie it to the bale.

Fig. 6.4

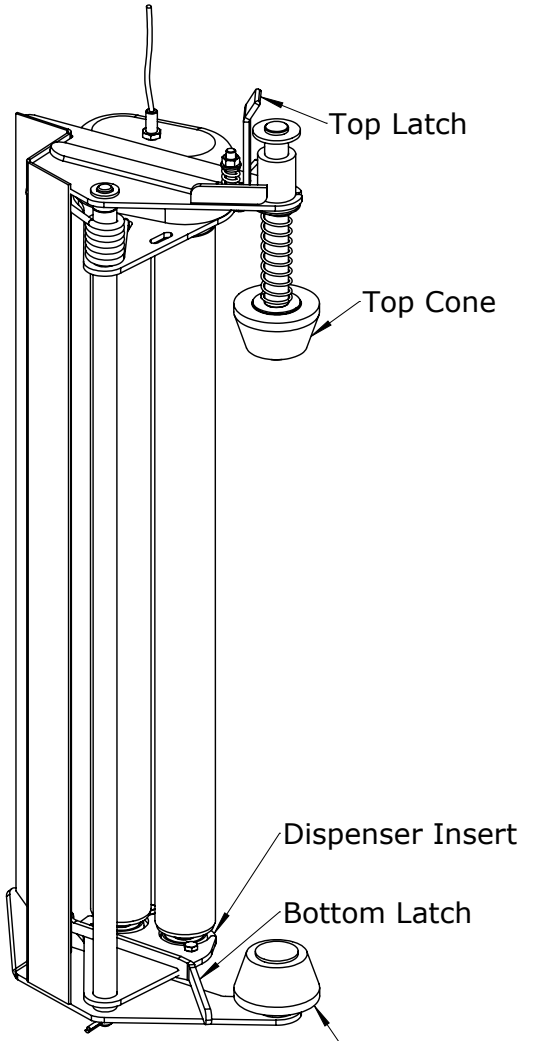


Fig. 6.5

Adjusting the Height of the Dispenser
The standard film dispenser is designed for 750mm film. If using 500 mm film an adaptor is required which must be ordered separately. See parts book and contact your dealer.

The plastic film should hit at the middle of the bale wrapped (Fig. 6.6), and therefore it can be necessary to adjust the height of the pre-stretcher (See Fig. 6.7).

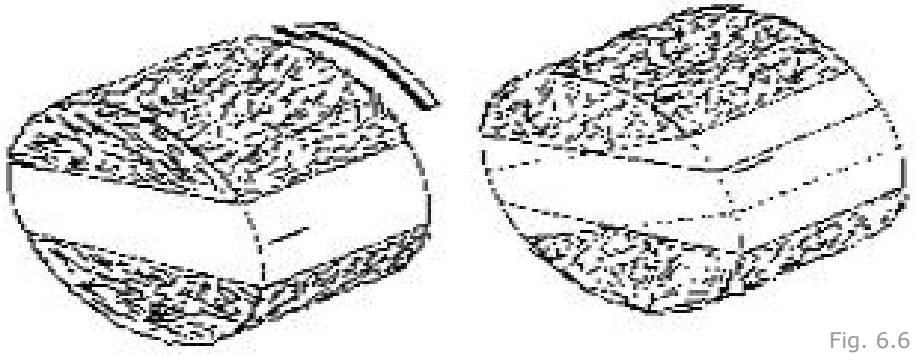


Fig. 6.6

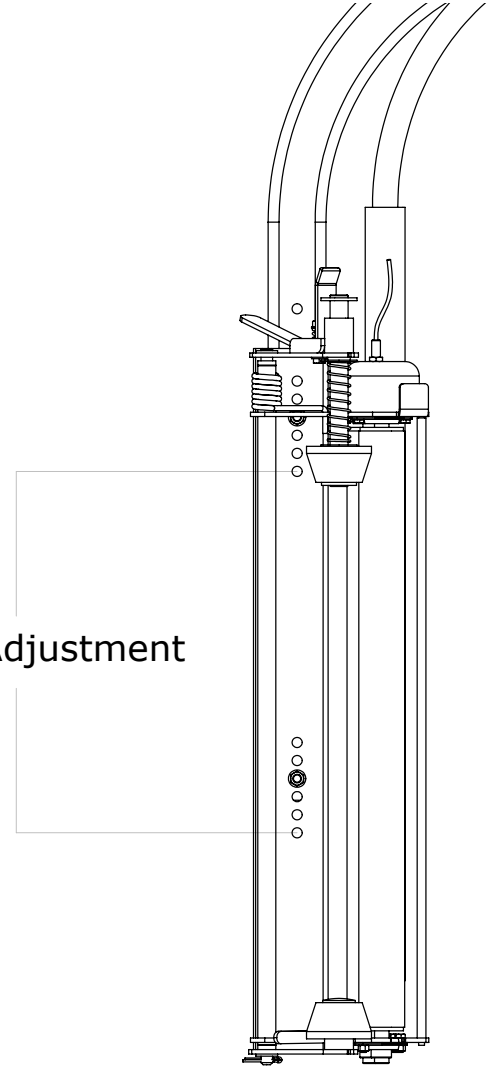


Fig. 6.7

Tanco Dual Stretch Dispenser
All Tanco Autowrap machines are supplied with a patented dual stretch gear system.
This system enables a quick change of stretch levels on the Film Dispenser.

If the Gear Bolt is fitted in Position 1 (See Fig. 6.8), the top set of gears provide the stretch @ 70%.
By removing the Gear Bolt from Position 1 and fitting it in Position 2, the bottom set of gears become the stretch gears giving 32% (for prestretched film) or optionally 55% (for use in hotter climates or with square bales).

Tanco Dispenser Gear Comninations

Inner Gear	Outer Gear	% Stretch
60 Tooth	35 Tooth	70%
58 Tooth	37 Tooth	55%
54 Tooth	41 Tooth	32%

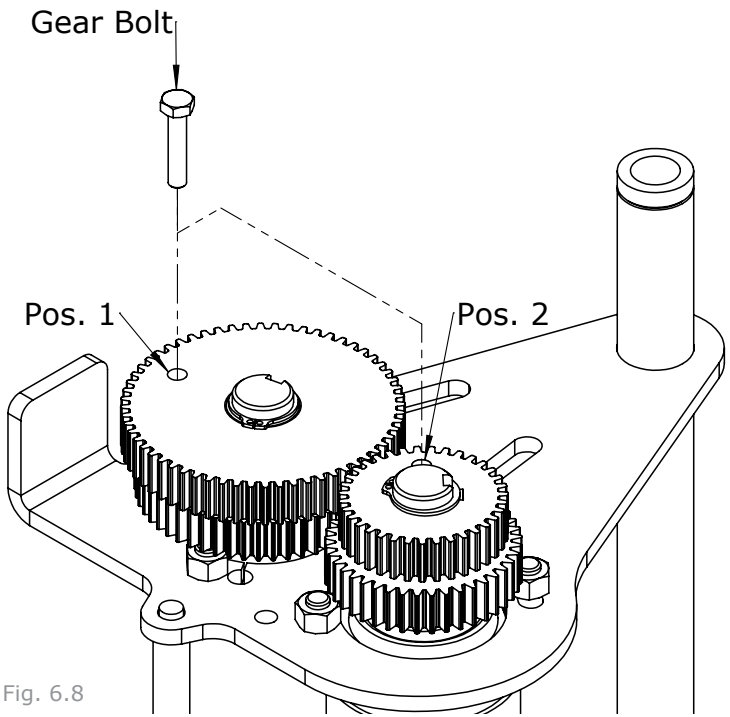


Fig. 6.8

Introduction

The Tanco Autowrap Bale Wrap Controller enables the operator to monitor and control the operation of the bale wrapper at any stage of the wrapping cycle. The controller is designed for models: 1400 and 1814 table type wrappers.

There are 2 operating modes – Automatic and Manual. The Automatic Mode permits 'one-touch wrapping' to ease the workload on the operator. The controller is fully programmable to optimise wrapping performance. Bale counts are automatically logged in any one of 10 selectable memory stores, in addition to a grand total memory store.

IMPORTANT SAFETY INFORMATION!
Please read and understand the instructions for using this controller before operating the machine.

This controller is fitted with a push-button type On/Off Emergency Stop switch. Always ensure the controller is switched OFF via this switch before attempting any adjustment or maintenance to the machine.
Please follow ALL other safety instructions given in the manufacturers' Operator's Manual for this machine.

Controller Main Operating Functions & Display

The principal instrument features and operating functions of the Controller are shown in Fig. 7.1 overleaf.

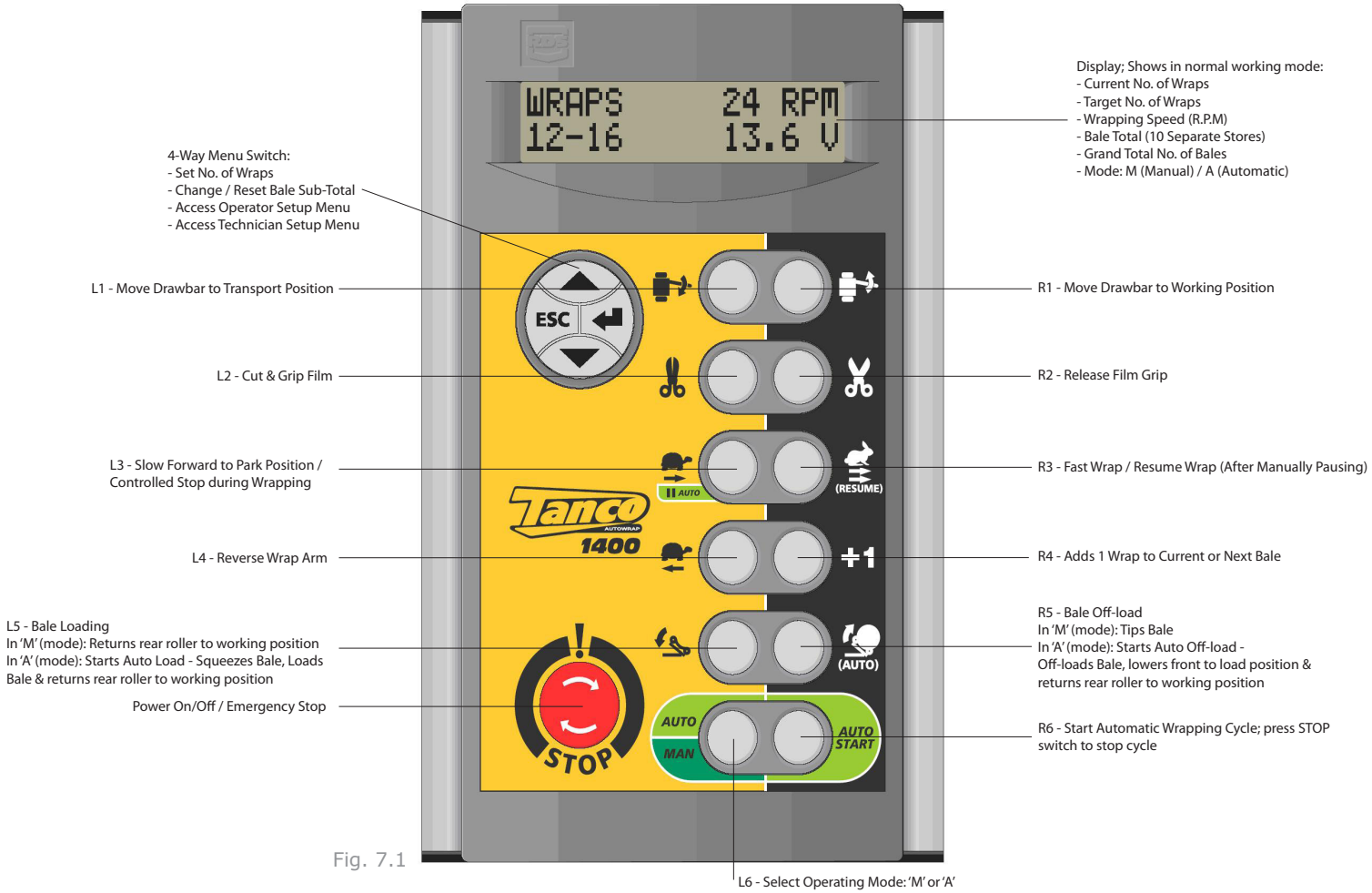

WRAPS 24 RPM
12-16 13.6 V
ESC
AUTO
(RESUME)
+1
(AUTO)
AUTO
MAN
AUTO START
STOP
4-Way Menu Switch:
- Set No. of Wraps
- Change / Reset Bale Sub-Total
- Access Operator Setup Menu
- Access Technician Setup Menu
Display; Shows in normal working mode:
- Current No. of Wraps
- Target No. of Wraps
- Wrapping Speed (R.P.M)
- Bale Total (10 Separate Stores)
- Grand Total No. of Bales
- Mode: M (Manual) / A (Automatic)
L1 - Move Drawbar to Transport Position
R1 - Move Drawbar to Working Position
L2 - Cut & Grip Film
R2 - Release Film Grip
L3 - Slow Forward to Park Position / Controlled Stop during Wrapping
R3 - Fast Wrap / Resume Wrap (After Manually Pausing)
L4 - Reverse Wrap Arm
R4 - Adds 1 Wrap to Current or Next Bale
L5 - Bale Loading
In 'M' (mode): Returns rear roller to working position
In 'A' (mode): Starts Auto Load - Squeezes Bale, Loads Bale & returns rear roller to working position
R5 - Bale Off-load
In 'M' (mode): Tips Bale
In 'A' (mode): Starts Auto Off-load - Off-loads Bale, lowers front to load position & returns rear roller to working position
Power On/Off / Emergency Stop
R6 - Start Automatic Wrapping Cycle; press STOP switch to stop cycle
L6 - Select Operating Mode: 'M' or 'A'

Fig. 7.1

Operation

Operation in Automatic mode
The automatic sequence is made up of three sections: Loading, Wrapping and Off-loading.
The controller comes initially set so one press of a button automatically loads the bale, a second press runs the complete wrapping cycle and a third press automatically off-loads the bale.
It is possible to set the controller so one button press runs the complete cycle, see 'Changing Default Automatic Sequence'.
As initially set three buttons on the controller are used to start each section of the sequence, see points, 3, 5, and 7 below.

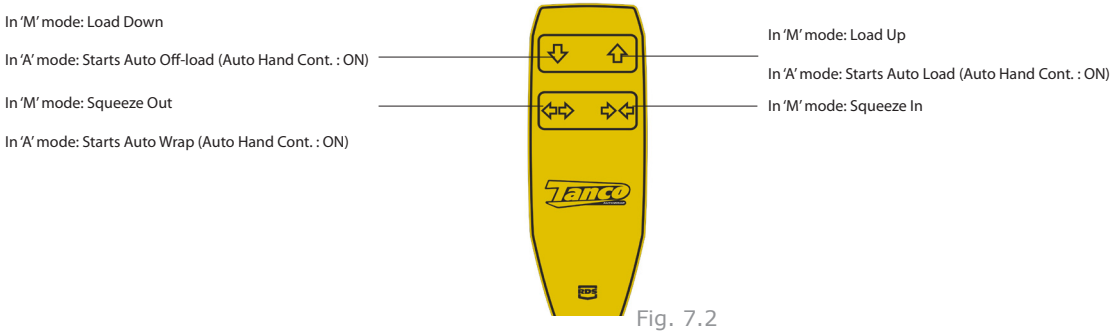


Fig. 7.2

Operation

Operation in Automatic mode
The automatic sequence is made up of three sections: Loading, Wrapping and Off-loading.
The controller comes initially set so one press of a button automatically loads the bale, a second press runs the complete wrapping cycle and a third press automatically off-loads the bale.
It is possible to set the controller so one button press runs the complete cycle, see 'Changing Default Automatic Sequence'.
As initially set three buttons on the controller are used to start each section of the sequence, see points, 3, 5, and 7 below.

1. 'A' on the display indicates that the controller is set in Automatic mode. If not press (L6) to select.

2. The automatic starts with the wrap arm in the park position, that is with the wrap arm magnet parked under the sensor, the load arm down and squeeze arm in the fully open position.

3. Press (L5) to start the Auto Load sequence as follows:
- The squeeze arm comes in for a set time, bringing it in under the bale.
- The load arm raises for a set time, lifting the bale on to the table.
- The squeeze arm opens fully to a sensor.

4. If the wrapping arm is not parked in the Park Position then the controller will give an error message 'DISPENSER POSN' and it will not start loading. Correct the arm position and repeat.

5. Press (R6) to commence the Automatic Wrapping Cycle as follows:
- The wrap arm will start in slow speed and ramp up to full speed.
- The Cut and Starts open twice to release the plastic.
- On the last turn the wrap arm ramps down to slow speed.
- The Cut and Starts open.
- The wrap arm stops.
- The Cut and Start closes.
- The wrap arm reverses to the park position.

6. The squeeze arm must be in the fully out position for auto wrapping to start, if it is not the controller will give an error message 'SQUEEZE OUT' and not start wrapping. Correct the squeeze arm position and repeat.

7. Press (R5) to start the Auto Off-Load

8. If the wrapping arm is not stopped in the park position then the controller will give an error message 'DISPENSER POSN' and IT will not start Auto Off-load. Correct the arm position and repeat.

Changing Default Automatic Sequence
In the default automatic sequence the controller waits for a start signal before wrapping and again before off-loading. It is possible to change this:
In the Operator Setup if Autostart Wrap setting is changed from Off to On, then wrapping will automatically start when the load sequence has finished. Likewise if Auto Off-Load is change to On then the bale will automatically be off-loaded when the wrapping sequence has finished. Great care should be taken when auto off-loading especially in hilly conditions. In the interest of safety if the above settings are set to On, the controller will prompt you to confirm the On setting if the controller is switched off and on again.

Manually Interrupting an Automatic Wrapping Cycle
Press (L3) to bring the wrapper to a controlled stop. Pressing (R3) will resume the auto-wrap cycle from where it stopped.

For safety reasons; if it is necessary to work on the machine (e.g. in the event of a film break or the film running out), then it is strongly recommended that you then switch the controller off via the red stop button and disengage the machine power source. Pressing the (R3) switch after switching the controller back on will resume the auto-wrap cycle from where it stopped. Unless it is an emergency situation, do not bring the machine to a stop by pressing the red stop button as this will impose unnecessary strain on the machine.

Manual Options in Automatic Mode
With the controller in Automatic Mode, the following manual functions are possible;

- Slow Wrap (not during the wrapping sequence)
If (L3) is held down the arm will stop when it comes to the park position, releasing and pressing again will move the arm to the next park position.

Press (R3) to resume the normal fast wrap.

- Reverse Wrap Arm (only enabled outside of the wrapping sequence)
Press (L4) to shift the wrap arm backwards to the desired position. As with the slow wrap if this button is held down the arm will stop at the park position.

- Load Arm Up (on Hand Held Controller)
Pressing the Upwards arrow on the Hand Held Controller raises the Load Arm.

- Load Arm Down (on Hand Held Controller)
Pressing the Downwards button on the Hand Held Controller lowers the Load Arm.

- Squeeze Arm In (on Hand Held Controller)
Pressing the button with both arrows facing one another closes the Load Arm in.

- Squeeze Arm Out (on Hand Held Controller)
Pressing the button with both arrows facing away from one another opens the Load Arm.

- Add 1 Wrap
Each time you press (R4) an additional wrap will be put on the current bale if the wrapping sequence is in progress, or onto the next bale if the automatic cycle has not yet been started. You can add as many wraps as required.

Operation in Manual Mode
'M' on the display indicates that the controller is set in manual mode. If not, press (L6) to select.

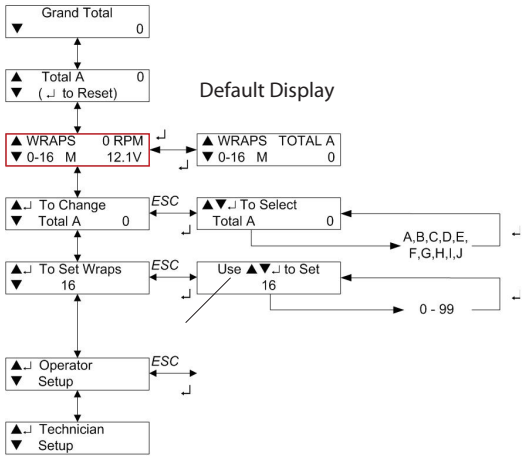
In Manual Mode you have total control of every stage of the wrapping cycle. The software logic determines which manual functions can be activated at any point in the wrapping cycle. Should the operator incorrectly select a function at a certain stage during the wrapping cycle, then that operation will not be performed.

The Display Menu

The Display menu is divided into 3 sections. At the top level are the settings used during the daily work with the machine – i.e. Store totals and No. of Wraps.
The Operator Setup section enables the operator to perform adjustments to the machine operation – e.g. time duration and time delay settings during the automatic cycle.

The 'Technician Setup' menu is not normally accessible to the operator without a PIN access code. 'Technician Setup' is not covered by this manual.

Use the 4-way switch to navigate the menu. Each menu screen indicates which keys to press to make the settings. The instrument will default back to the main operating display after 30 seconds if no other key is pressed.



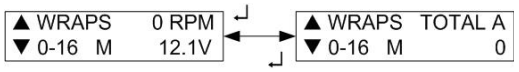
(Note: See Programming Factors on 36 & 37)

NOTE: There are additional sequences selectable in the Operator Setup menu but not shown in the table. These sequences are for wrapper models to which this manual does not apply. Please refer to the Operator Setup Menu for further explanation of the Operator Setup functions given in the table above.

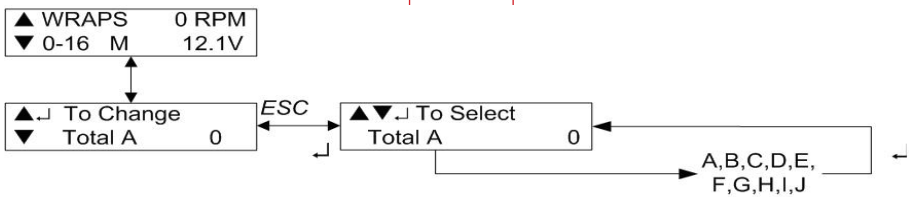
Selecting a Store Total

There are 10 individual memory registers labeled 'Store A' to 'Store J' for bale totals. Each time a bale cycle is completed, the currently selected store total and the grand total increments by 1.

The currently selected store is displayed on one of the two screens selectable in the normal operating mode.



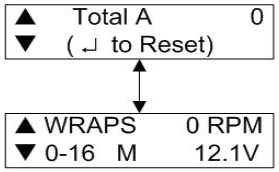
The default setting is Store A. To select a particular store, navigate the display menu using the 4-way switch.



Press the Up/Down arrow keys to select the store, then press the ENTER key to confirm the selection.

Resetting a Store Total to Zero

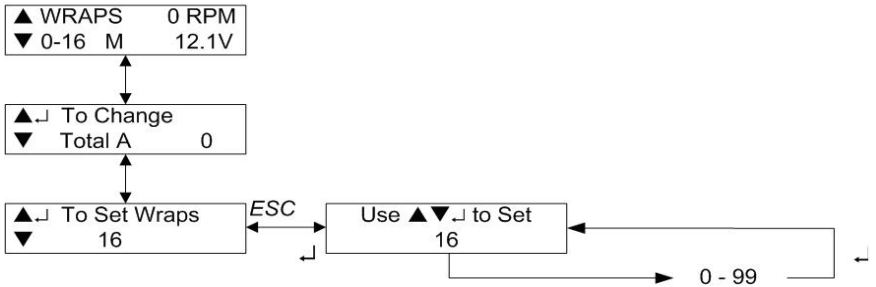
Stores A to J can be individually reset to zero at any time. The Grand Total store cannot be reset. First select the store to be zeroed, and then navigate the display menu as shown below.



Press the ENTER key to reset.

Setting the Number of Wraps

The default number of wraps is 16. You can set the target number from 0 to 99 by navigating the display menu as shown below.



1400 Programmable Factors - Operator Level

Menu No.	Operator Level	Default	Units	Notes
N/A	Target No. of Wraps	16		
4.01	Contrast	6		
4.02	Film Break	OFF		Switches On or Off - Film Break Sensor
4.41	Remote Type	IR		Optional Extra Remote Control
4.4	Auto Hand Cont.	Off		Always Set to Off
4.47	Autostart Wrap	Off		Switches On or Off Automatic Wrapping Start.
4.03	Auto Off -Load	Off		Switches On or Off Automatic Off-loading.
4.07	Squeeze In	3.0	Seconds	Squeeze Arm in Time
4.08	Load Up	4.0	Seconds	Load Up Time
4.09	Squeeze Out	2.0		Squeeze Arm Out Time
4.45	Pause to Release	1.0	Seconds	Pause at when Load Up before Squeeze Release
4.46	Tip to Load Down	1.0	Seconds	Time from Tip to Front Down
4.23	Wraps to Release	*3	Pulses	No. of Wraps to First Film Release.
4.24	Release 2	*8	Pulses	No of Wraps to Second Film Release
4.25	Release Delay	0.0	Seconds	Delay from Passing Sensor to Cutter Opening
4.44	Del. to C&S Open	*0.2	Seconds	Time from Slow to Cutter Open
4.26	Delay To Slow	*0.3	Seconds	Time from Passing Sensor to Going Slow
4.27	Delay To Stop	0.2	Seconds	Time Past Sensor
4.49	Arm adjust	0.5	Seconds	Time Load Arm Raises for Ground Clearance
4.5	In line	Off		Switches On or Off In line Sensor Operation
4.35	Language	English		

1400 Programmable Factors - Technician Level (Pin 1,2,3,4)

Menu No.	Technician Level	Default	Units	Notes
5.01	Sequence	1400		
5.39	Slow Arm PWM	*33	%PWM	Sets Wrapping Slow Speed
5.4	Fast Arm PWM	*49	%PWM	Sets Wrapping Max. Speed
5.41	Rev Arm PWM	*30	%PWM	Sets Reverse Speed
5.51	1-D Fast Speed	*49	%PWM	Sets Speed with 1 Plastic
5.15	Slow Start Time	*2	Seconds	Slow Time Duration at Start
5.16	C&S Open Time	0.3	Seconds	Cutter Opening Time
5.17	C&S Close time 1	0.3	Seconds	Cutter Closing Time During Wrapping
5.18	C&S Close time 2	2.0	Seconds	Cutter Closing Time at End of Wrapping
5.53	1-D Rolls Stop	1.0	Seconds	Table Rollers Intermittent Stop Time for 1 Film Wrapping
5.58	1-D Rolls Rot.	1.3	Seconds	Table Rollers Intermittent Rotation Time for 1 Film Wrapping
5.48	Tip Return Delay	*0	Seconds	Delay from Tip to Tip Return
5.5	Load Arm Down	3.0	Seconds	Load Arm Down Time
5.49	Tip Return Time	*2	Seconds	Tip Return Time
5.57	Door Open	5.0	Seconds	Minimum Time Accepted for Bailer Door Opening.
5.25	RPM Alarm	*35	Seconds	Maximum Wrapping Arm Speed
5.28	Set Default			Sets Controller Back to its' Default Settings

Operator Setup Menu

The default settings for the machine are developed by Tanco for optimal operation of the machine. However, the operator can change certain parameters in the 'Operator Setup' menu to take account of operational conditions.

Transport & Working Positions
Working in the field the 1400 is off-set to the right had side of the tractor, for road transport the draw bar is moved in so the machine runs directly behind the tractor.

Changing from Working to Transport Position (See Fig. 8.1)
- Swing Drawbar in fully.
- Raise the Load Frame Fully Up.
- Rotate Wrap Arm in slow speed too so it is running in line with the centre of the machine, it is recommended for safety that the rolls of film be removed from the dispensers and placed on the carriers on the drawbar.
- Rotate the Squeeze Arm to its' inner position taking care that the not strike the parked wrap arm.

To move from transport to working position carry out the above in reverse order.

Note: If Wrap Arm Reverse button (L4) is held down the wrap arm will reverse to the park position and stop automatically in the correct position.

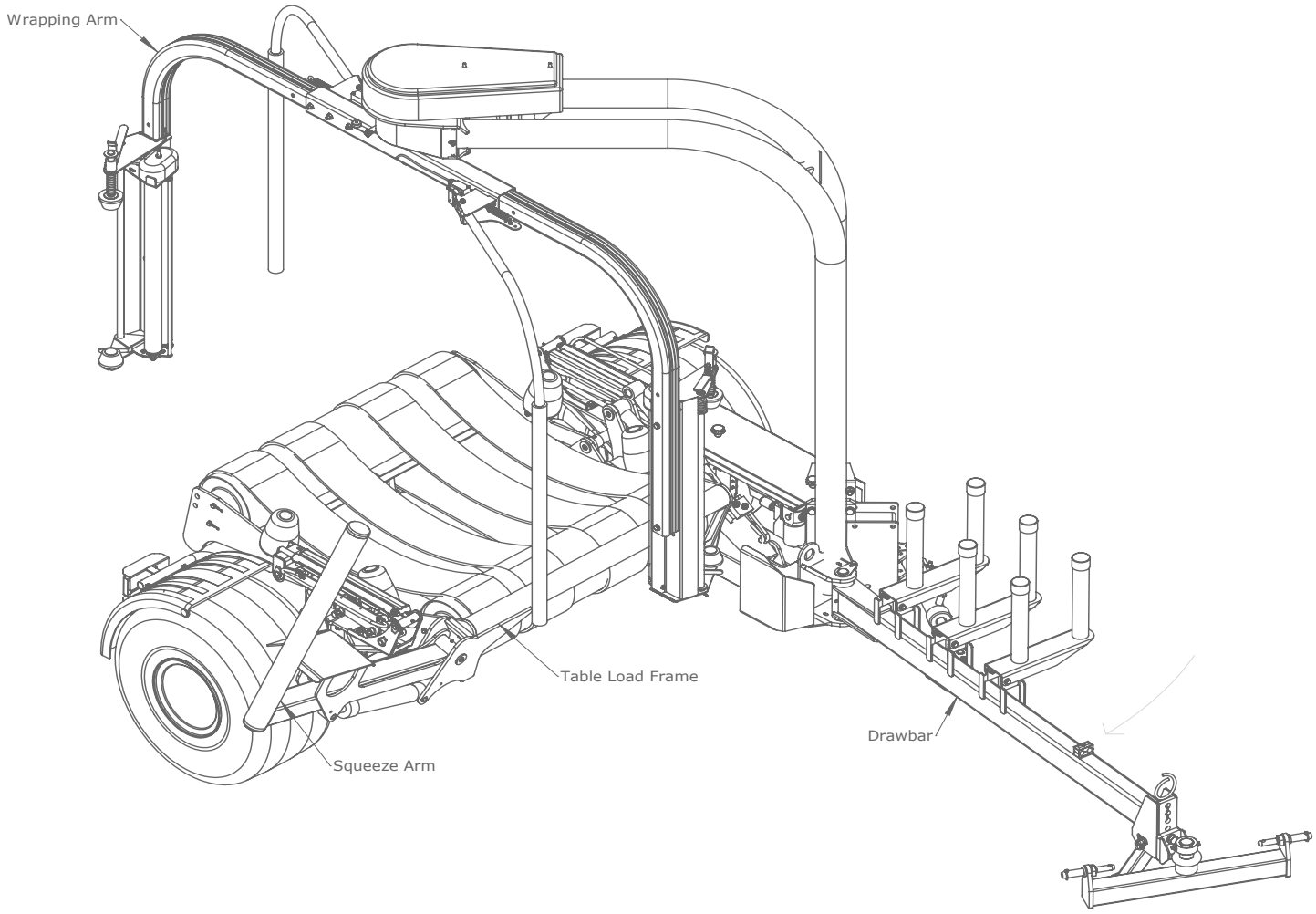


Fig. 8.1

Setting the Speed of the Wrapping Arm
The wrapping arm speed is controlled by a proportional hydraulic valve. When running in automatic mode the arm starts at slow speed, then ramps to full speed and on the last revolution ramps down to slow and stop. The machine is set as standard to run at approximately 30 RPM.

Adjustment of arm speed is done in the Technician Level of the controller and it is therefore recommended that it be altered by an experienced technician. Menu No.5.4 Fast Arm PWM, sets the maximum arm speed. Note the setting valve here is not the actual RPM but the proportion the valve is open. A setting of 50 equates to 30 RPM approximately. Note setting changes should only be made in increments of 1 as the maximum allowable speed is 32 RPM.
Slow speed and ramping up and down settings are also done in the technician Level of the controller.

NOTE: Max. allowed wrapping arm speed is 32 revolutions per minute.

REMEMBER!
Increased speed of tractor engine does not increase the wrapping speed, it only increases the oil flow into the system, this may increase the temperature in the hydraulic system.

3 Operational Principles
The controller allows for varying degrees of operator intervention in the control of the machine. It is possible to set the controller so one press of a button will run a full automatic sequence from loading to wrapping and unloading. When operating in less than ideal conditions for example when wrapping badly shaped bales or if wrapping in hilly areas it is advisable to break the sequence into the three sections;

Loading
Wrapping
Unloading

See below the correct way to preform these tasks;

- Loading
Set the machine into the loading position: (See Fig. 8.2)
• Move the Drawbar to the full out position.
• Lower the Load Frame to the ground.
• Open the Squeeze Arm fully.
• Ensure the Wrapping Arm is in the park position; ie the Wrap Arm Magnet is positioned under the Sensor, (See Fig. 8.4)

Note: The controller will not allow loading if the wrap arm is not in this position.
• Drive up to bale, keeping the Bale Guide close to the end of the bale, commence loading when Load Frame cross tube is in contact with the bale (See Fig. 8.3).

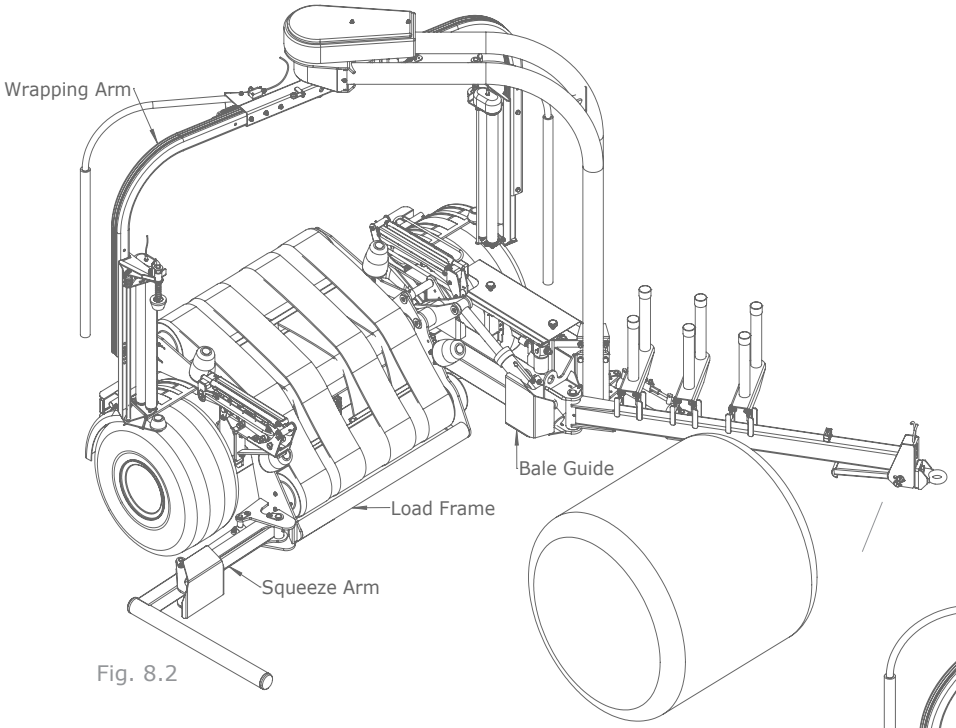


Fig. 8.2

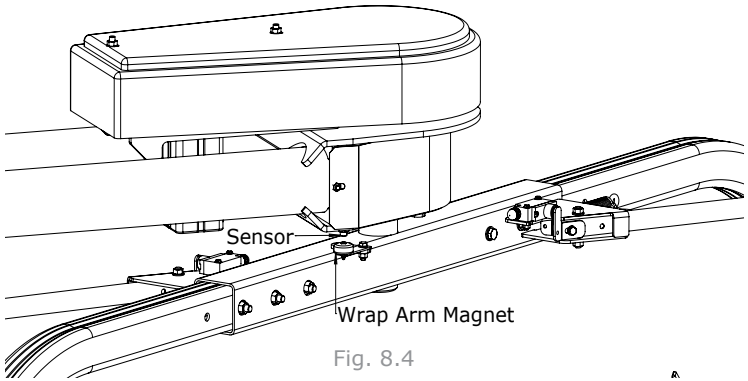


Fig. 8.4

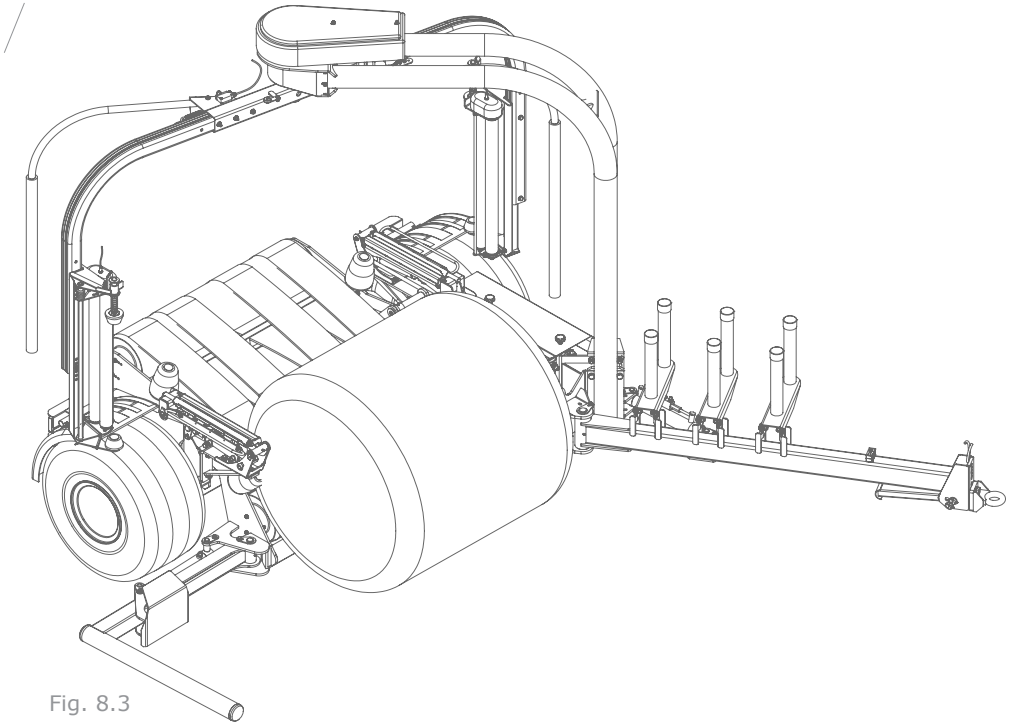


Fig. 8.3

- Wrapping
The Squeeze Arm must be in the full out position for wrapping to commence. Make sure that the bale is sitting correctly on the table before starting wrapping. Pressing (R6) starts the automatic wrapping cycle.

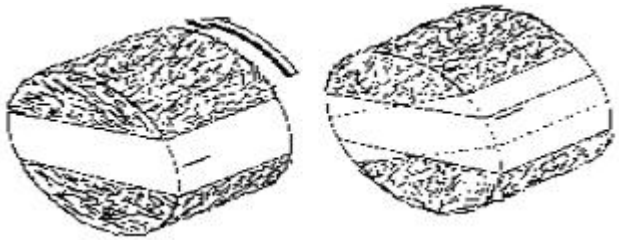
Adjusting the Overlap
The 1400 is fitted as standard with the 2 x 2 x 50% film overlap system when using 2 rolls of 750 film. This is achieved by means of the gear ratio of the drive, ensure that the correct number of film layers are applied to the bale after a specific number of revolutions of the wrap arm. The number of turns required to wrap a bale depends on bale size .

To calculate the number of turns required:
Count the number of turns to just cover the bale, add 1 to this. This applies two layers, multiply by 2 for 4 layers, 3 for 6 layers and so on.

The table below give an indication of the number of wraps to achieve the desired number of
layers on different size bales.

Best practice suggests a minimum of 6 layers and more on high dry matter and stemmy material.

Bale Diameter	4 Layers	6 Layers
120cm	16 wraps	24 wraps
150cm	20 wraps	30 wraps



- Unloading
In 'A' (Auto Mode) the machine will run through a full automatic wrapping sequence. One round before the required number of revolutions is obtained; the speed of the wrapping arm is reduced and the cutter opens. The wrapping arm passes the open cutter and stops. The cutter closes and the wrapping arm reverses to the park position. (See Section 7 for making alterations to controller settings).

The Bale is now ready to be Unloaded this can be done in one of two ways; Standard Off-loading or End Tipping

Standard Off-loading
The rear roller drops down to off-load the bale. Beware of the danger of the bales rolling when working in hilly conditions, always off load the bale across the hill. The controller allows a number of methods of triggering off-loading:

If Auto Off-Load is set to ON (Operator Setup) then the bale will be automatically off-loaded at the end of wrapping. If Auto Off-Load is set to OFF, then press (R5) must be pressed to start off-loading.

End Tipping

The 1400 can be fitted with an optional bale End Tipping attachment (See Fig. 8.5) which turns the bale on to its end as it is being off-loaded (see Fig. 8.6 & 8.7). It is attached to the Table Tip Frame with bolts and rubber buffers and can be adjusted to ensure that wheel is clear of the ground during transport.

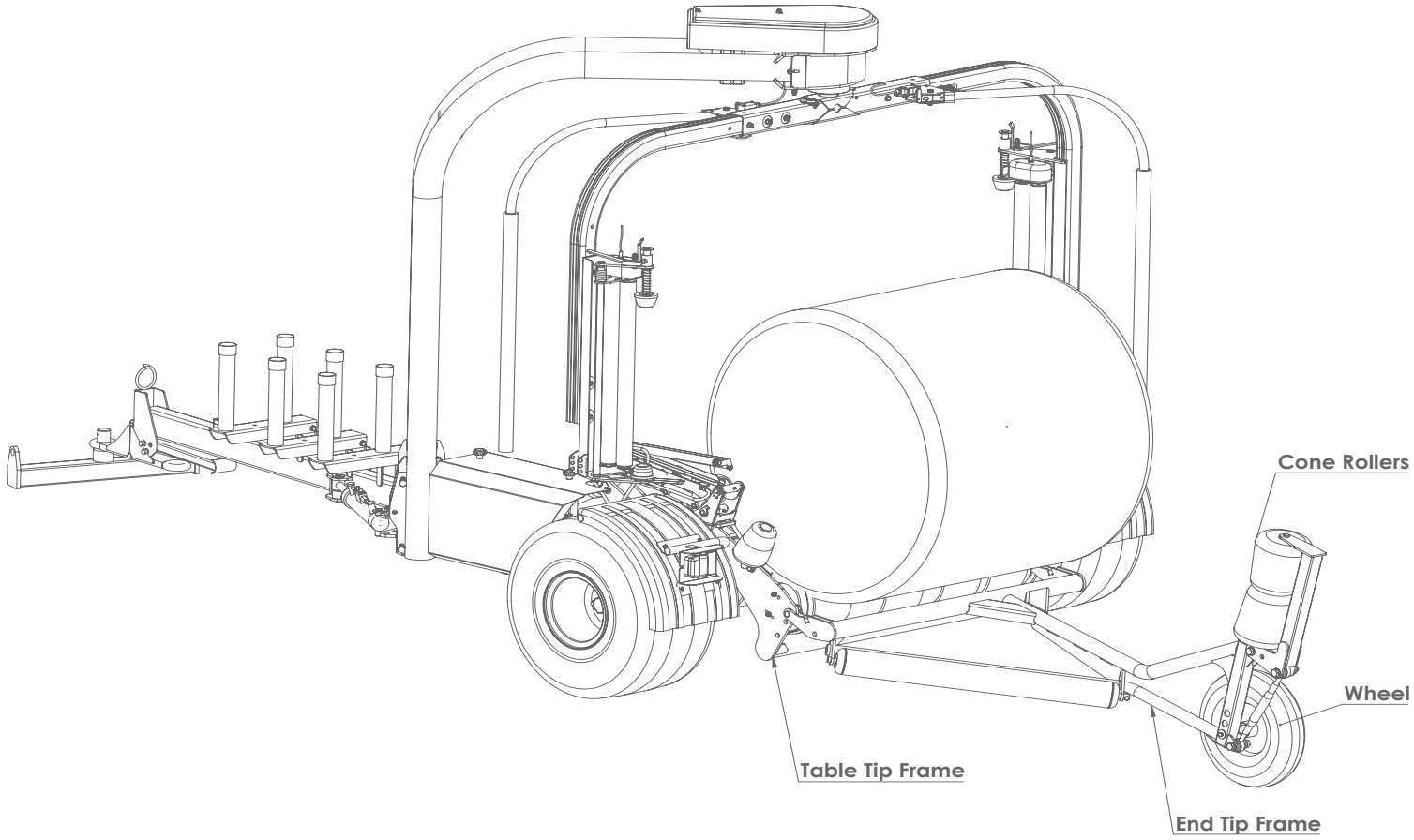


Fig. 8.5

To avoid damage to the bale the 1400 should be stationary when End Tipping.

The operation of the end tip attachment is heavily dependant upon the terrain and the bale shape. The mounting height of the wheel is adjustable to improve operation with different bale sizes and operating conditions. The andgle of the cone rollers can be adjusted in order to suit different size bales.

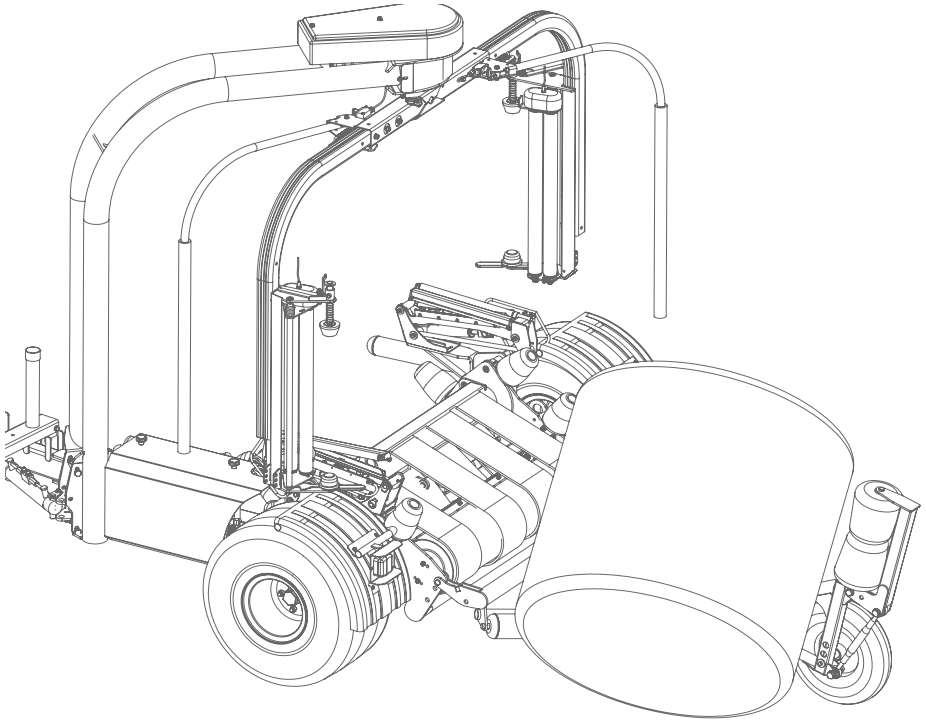


Fig. 8.6

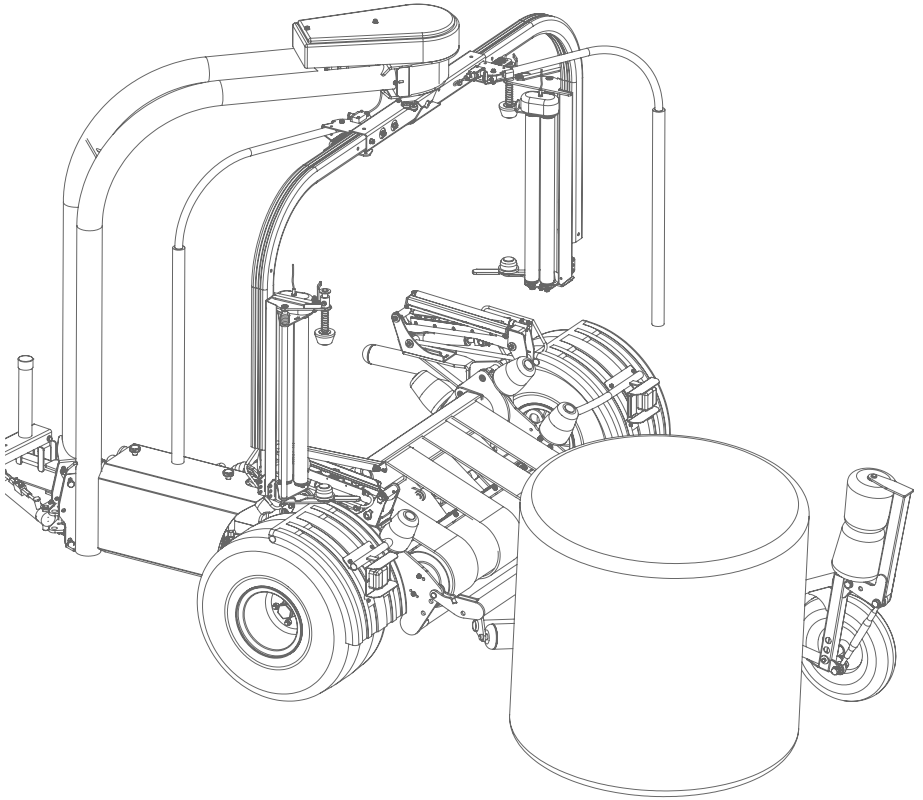
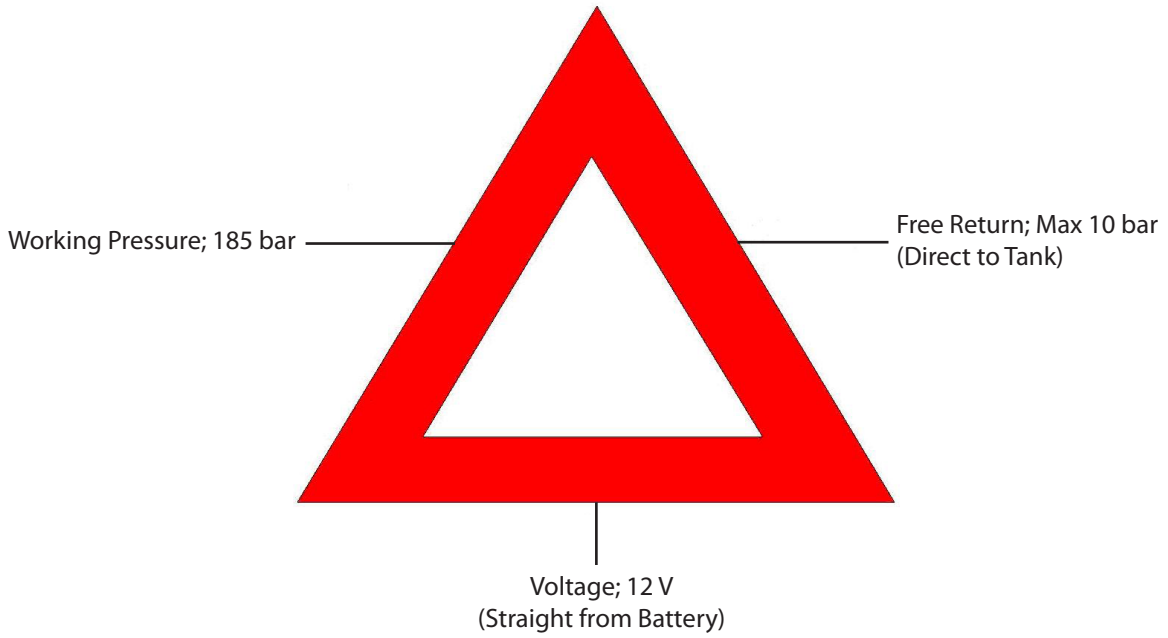
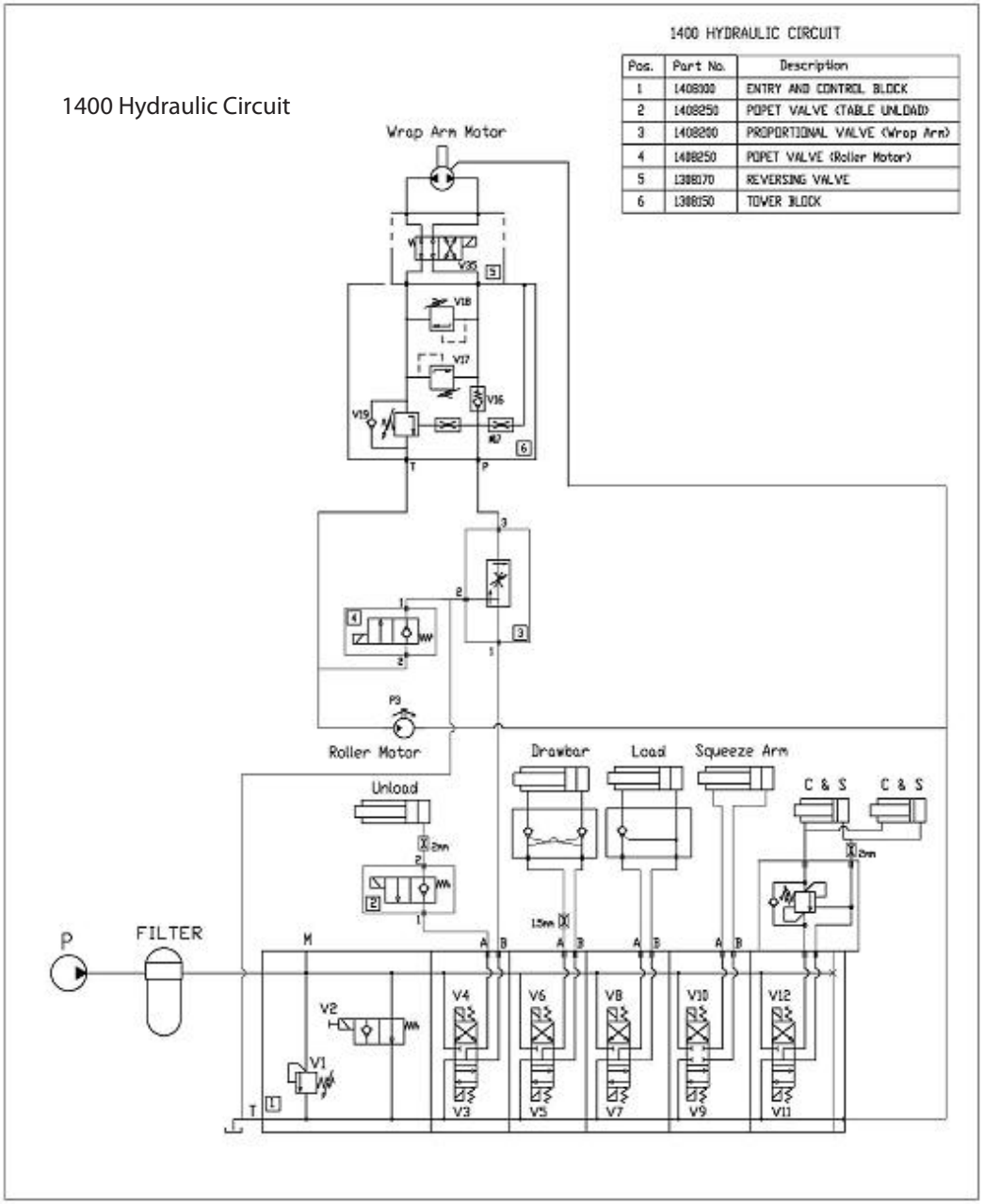


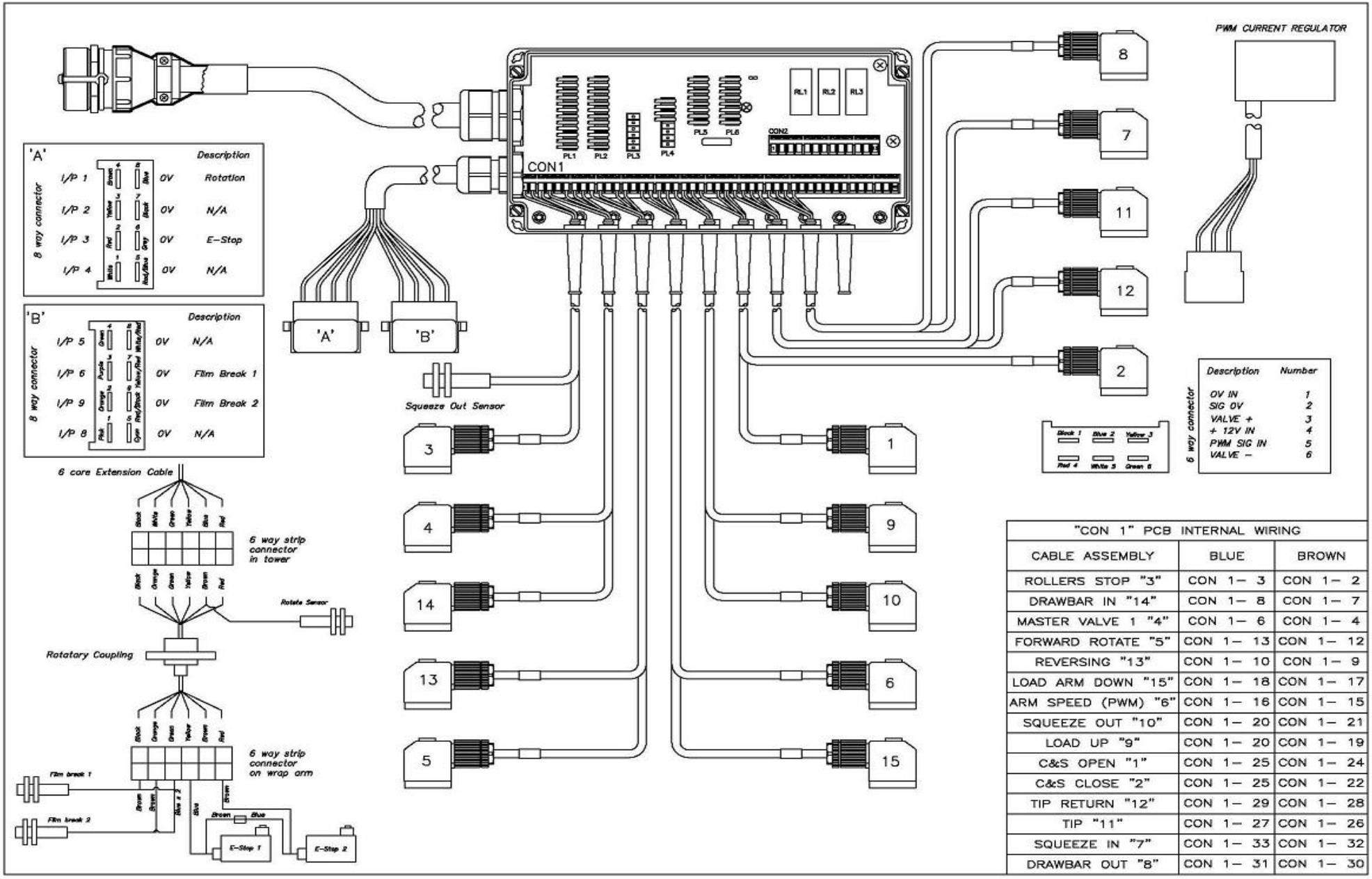
Fig. 8.7

Electro-Hydraulics
Note: There are 3 basics, which must ALWAYS be followed if the machine is to function correctly



1400 Hydraulic Circuit





"CON 1" PCB INTERNAL WIRING		
CABLE ASSEMBLY	BLUE	BROWN
ROLLERS STOP "3"	CON 1– 3	CON 1– 2
DRAWBAR IN "14"	CON 1– 8	CON 1– 7
MASTER VALVE 1 "4"	CON 1– 6	CON 1– 4
FORWARD ROTATE "5"	CON 1– 13	CON 1– 12
REVERSING "13"	CON 1– 10	CON 1– 9
LOAD ARM DOWN "15"	CON 1– 18	CON 1– 17
ARM SPEED (PWM) "6"	CON 1– 16	CON 1– 15
SQUEEZE OUT "10"	CON 1– 20	CON 1– 21
LOAD UP "9"	CON 1– 20	CON 1– 19
C&S OPEN "1"	CON 1– 25	CON 1– 24
C&S CLOSE "2"	CON 1– 25	CON 1– 22
TIP RETURN "12"	CON 1– 29	CON 1– 28
TIP "11"	CON 1– 27	CON 1– 26
SQUEEZE IN "7"	CON 1– 33	CON 1– 32
DRAWBAR OUT "8"	CON 1– 31	CON 1– 30

1400 Junction Box Wiring

Solenoid	Generic Function	Cable Number	AMP Pin	1400 Function
1	OP6	18	24	C&S Open
2	OP7	15	6	C&S Close
3	OP1	14	7	Roller Speed
4	OP2	3	14	Master Valve
5	OP4	31	16	Forward Rotate
6	OP3	6	18	Arm Speed (Prop.)
7	OP13	30	10	Squeeze In
8	OP14	11	15	Drawbar Out
9	OP8	24	22	Load Arm Up
10	OP9	27	2	Squeeze Out
11	OP16	1	19	Tip Off
12	OP15	5	12	Tip Return
13	OP11	16	11	Reversing
14	OP10	26	3	Drawbar In
15	OP5	4	13	Load Arm Down
16	OP12	25	4	12 volts

1400 Junction Box Wiring (contd.)

Solenoid	Generic Function	Cable Number	AMP Pin	1400 Function
N/A	IP1	12	9	Rotate Sensor
N/A	IP2	2	20	Not Used
N/A	IP3	20	31	Emergency Stop
N/A	IP4	19	30	Not Used
N/A	IP5	22	33	Squeeze Out
N/A	IP6	13	8	Film Break 1
N/A	IP8	29	5	Not Used
N/A	IP9	28	1	Film Break 2
N/A	AnIP5	8	26	Not Used
N/A	AnIP6	7	25	Not Used
N/A	0v	35	35	
N/A	0v	34	34	
N/A	0v	33	23	
N/A	0v	9	27	
N/A	An0v	21	32	
	5v Supply	23	28	

Description of Hydraulics

The Control Valve (See Fig. 9.1) uses a 'Master Valve system; so to operate any function the master valve plus the service valve for that function is powered. For troubleshooting purposes it is useful to note on the control valve that, energizing a solenoid on top of the valve gives pressure out the bottom port of that section on valve and vice versa.

Open & Closed Center Hydraulics
The 1400 hydraulic system can be set up for tractors with Open or Closed Center Hydraulics.

Open Centre Hydraulics
Most tractors have a hydraulic system that gives a continuous output which flows through the valve on the machine and back to tank when no function is operating (Open center).

Note:
The TANCO AUTOWRAP 1400 is set-up for open centre on leaving the factory.

Close Centre Hydraulics
Some tractors (John Deere) have a hydraulic system that require the valve on the machine to allow no flow when no function is operating (Closed Center). The hydraulic valve can easily be configured to operate in this way.

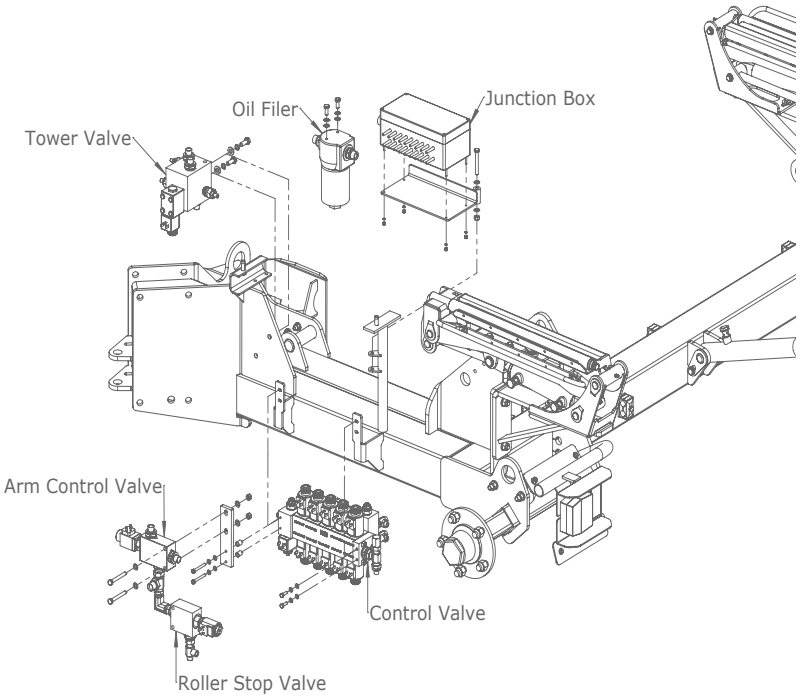


Fig. 9.1

Valve Functions

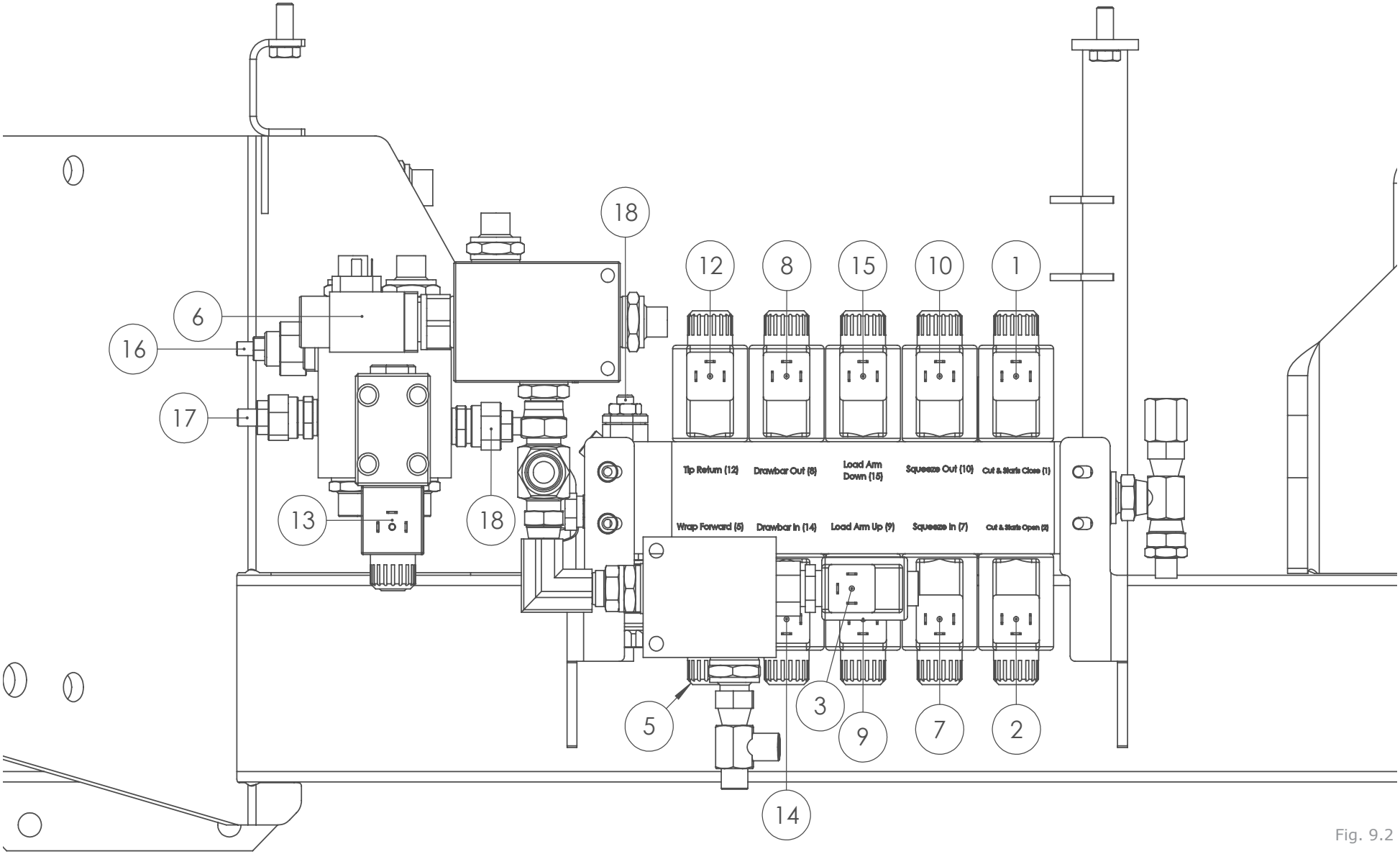


Fig. 9.2

Valves 1 to 15 (See Fig. 9.2) are 12 V Electrical Solenoid Valves, their functions are as follows;

Valve 1 (Cutter Open) & Valve 2 (Cutter Close)
These valves open and close the film cutter. To prevent the Cutter creeping open, there is a load holding valve on top of the cutter section of the control valve. There is a 2mm speed control orifice in the bottom port of the cutter section.

Valve 3 - Roller Stop
This valve is normally closed; it is pulsed open and closed to give half speed on the table rollers when the film break sensor detects that one film has broken.

Valve 4 - Master Valve
This valve is powered for every function.

Valve 5 - Arm Rotate
This valve powers the wrap arm and table rollers. Valve 6 is always operated with this valve.

Valve 6 - Wrap Arm Speed
This valve controls the speed of the wrap arm, it gets a varying PWM (Pulse Wave Modulation) signal from the controller to vary the speed. Its' settings are adjustable in the Technician Setup in the controller.

Valve 7 - Squeeze In
This valve powers squeeze arm in.

Valve 8 - Drawbar Out
This valve moves the drawbar out to the working position.

Valve 9 - Load Up
This valve raises the load arm.

Valve 10 - Squeeze Out
This valve opens the squeeze arm.

Valve 11- Tip Down
This poppet valve mounted on the tip port of the Control Valve lowers the rear roller frame for tipping off bale.

Valve 12 - Tip Return
This valve raises rear roller frame after tipping.

Valve 13 - Reversing Valve
This vale mounted on the Tower Valve to reverse the direction of the wrap arm. It is always operated with valves 5 and 6.

Valve 14 - Drawbar In
This moves the drawbar in to the transport position.

Valve 15- Load Arm Down
This valve lowers the load arm.

Valves 16,17,18 are on the Tower Block, their functions are as follows;

Valve 16 (VBS) Brake Valve.
This is a pilot operated (8:! Ratio) Load Holding Valve, it regulates the oil flow on the outlet side of the wrap arm motor. It makes the arm run smoother and holds it in place when parked.

Valve 17 - (VMP) Cross Line Relief Valve Forward
This valve limits the max. torque of the wrapping arm. If the inlet pressure exceeds the set value, it relieves the oil across to the outlet side of the motor. It is adjusted so that the pull force on the far end of the arm is approximately 35 KG. If it is set too high acceleration at the beginning of wrapping will be very sharp.

Valve 18 - (VMT) Cross Line Relief Valve Reverse
This valve ensures a gradual stop for the wrap arm by limiting the pressure on the outlet side of the motor. If the pressure exceeds the set value, it relieves the oil across to the inlet side of the motor.

Valve 19 - Main Relief Valve
The hydraulic system is equipped with a safety relief valve, which is preset to 185 bar. If this pressure is exceeded it opens and allow the oil from the pressure port to the tank port of control valve

⚠ IMPORTANT:
Valves 16 to 19 have been carefully set in the factory. Incorrect adjustment of these may cause damage to the machine. Always ensure that trained personnel only adjust the settings of these valves.

Pressure Test Point
There is a pressure test point on the inlet end of the Control Block.

Check Points Prior to Troubleshooting
There are some general check points that have to be examined first if something is wrong with the machine. There are three basic assumptions that have to be fulfilled for the machine to function properly;

1. The oil pressure from tractor should be 180 bar.
2. The return flow of oil has to be as free as possible, max. 10 bar counter pressure.
3. Enough electric power to all functions.

Oil Pressure
To check the oil pressure into the machine is high enough, a gauge may be placed in line on the feed hose or there is a standard test point on the end of the Control Valve.

Oil Flow
The amount of oil that the tractor delivers should be minimum 20 liters/minute for satisfactory operation of the machine, but it is recommended that it is 30 liters/minute.

Note: (Max. allowed oil amount is 60 liters/minute). Ensure that oil level in tractor's hydraulic system is correct and tractor's oil filter is changed regularly.

Return Pressure
The return pressure can be too high. With high return pressure the machine's functions will get less power. High return pressure means also that you need more power to operate the valves.

Max. allowed pressure is 10 bar, we recommend "free return" directly to the tank.

Electric Power
It is important to check that all functions receive enough electric power. If not, some, or all functions may fail. The controller displays a voltage reading.

Battery Voltage
If the voltage falls below 10 V the valves will not be able to open.

Electrical Connection
The electric supply for the machine's remote control and electro-hydraulic components must come directly from the tractors' 12 volt battery.

The electric wires from the battery must have an area measurement of min. 2,5 mm2. Connection to other contacts on the tractor can cause risk of malfunction and is not recommended.

Note:
Brown leader goes to the Battery's Positive Pole
Blue leader goes to the Battery's Negative Pole

- Check that the connection between battery cable and control is ok.
- Check that the connection between controller unit and machine is ok.
- Check that fuse on the battery Cable is ok.

Procedure of Troubleshooting
If the machine fails to operate correctly it must be determined if the problem is Hydraulic, Mechanical or Electrical.

Solenoid Valves
When checking if the Solenoid valves are receiving electric power, you do this in the following way:

1. Unscrew the nut that holds the solenoid.
2. The solenoid is easy to move without electric power.
3. Push the current function on the remote control. If the solenoid gets power, it will be difficult to move, it "sticks". This is the best and easiest way to check if the solenoid valve is receiving electric power. Another way is to hold a screwdriver up to the magnet. If it "sticks", the solenoid is receiving electric power.

The power supply to the valve can also be measured with a voltmeter, but then the contact must be connected to the solenoid, so it is using power. To have reliable functions, the voltage should not be lower than 11,5 volts, even if the solenoid valve usually works with a little lower voltage.

If the electric supply is in order and one of the functions fails, the reason can be dirt that tightens or prevents the sliding shaft (spool) from moving.
Try to manoeuvre the function manually, by pressing the point of a screwdriver into the end of the valve housing. At the same time the corresponding switch on the control unit has to be operated to get electric power to the master valve. If the function is working again after this, the dirt may have been pushed out in the oil system and the machine can be operated normally again.

⚠ Take care so that the machines moving parts, do not cause damage to persons or objects.

The Machine Does not Function
- Even if the gauge shows enough pressure and there is no reaction in the machine. The reason could be that one, (or both), of the quick-couplers does not open for the oil, in this situation you should change the quick-couplers.

- The counter pressure may be too high.
Max. allowed counter pressure is 10 bar.

Make sure that the open / closed valve is correctly positioned.

Note: Disturbances of this type, a, b or c, are most likely in the first days that the machine is in use.

The Cutter will not Hold the Film
Is the cutter closing fully, if not increase the Cutter Close Duration 2.
If the cutter is creeping open, there may be dirt in the load holding, open and close the cutter a number of times to try to clear this. If the problem develops over time then it may be due to seal wear in the cutter arms.

The Wrapping Arm will not Rotate
- Check error messages on the controller,' SQUEEZE OUT', squeeze arm must be in the fully out position for wrapping to start. 'SAFETY' if the safety arm has tripped.

- Check by hand if wrapping when parked that the wrap arm is held firmly in place; if it can be easily moved, check chain drive, drive keys and drive motor.

- Check if the arm is attempting to drive but is under pressure, unscrew adjustment on Valve 16 - Brake Valve on Tower Block. If this does not solve problem return valve to original position.

-Check if the hydraulics are under pressure and the arm is not moving then there may be a problem with the electrical supply to the control valve, this is best dealt with by an experienced technician.

The Hand Controller will not Operate the Lift Arm
In the Operator Setup, the Remote Type (Menu no.4.41) may be set to RF, if so, change to IR.

Please contact your dealer if you are in any doubt regarding the above.

Periodic Maintenance

Bearings
All ball-bearings are packed with grease, and do not need any more maintenance.

Pre-Stretchers
If the machine is in daily use, the Gears under the plastic cover on the dispenser should be greased when needed.

Cutters / Film Holders
The cutter / film holder is pre-adjusted from the factory and does not need further adjustments. When replacing spare parts, it is necessary to adjust it. The springs for the U-shaped slot shall be adjusted so that they are almost completely squeezed together when the cutter-arm is all down.

Cleaning
The machine should be cleaned and oiled regularly and at the end of the wrapping season.

When using high pressure washing apparatus, care must be taken with the electrical installation.
Also make sure that water is not sprayed directly into the bearings, etc. Keep the control box protected from rain and water. If necessary use compressed air to dry electrical components.

Hydraulic Cylinders
Make sure that all hydraulic cylinders are closed when storing the machine.

Quick Couplers
Ensure that the quick couplers are kept clean and apply the dust caps after use.

Storage
The machine should be parked on a dry place during the closed season.

Oil Filter
The oil filter must be changed once a year.

Lubrication (See Fig. 11.1)
The table below outlines the recommended lubrication requirements for components on the 1400;

No.	Component	Type	Intervals
1	Drawbar Ram	Grease	50hrs
2	Table Up Ram	Grease	10hrs
3	Table Tip Ram	Grease	10hrs
4	Squeeze Arm	Grease	10hrs
5	Cut & Tie Ram	Grease	10hrs
6	Wrap Arm Drive*	Oil	50hrs
7	Table Roller Drive*	Oil	50hrs
8	Dispenser Gears	Oil	50hrs

* Chain & Sprockets

Note: We recommend that you change the oil in the Tower & Table motors every 500hrs.

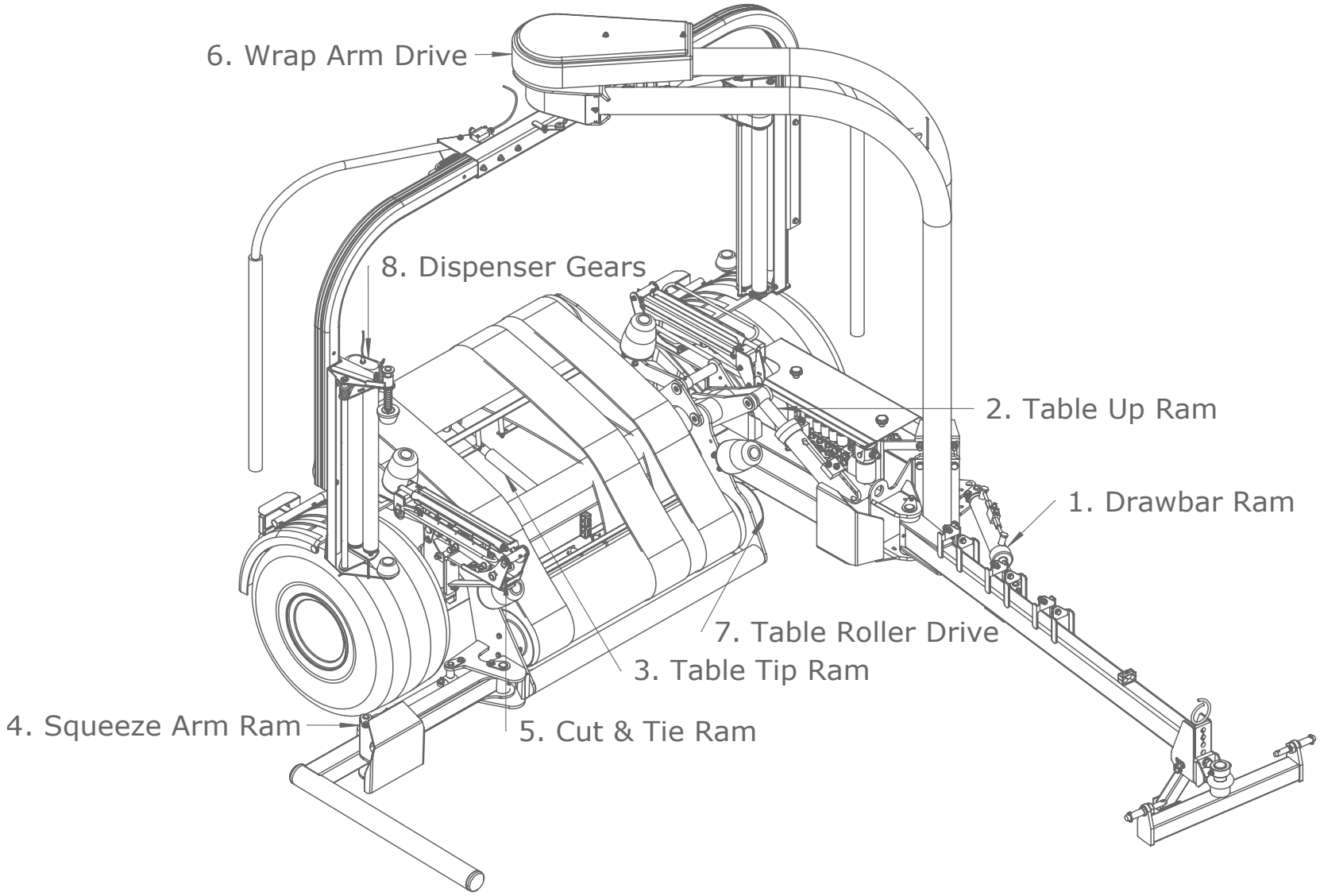

6. Wrap Arm Drive
8. Dispenser Gears
2. Table Up Ram
1. Drawbar Ram
7. Table Roller Drive
3. Table Tip Ram
4. Squeeze Arm Ram
5. Cut & Tie Ram

Fig. 11.1

GUARANTEE

Subject to hereunder provided, the sellers undertake to correct either by repair or at their election by replacement any defect of material or workmanship which occurs in any of its goods within twelve months after delivery of such goods to first user, with the exception of contractors or commercial users when warranty period is six months.
In respect of Autowraps the warranty period is for 12 months or 8000 bales, whichever occurs first.

The term goods when used in this document means the article or articles described in invoices as sold by the sellers but dose not include equipment or proprietary parts or accessories not manufactured by the sellers. The sellers, however, undertake to pass on so far as they legally can to the first user the benefit of any warranty given to the sellers by the suppliers of such equipment, parts or accessories.
This understanding shall not apply to:-

(a) Any goods that have been sold by the first user.
(b) Any goods which have been injured by unfair wear and tear, neglect or improper use.
(c) Any goods the identification marks of which have been altered or removed.
(d) Any goods that have not received the basic normal maintenance such as tightening of bolts, nuts, tines, hose connections and fittings and normal lubrication with the recommended lubricant.
(e) The use of any product on tractors exceeding the recommended horsepower.
(f) Any goods that have been altered or repaired other that on instruction or with the written approval of the seller or to which any part not manufactured or having written approval by the sellers have been fixed.
(g) Any second-hand goods or parts thereof.

Any allegedly defective part or parts returned to the seller must be sent carriage paid. No claim for repair or replacement will be entertained unless upon discovery of the alleged defect written notification is sent to the Sellers giving, at the same time, the name of the Buyer from whom the goods were purchased and the date of purchase, together with the full details of the alleged defect and the circumstances involved, also the serial number of the machine etc.

The sellers shall be under no liability to their Buyers and first or subsequent users of their goods or to any other person or persons for loss or damage howsoever arising in respect of either personal injuries or for arising out of, or in any other way connected with or arising from the manufactures sale, handling, repair, maintenance, replacement or use of its goods or the failure or malfunction of any of its goods.
Representation and/or warranties made by any persons (including Buyers and employees and other representatives of the Seller) which are inconsistent or conflicting with these conditions are not binding upon the sellers unless given in writing and signed by a director of sales.

CLAIMS

If you wish to make a claim under the guarantee:

1: Immediately, stop using the machine.

2: Consult with your Tanco dealer (supplier). He/She can download a warranty claim form on-line. This should be filled out and e-mailed to distributor and forwarded to relevant contact person in Tanco. Please ensure all relevant information is included on this form

3: Consult with your Tanco dealer (supplier) and have them forward your claim and the damaged item to Tanco.

EC DECLARATION OF CONFORMITY

CE

ACCORDING TO DIRECTIVES 2006/42/EC

Manufacturer:
Tanco Autowrap Ltd
Bagenalstown
Co. Carlow
IRELAND

CERTIFIES THAT THE FOLLOWING PRODUCT:
TANCO AUTOWRAP
MODEL: 1400 EH
SERIAL NO:

To which this declaration relates, corresponds to the essential requirements of the Directive 2006/42/EC.

To conform to these essential health and safety requirements, the provisions of the following harmonized standards were particularly considered:

ISO 12100, EN 294, prEN 703, EN ISO 13857, EN ISO 4254 - 1, prEN 982.

DATE: 01/11/2011

Signed:

Con Hourihane, Technical Manager

1400 Spare Parts List (English)

We recommend that when you require spare parts you use only original parts.
When ordering spare parts please follow the following steps;

1. Identify the part you require using the detailed drawings.
2. Once you have identified the part you require reference the item number relating to the part on the item list where you will find the part number and description of the part you require. You will be require to give the complete part no and decription when ordering your part(s).
3. When ordering you must give the Serial Number and Model Number of the machine.
4. All orders must go through your local Tanco Dealer, and must be either faxed or e-mailed to Tanco Autowrap.

1400 Ersatzteilliste

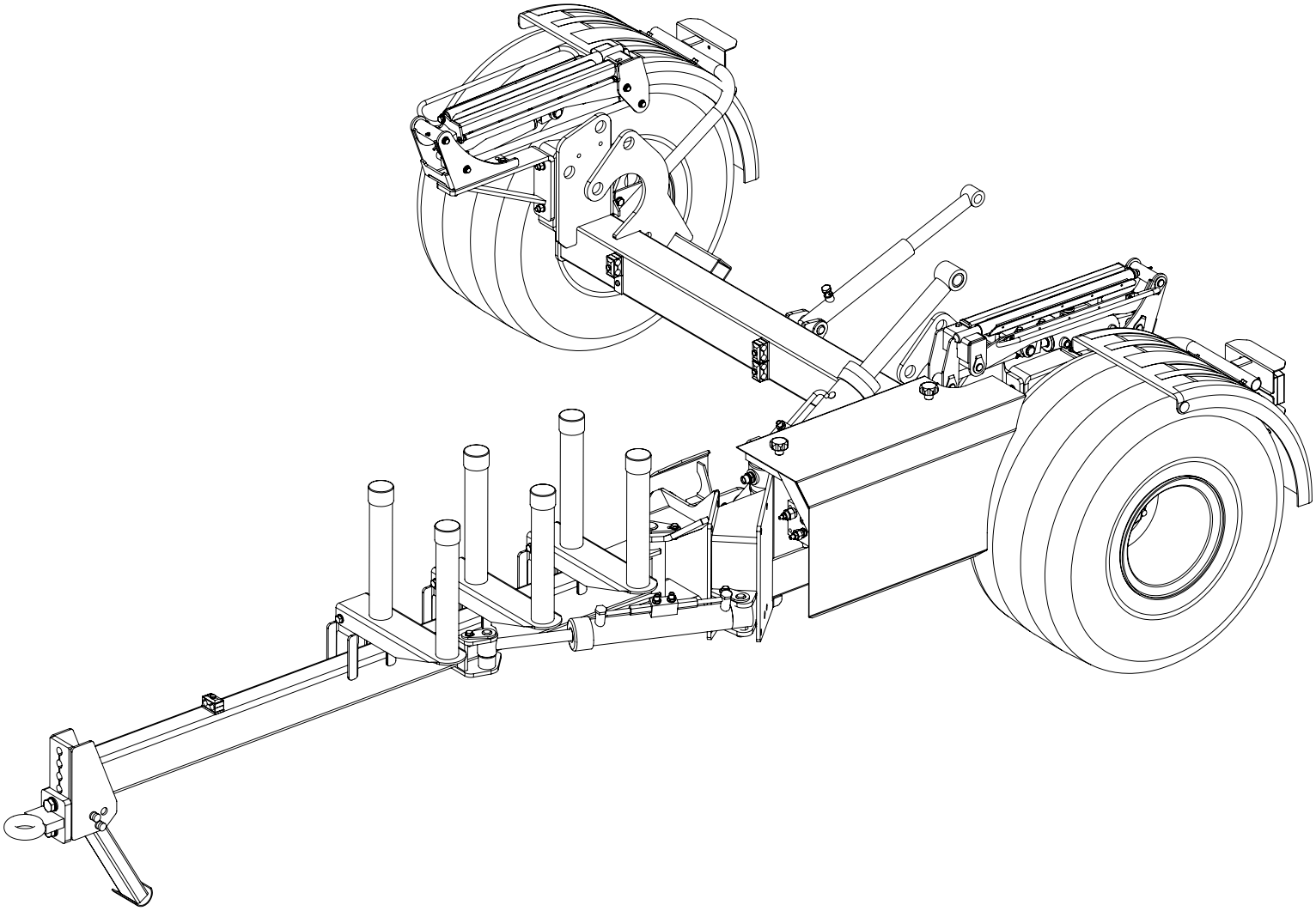
Wir empfehlen, nur Originalteile als Ersatzteile zu verwenden.
Befolgen Sie bei der Bestellung von Ersatzteilen bitte die folgenden Schritte:

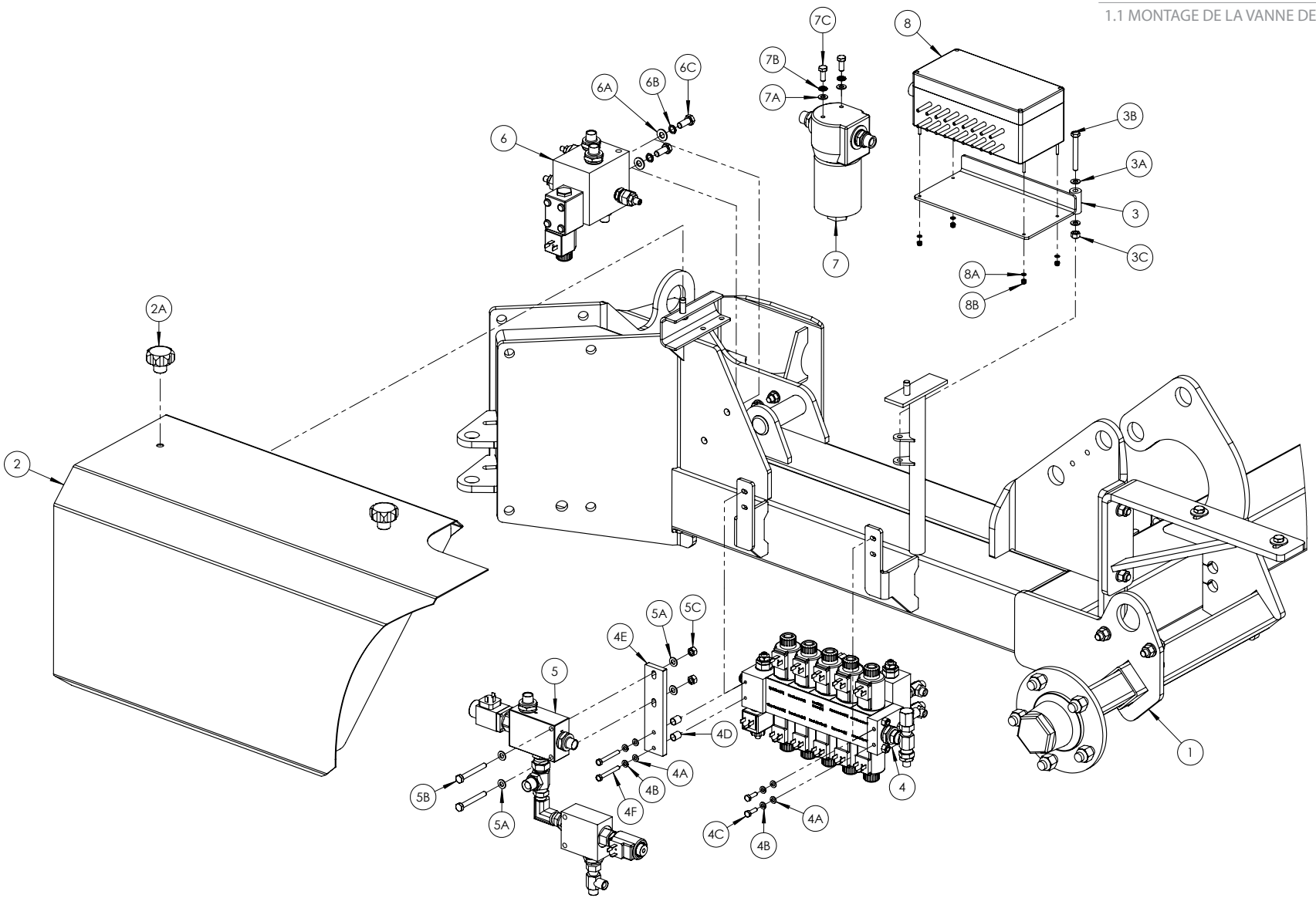
1. Stellen Sie anhand der detaillierten Zeichnungen fest, welches Teil Sie benötigen.
2. Haben Sie das benötigte Teil identifiziert, geben Sie die Teilnummer auf dem Bestellschein an, mit dem Sie das/die Ersatzteil/e bestellen.
3. Geben Sie bei jeder Bestellung die Serien- und die Modellnummer Ihrer Maschine an.
4. Alle Bestellungen müssen über Ihren Tanco-Händler vor Ort erfolgen und müssen Tanco Autowrap als Fax oder E-Mail erreichen.

Liste des pièces de rechange 1400

Si vous avez besoin de pièces de rechange, nous vous recommandons de n'utiliser que des pièces garanties d'origine.
Pour toute commande de pièces de rechange, veuillez suivre les étapes suivantes :

1. Identifiez la pièce dont vous avez besoin à l'aide des schémas détaillés.
2. Après avoir identifié la pièce dont vous avez besoin, relevez son numéro de référence dans la liste des pièces dans laquelle vous trouverez également la description de la pièce requise. Lors de la commande, vous devez indiquer la référence et la description complètes de la pièce.
3. Lors de la commande, vous devrez mentionner le numéro de série et le numéro de modčle de la machine.
4. Vous devez effectuer toutes les commandes auprès de votre revendeur Tanco local et les faxer ou les envoyer par e-mail à Tanco Autowrap.

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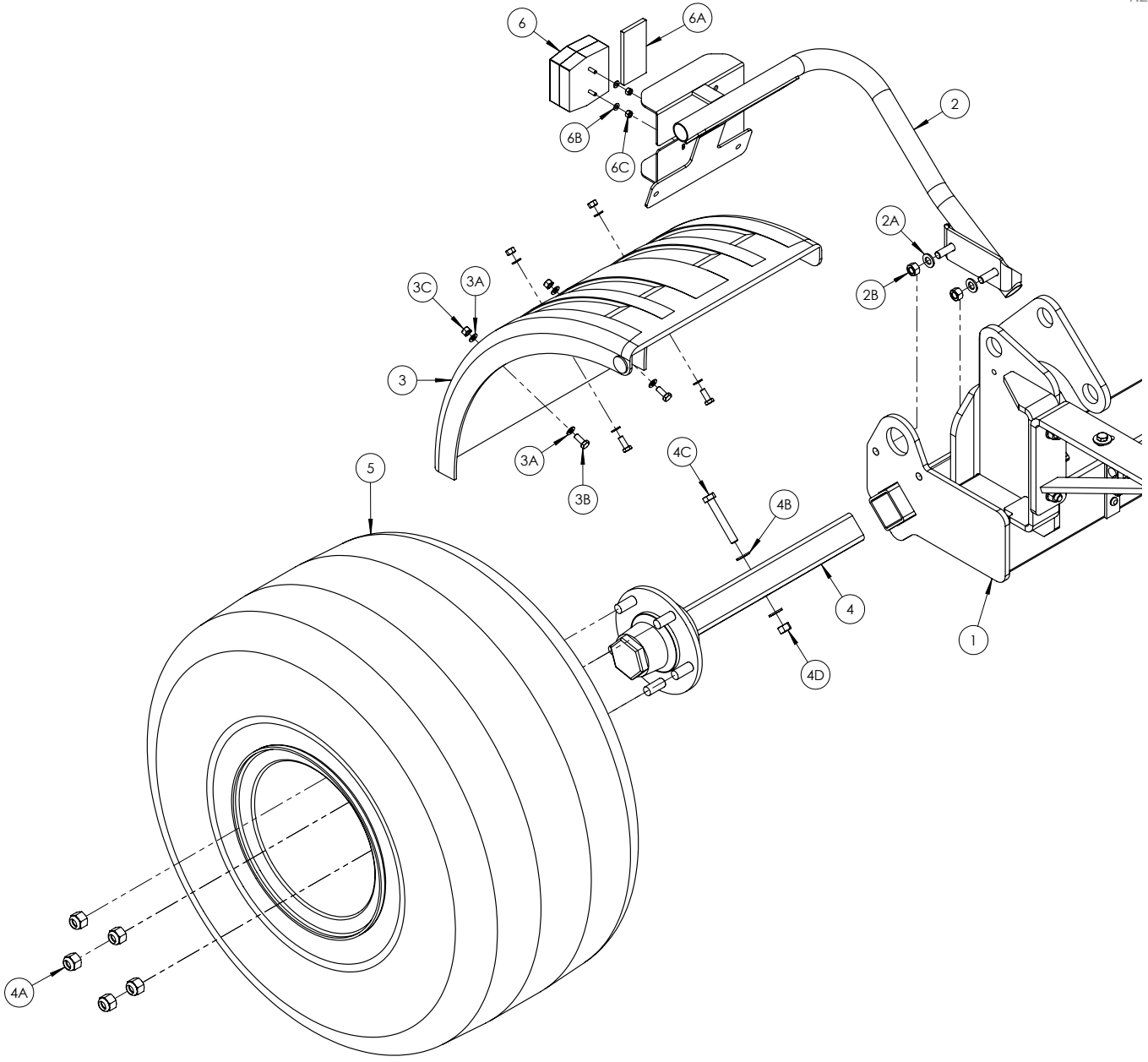
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401100	1	Fahrgestell	Chassis	Châssis	
2	1401060	1	Ventilabdeckung	Valve Cover	Couvercle de soupape	
2A	34251456	2	Handrad	Handwheel	Volant	(50 x 10)
3	1401050	1	Verteilerkastenhaltebügel	Junction Box Mounting Bracket	Support de montage de la boîte de raccordement	
3A	Z10-02-08	2	Unterlegscheibe	Flat Washer	Rondelle plate	M8
3B	Z26-048B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 65mm
3C	Z23-08	1	Feststellmutter	Locknut	Contre-écrou	M8
4	1408100	1	Steuerventil	Control Valve	Vanne de régulation	
4A	Z10-02-06	4	Unterlegscheibe	Flat Washer	Rondelle plate	M6
4B	Z12-02-06	4	Federscheibe	Spring Washer	Rondelle à ressort	M6
4C	Z26-020S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M6 x 20mm
4D	1403044	2	Ventilabstandshalter	Valve Spacer	Entretoise de soupape	
4E	1401066	1	Ventilmontagebügel	Valve Mounting Bracket	Support de fixation de la soupape	
4F	Z26-026B	2	Sechskantschraube	Hex Bolt	Boulon Hex	M6 x 50mm
5	1408210	1	Proportionalventil	Proportional Valve	Vanne proportionnelle	
5A	Z10-02-08	4	Unterlegscheibe	Flat Washer	Rondelle plate	M8
5B	Z26-048B	2	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 65mm
5C	Z23-08	2	Feststellmutter	Locknut	Contre-écrou	M8
6	1308180	1	Turm-Block	Tower Block	Bloc Tour	
6A	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
6B	Z12-02-10	2	Federscheibe	Spring Washer	Rondelle à ressort	M10
6C	Z26-0611S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
7	1308070	1	Ölfilter	Oil Pressure Filter	Filtre hydraulique	
7A	Z10-02-08	2	Unterlegscheibe	Flat Washer	Rondelle plate	M8
7B	Z12-02-08	2	Federscheibe	Spring Washer	Rondelle à ressort	M10 x 25mm
7C	Z26-039S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 20mm
8	1409100	1	RDS-Steuer-Set (Verteilerkasten)	RDS Control Kit (Junction Box)	Kit de commande RDS (boîte de raccordement)	
8A	Z10-02-04	2	Unterlegscheibe	Flat Washer	Rondelle plate	M4
8B	Z23-04	2	Feststellmutter	Locknut	Contre-écrou	M4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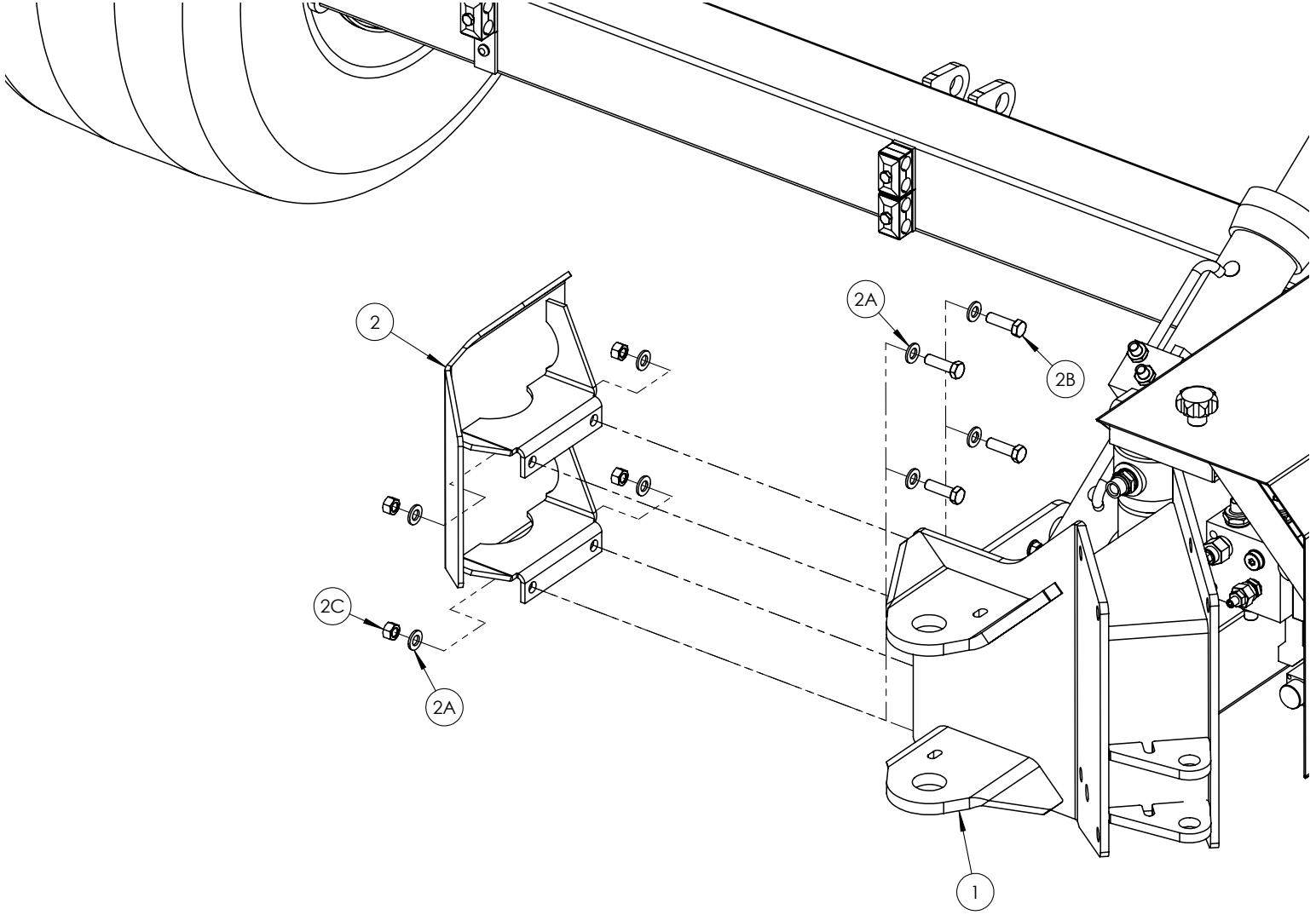
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401100	1	Fahrgestell	Chassis	Châssis	
2	1402100	1	Kotflügelaufhängung (rechts)	Mud Guard Mounting Bracket (Right)	Support de montage du pare-boue (droit)	
	1401210	1	Kotflügelaufhängung (Links)	Mud Guard Mounting Bracket (Left)	Support de montage du pare-boue (gauche)	
2A	Z10-02-12	4	Unterlegscheibe	Flat Washer	Rondelle plate	M12
2B	Z26-084S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 40mm
2C	Z23-12	2	12 mm Sicherungsmutter	12mm Locknut	Contre-écrou 12mm	
3	1401250	1	Kotflügel aus Kunststoff	Plastic Mudguard	Pare-boue plastique	
3A	Z10-02-08	8	Unterlegscheibe	Flat Washer	Rondelle plate	M8
3B	Z23-08	4	Feststellmutter	Locknut	Contre-écrou	M8
4	Z04-032	1	Achsschenkel	Stub Axle	Demi-essieu	
4A	M22AWNA	5	Radmutter	Wheel Nut	Écrou de roue	M16
4B	Z10-02-12	2	Unterlegscheibe	Flat Washer	Rondelle plate	M12
4C	Z26-0901B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M12 x 80mm
4D	Z23-12	1	Feststellmutter	Locknut	Contre-écrou	M12
5	Z04-04-1070	1	Straßenrad	Road Wheel	Roue de transport	
6	Z05-32	1	Beleuchtungs-Set	Lighting Set	Éclairage	
6A	Z04-621	1	Reflektor	Reflector	Réflecteur	
6B	Z10-02-05	2	Unterlegscheibe	Flat Washer	Rondelle plate	M5
6C	Z23-05	2	Feststellmutter	Locknut	Contre-écrou	M5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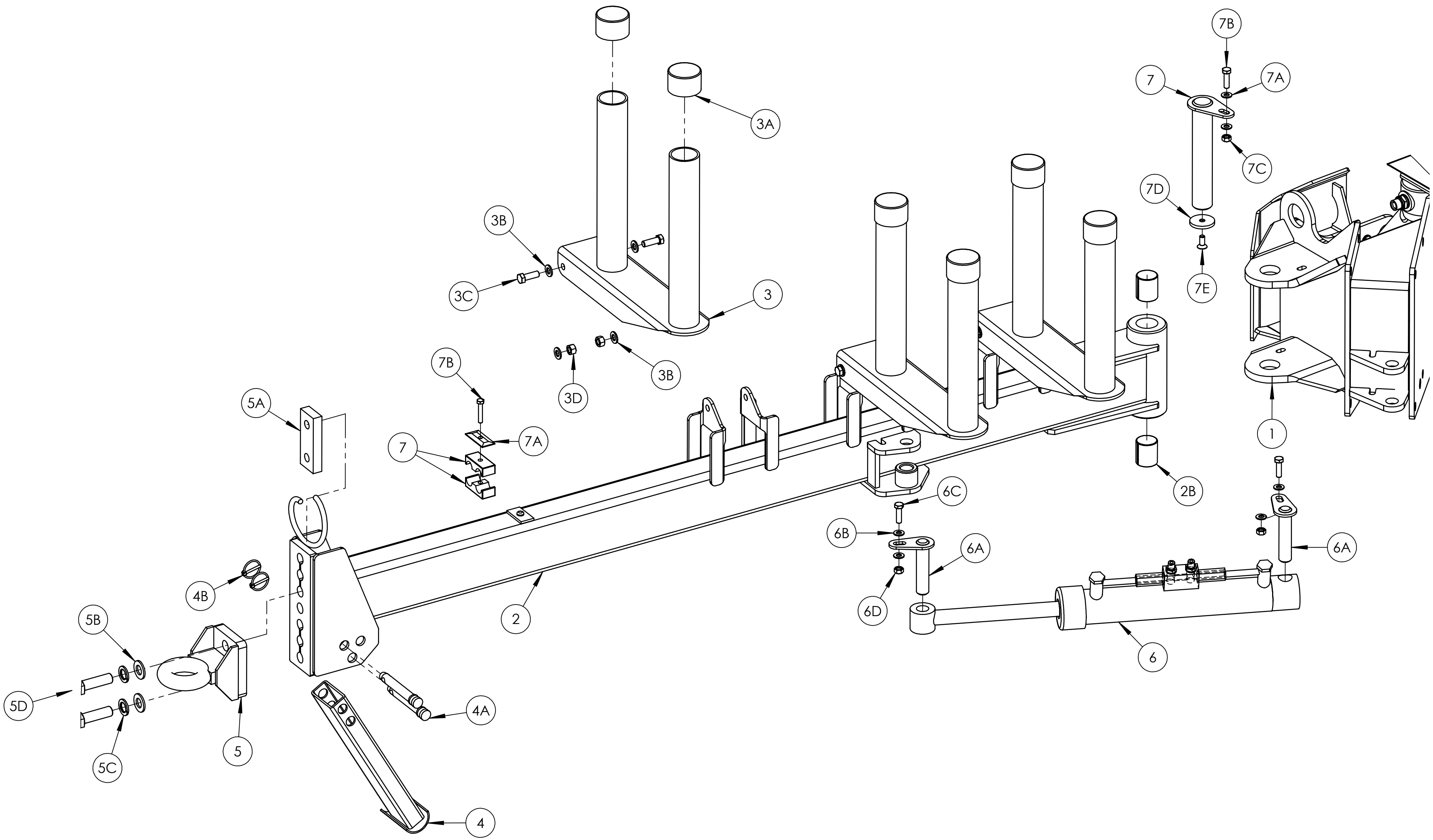
1	1401100	1	Fahrgestell	Chassis	Châssis	
2	1401070	1	Ballenführung	Bale Guide	Guide balle	
2A	Z10-02-10	8	Unterlegscheibe	Flat Washer	Rondelle plate	M12
2B	Z26-084S	4	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 40mm
2C	Z23-12	4	Feststellmutter	Locknut	Contre-écrou	M12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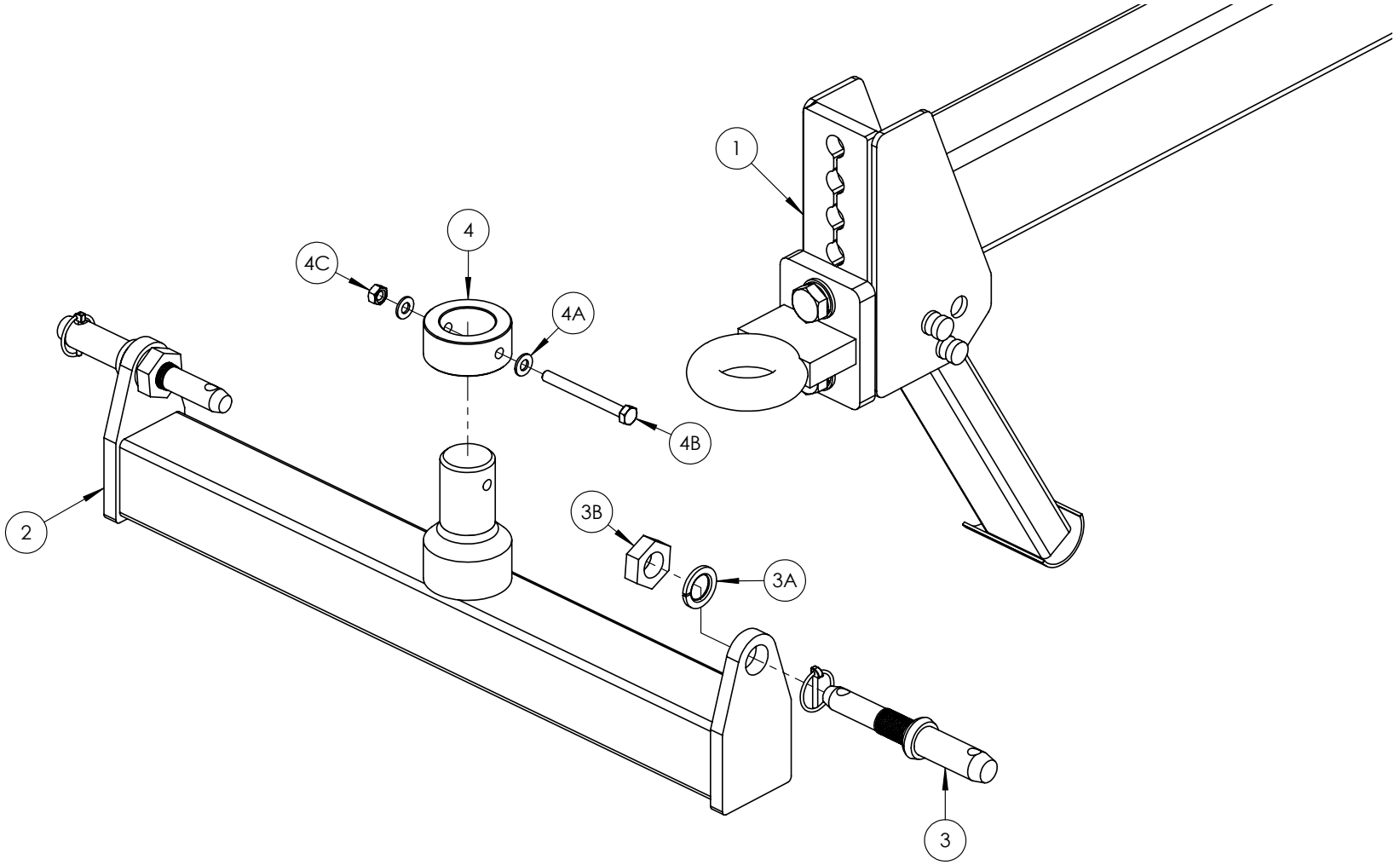
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401100	1	Fahrgestell	Chassis	Châssis	
2	1401500	1	Zugstange	Drawbar	Barre d'attelage	
2A	34060800	1	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
2B	1404056	2	DX Buchse	DX Bush	Douille DX	40mm ID x 50mm
3	1408015	3	Folientragwalze	Film Roll Holder	Support de bobine de film	
3A	Z32-085	6	Kappe	Cap	Capuchon	
3B	Z10-02-12	12	Unterlegscheibe	Flat Washer	Rondelle plate	M12
3C	Z26-038B	6	Sechskantschraube	Hex Bolt	Boulon Hex	M12 x 35mm
3D	Z23-12	6	Feststellmutter	Locknut	Contre-écrou	M12
4	1401075	1	Standfuß der Zugstange	Drawbar Leg	Béquille de barre d'attelage	
4A	Z03-04-74	2	Scharnierstift	Link Pin	Goupille de liaison	
4B	Z03-22-03	2	Klappsplint	Linch Pin	Clavette d'essieu	1/4"
5	1401600	1	Zugöse	Hitch Eye	Anneau d'attelage	
5A	1403005	1	Bolzenplatte	Bolt Plate	Plaque boulonnée	
5B	Z10-02-20	2	Unterlegscheibe	Flat Washer	Rondelle plate	M20
5C	Z12-02-20	2	Federscheibe	Spring Washer	Rondelle à ressort	M20
5D	Z26-165B	2	Sechskantschraube	Hex Bolt	Boulon Hex	M20 x 70mm
6	1408166	1	Zugstangenkolben	Drawbar Ram	Vérin de barre d'attelage	
6A	1401716	2	Zylindermontagestift	Ram Mounting Pin	Goupille de fixation du système	
6B	Z10-02-10	4	Unterlegscheibe	Flat Washer	Rondelle plate	M10
6C	Z26-063S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
6D	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10
7	34260117M	1	Rohrschelle	Pipe Clamp	Collier de serrage	M22
7A	34260117	1	Obere Rohrschellenplatte	Pipe Clamp Top Plate	Collier de serrage, Plaque supérieure	
7B	Z26-042B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 45mm
8	1401713	1	Zugstangendrehstift	Drawbar Pivot Pin	Axe d'articulation de barre d'attelage	
8A	Z26-063S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
8B	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
8C	Z23-10	1	Feststellmutter	Locknut	Contre-écrou	M10
8D	1403033	1	Senkstiftkappe	Countersunk Pin Cap	Bouton de blocage noyé	
8E	Z13-5-10X25	1	CSK-Innensechskant-Set	CSK Allen Set	Vis six pans creux CSK	M10 x 25mm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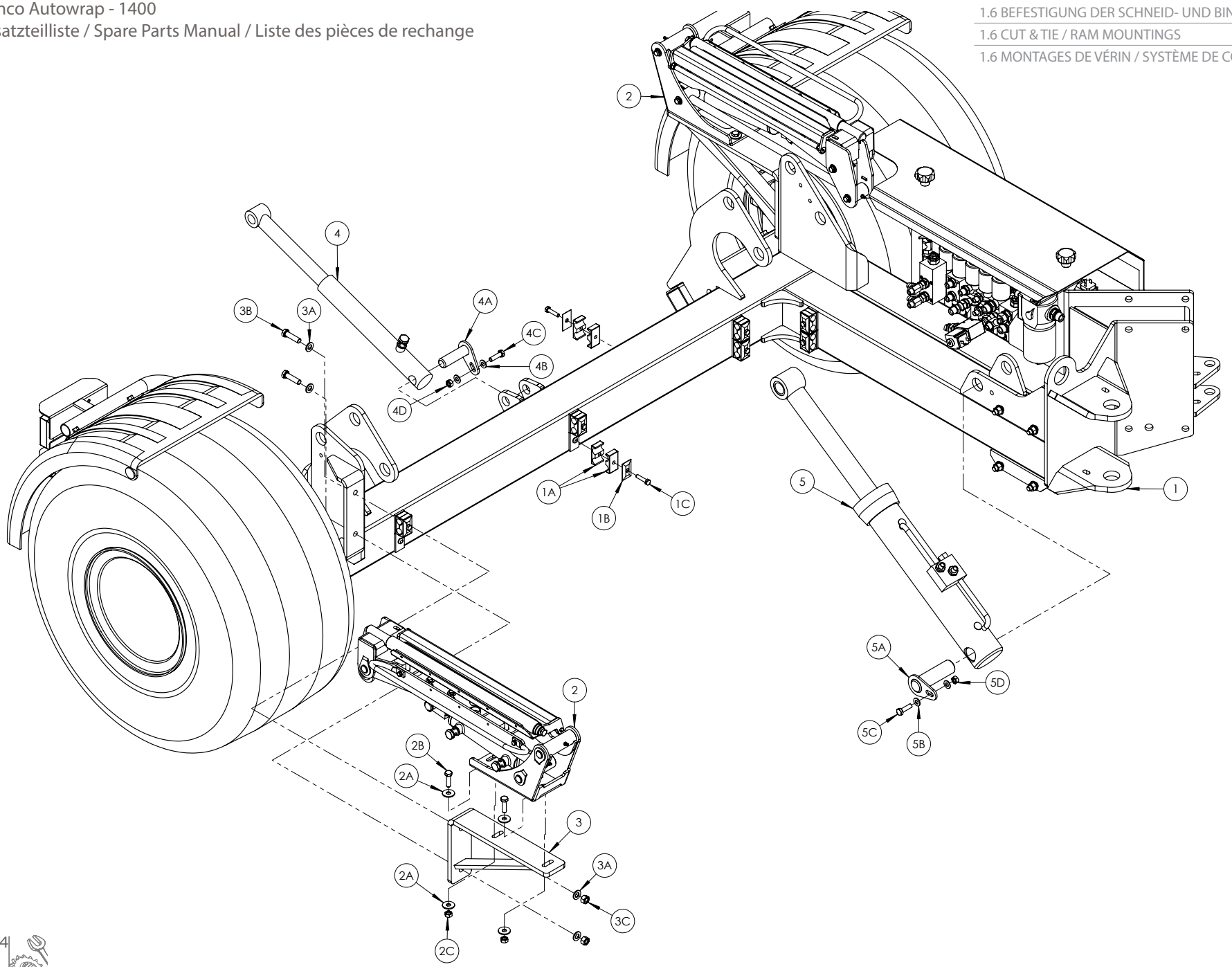
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401500	1	Zugstange	Drawbar	Barre d'attelage	
2	1401110	1	Schwenkachse	Swivel Hitch	Attelage articulé	
2A	Z03-22-06	2	Klappsplint	Linch Pin	Clavette d'essieu	7/16”
3	34105716	2	Dreipunkt-Gestängestift	3pt Pont Linkage Pin	Axe attelage 3 points	
3A	Z12-02-25	2	Federscheibe	Spring Washer	Rondelle à ressort	M25
3B	1401109	2	Dreipunkt-Gestängemutter	3pt Pont Linkage Nut	Écrou attelage 3 points	
4	1401074	1	Drehkranz	Swivel Collar	Collier pivotant	
4A	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10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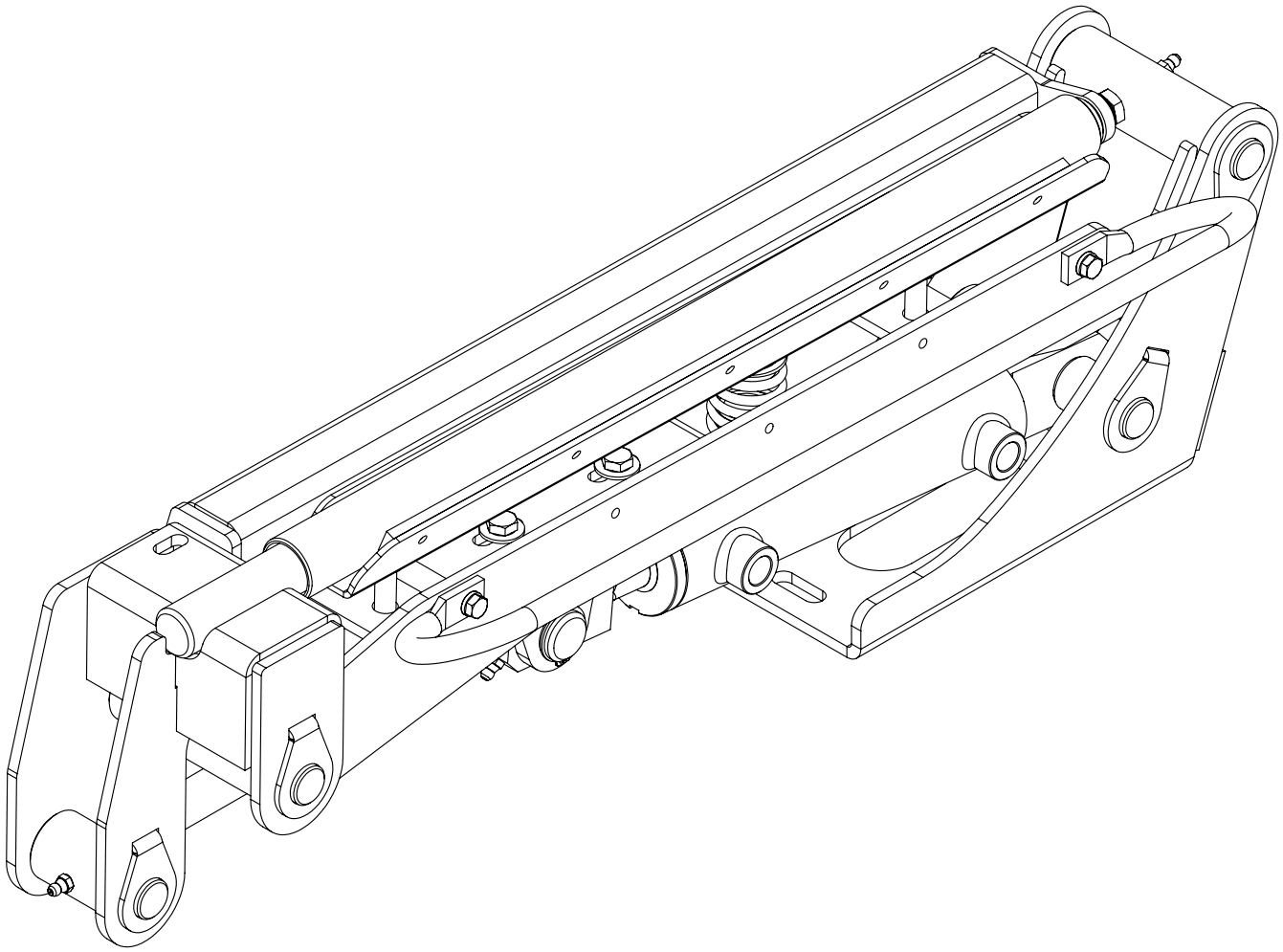
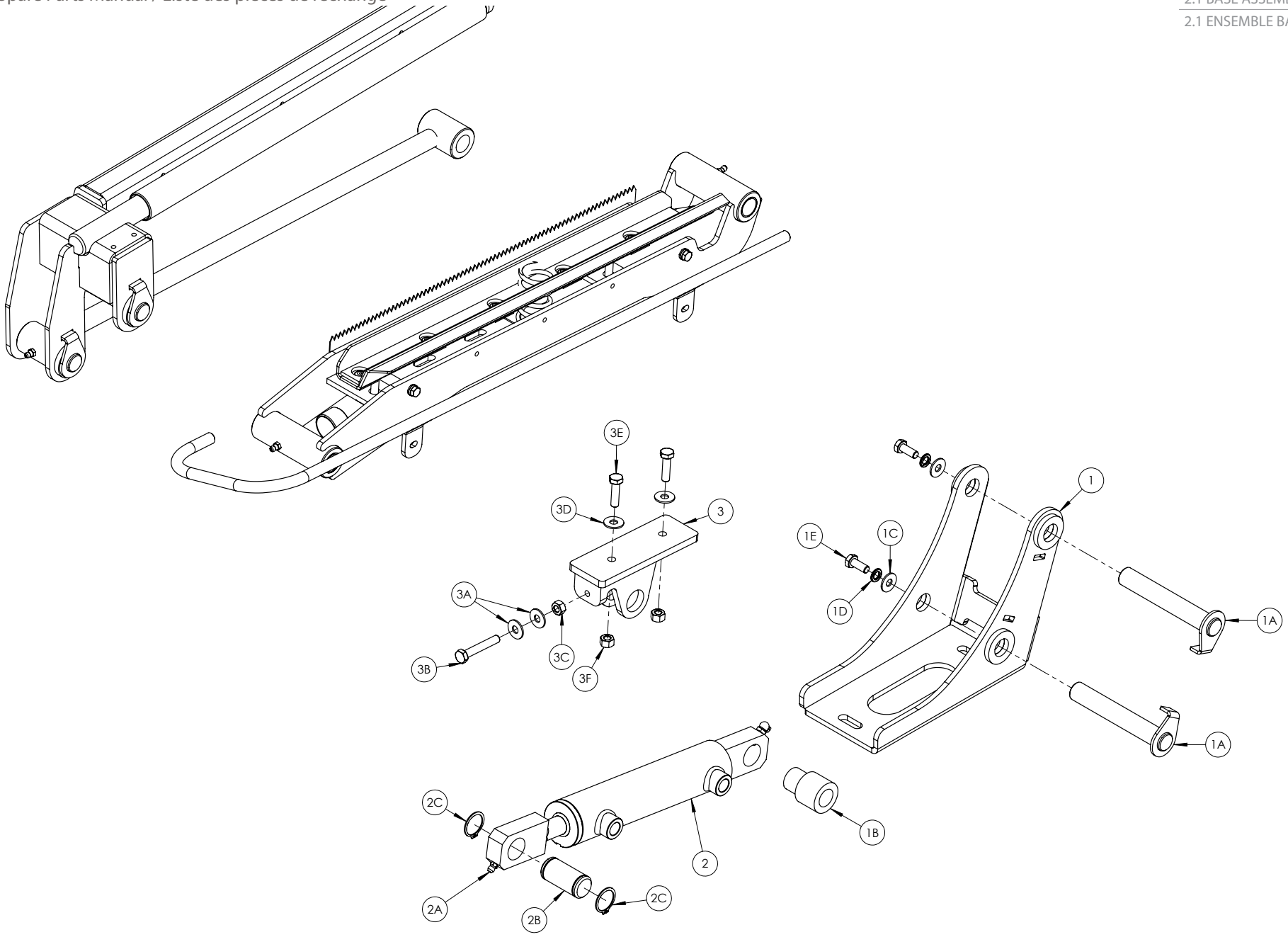
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401100	1	Fahrgestell	Chassis	Châssis	
1A	Z01-24-2618	7	Rohrschelle (Paar)	Pipe Clamp (Pair)	Collier de serrage (Paire)	M18
1B	Z01-24-27	7	Obere Rohrschellenplatte	Pipe Clamp Top Plate	Collier de serrage, Plaque supérieure	
1C	Z26-042B	7	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 35mm
2	1406100	2	Schneiden und Binden	Cut & Tie	Coupe et attache	
2A	Z11-02-101	8	Schmutzwascher	Mudwasher	Pare-boue	M8
2B	Z26-063S	4	Sechskant-Set	Hex Set	Vis de régl. Hex	M10x 35mm
2C	Z23-10	4	10 mm Sicherungsmutter	10mm Locknut	Contre-écrou 10mm	
3	1401086	2	Schneiden-und-Binden-Haltebügel	Cut & Tie Mounting Bracket	Support de fixation, Coupe et attache	
3A	Z10-02-12	8	Unterlegscheibe	Flat Washer	Rondelle plate	M12
3B	Z26-085S	4	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 45mm
3C	Z23-12	4	Feststellmutter	Locknut	Contre-écrou	M12
4	1408169	1	Zylinder entladen	Unloading Cylinder	Vérin de déchargement	
4A	1401720	1	Zylinderstift	Cylinder Pin	Goupille du vérin	
4B	Z10-02-10	1	Unterlegscheibe	Flat Washer	Rondelle plate	M10
4C	Z26-063S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
4D	Z23-08	1	Feststellmutter	Locknut	Contre-écrou	M10
5	1408167	1	Ladezylinder	Loading Cylinder	Vérin de chargement	
5A	1401710	1	Zylinderstift	Cylinder Pin	Goupille du vérin	
5B	Z10-02-10	1	Unterlegscheibe	Flat Washer	Rondelle plate	M10
5C	Z26-063S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
5D	Z23-08	1	Feststellmutter	Locknut	Contre-écrou	M8

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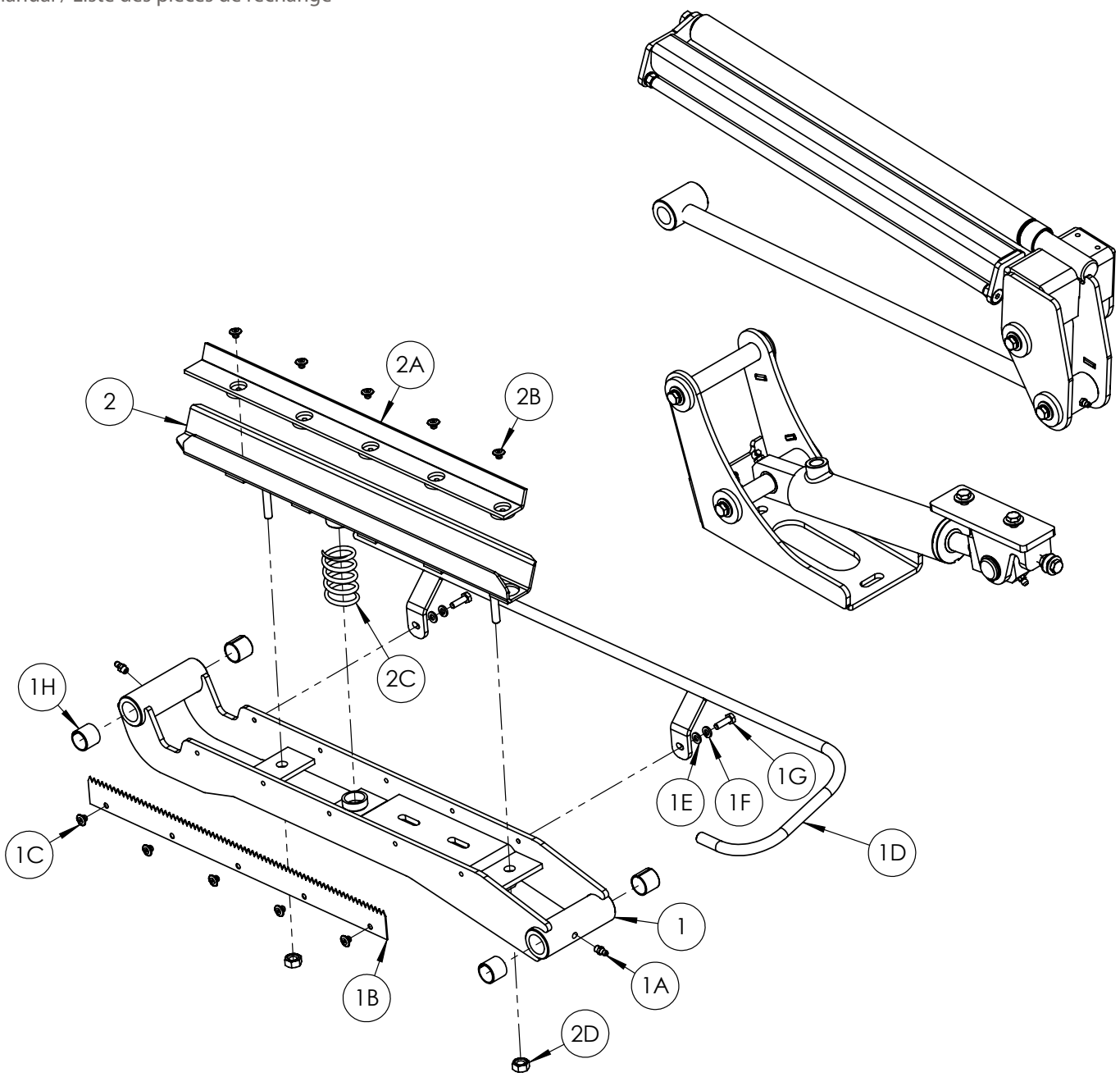
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1406060	1	Schneid- & Bindebasis („Cut & Tie"-Basis)	Cut & Tie Base	Base coupe et attache	
1A	1406080	2	Drehzapfen (lang)	Pivot Pin (Long)	Axe d'articulation (Long)	
1B	1406035	1	Abstandhalter	Spacer	Entretoise	
1C	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
1D	Z12-02-08	2	Federring	Spring Washer	Rondelle à ressort	M8
1E	Z26-039S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 20mm
2	1308151	1	Zylinder	Cylinder	Vérin	
2A	34060800	2	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
2B	34105631	1	Zylinderstift	Cylinder Pin	Axe du vérin	
2C	Z28-525	2	Seegerring	Circlip	Circlip	M25 Ext.
3	34920525	1	Zylindereinstellvorrichtung	Cylinder Adjuster	Réglage de vérin	
3A	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
3B	Z26-045S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 50mm
3C	Z18-08	1	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M8
3D	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
3E	Z26-041S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 30mm
3F	Z23-08	2	Feststellmutter	Locknut	Contre-écrou	M8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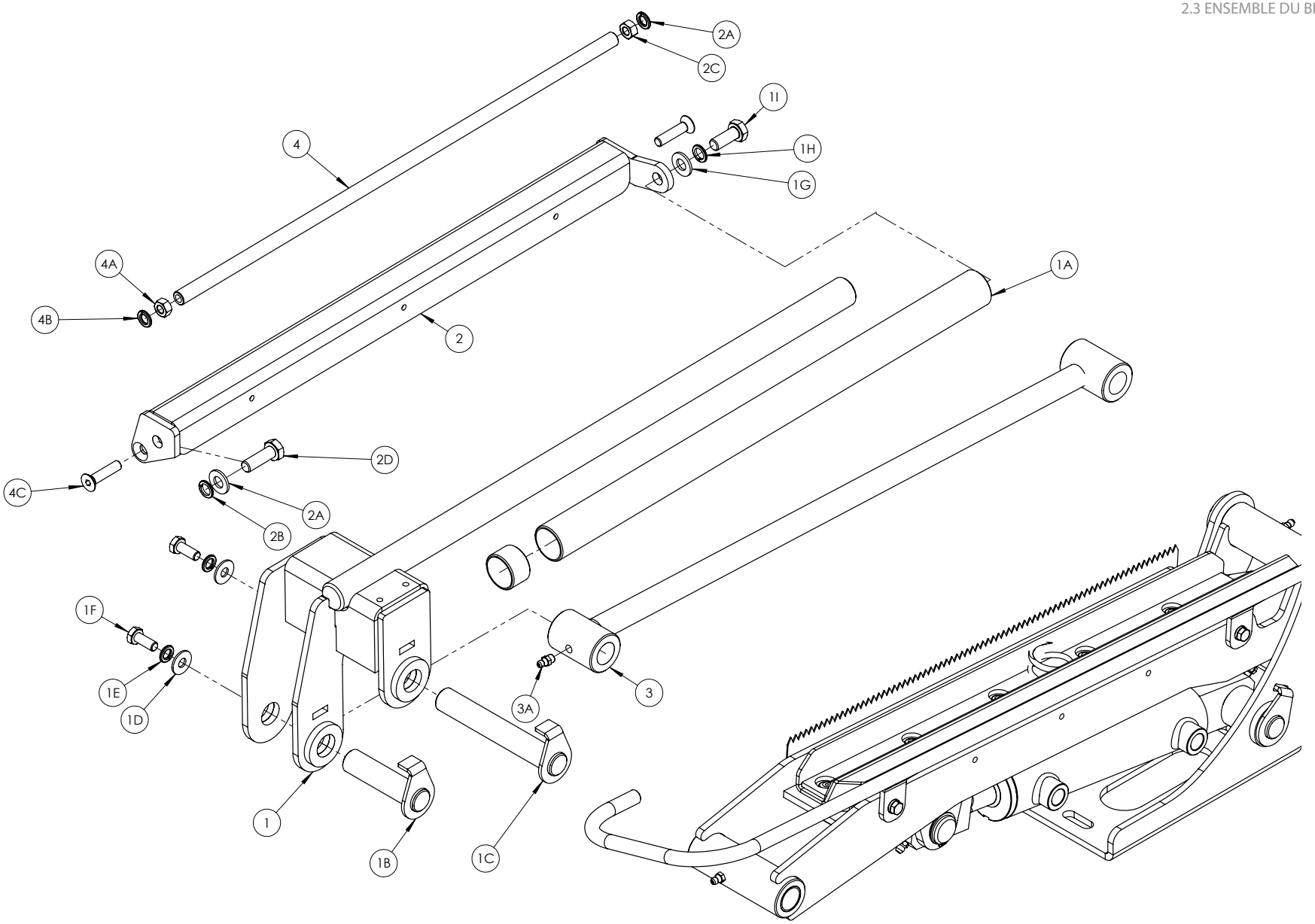
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1406112	1	Hubarm	Lift Arm	Bras de relevage	
1A	34060800	2	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
1B	1406074	1	Schneidklinge	Blade	Racleur	
1C	Z03-25-05	5	Blindniet	Pop Rivet	Rivet Pop	4.8 x 16mm
1D	1406130	1	Foliensammelbalken	Film Gathering Bar	Barre d'enroulage du film	
1E	Z10-02-06	2	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M6
1F	Z12-02-06	2	Federring	Spring Washer	Rondelle à ressort	M6
1G	Z26-020S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M6 x 20mm
1H	Z03-20-32	4	Buchse	Bushing	Bague	DX 20mm ID X 20mm Long
2	1406101	1	Druckplatte	Pressure Plate	Cale	
2A	1406076	1	Gummiplatte	Rubber Strip	Bande de caoutchouc	
2B	Z03-25-05	5	Blindniet	Pop Rivet	Rivet Pop	4.8 x 16mm
2C	1406078	1	Druckfeder	Pressure Spring	Ressort à pression	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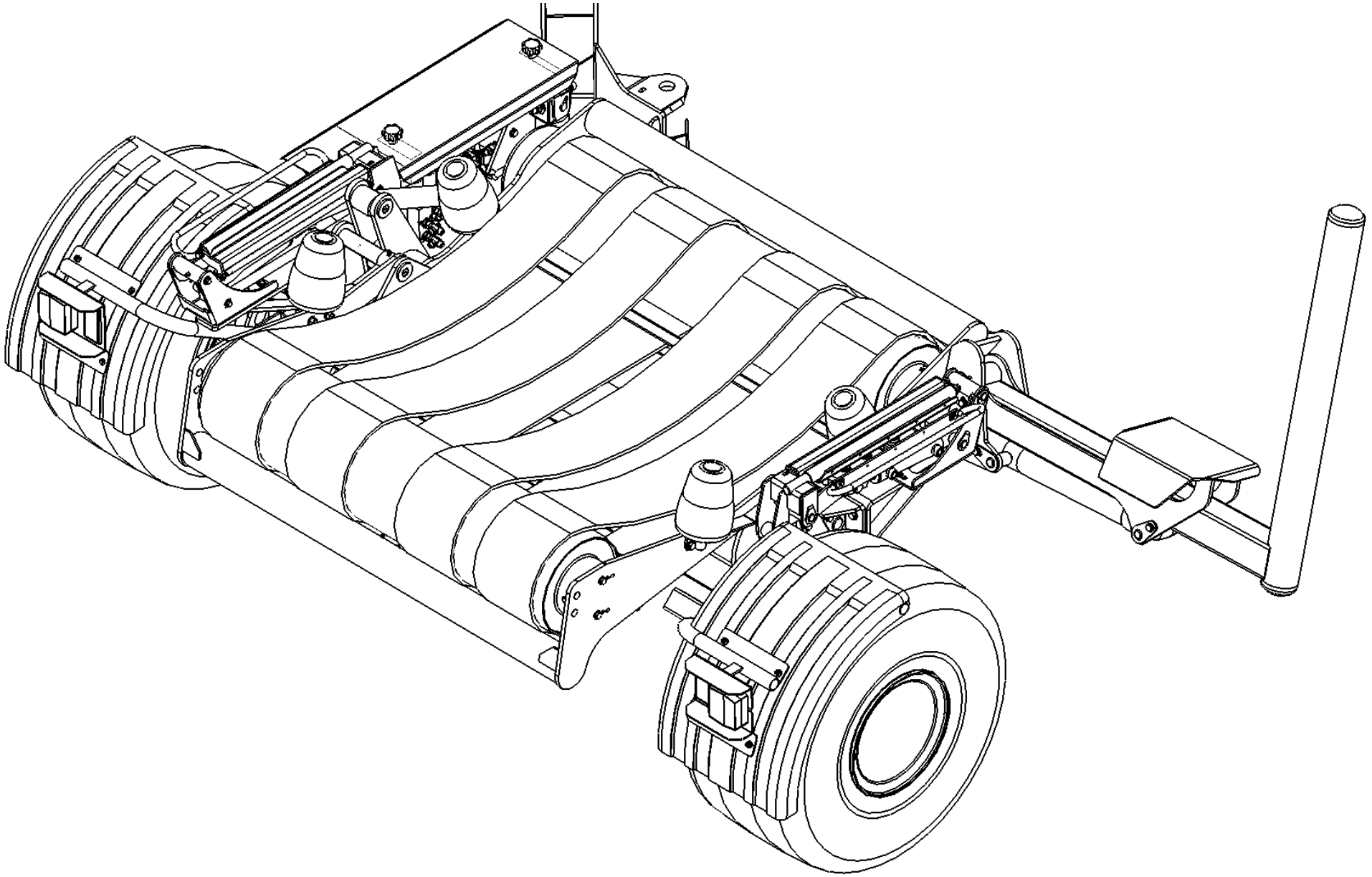
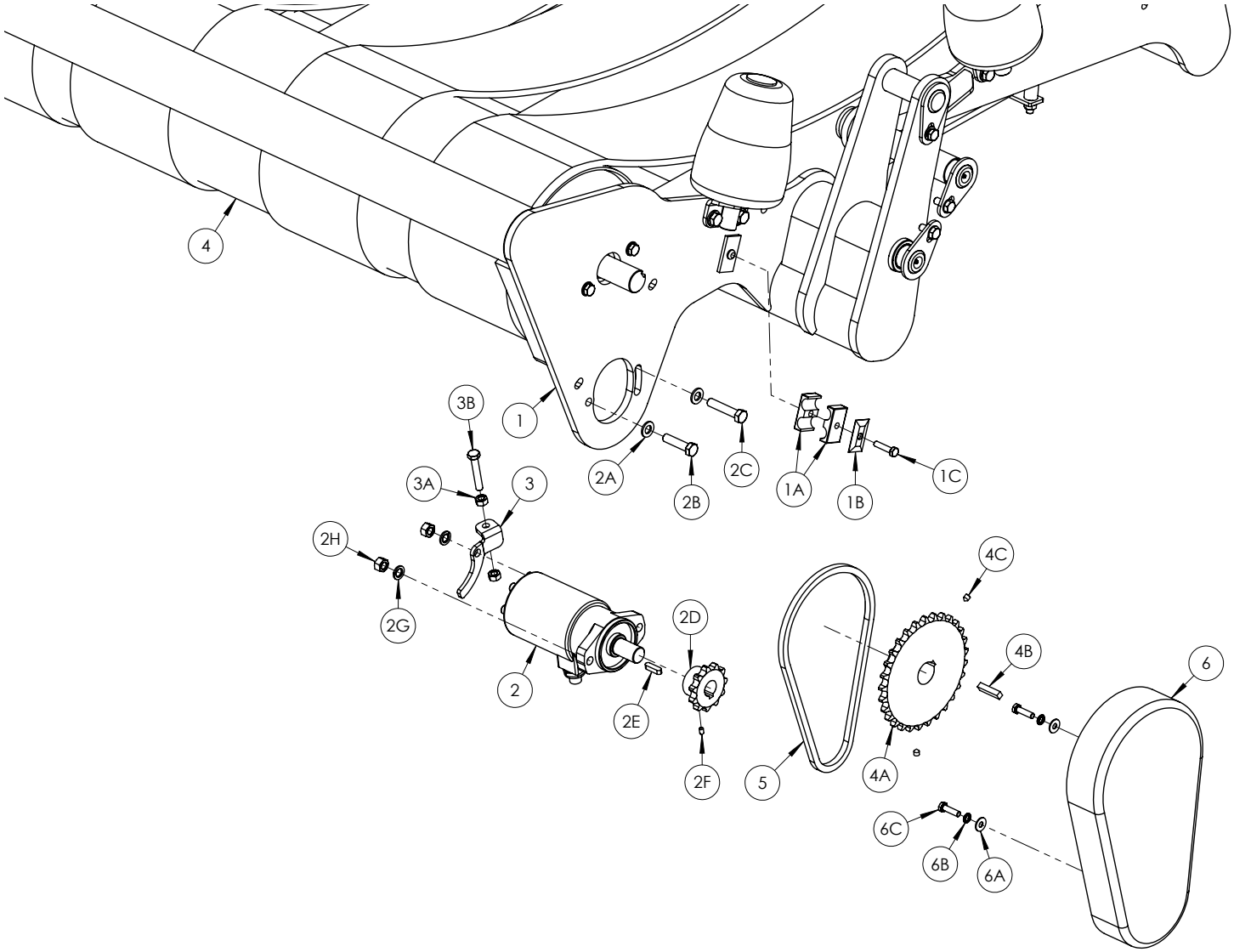
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1406113	1	Pulldown-Arm	Pull Down Arm	Bras d'abaissement	
1A	1406077	1	Rändelwalze	Knurled Roller	Rouleau moleté	
1B	1406085	1	Drehzapfen (kurz)	Pivot Pin (Short)	Axe d'articulation (Court)	
1C	1406080	1	Drehzapfen (lang)	Pivot Pin (Long)	Axe d'articulation (Long)	
1D	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
1E	Z12-02-08	2	Federring	Spring Washer	Rondelle à ressort	M8
1F	Z26-039S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 20mm
1G	Z10-02-10	1	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M10
1H	Z12-02-10	1	Federring	Spring Washer	Rondelle à ressort	M10
1I	Z26-0611S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
2	1406065	1	Oberer Arm	Top Arm	Bras supérieur	
2A	Z10-02-08	2	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M8
2B	Z12-02-08	2	Federring	Spring Washer	Rondelle à ressort	M8
2C	Z18-08	1	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M8
2D	Z26-041S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 30mm
3	1406102	1	Verbindungsarm	Connecting Arm	Bras de connexion	
3A	34060800	2	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
4	1406068	1	Folienrolle	Film Roller	Bobine de film	
4A	Z18-08	2	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M8
4B	Z12-02-08	2	Federring	Spring Washer	Rondelle à ressort	M8
4C	Z13-5-08X35	2	Inbussenkkopf-Set	Countersunk Allen Head Set	Vis noyée à tête à six pans creux	M8 x 35mm

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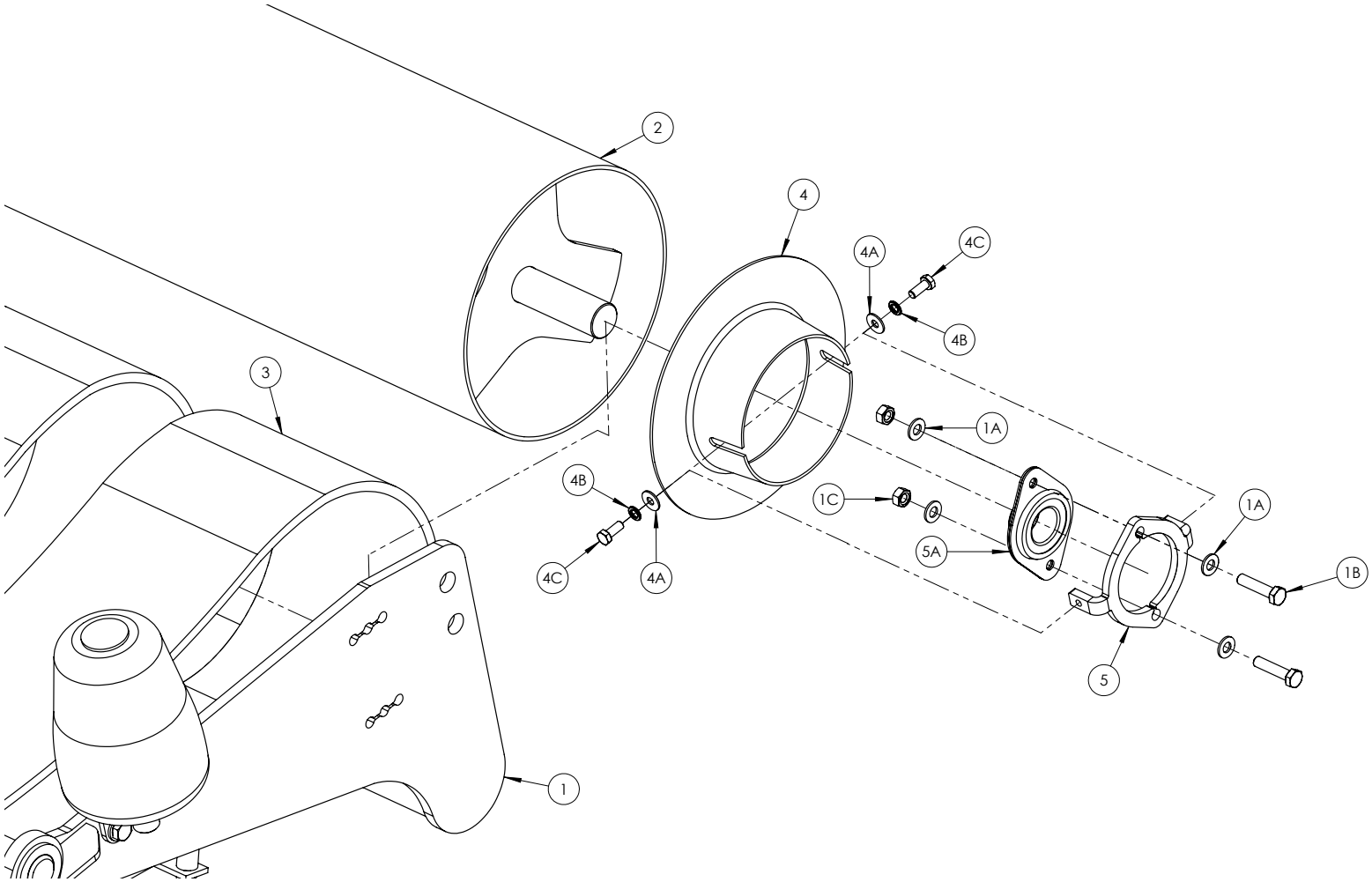
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403300	1	Laderahmen	Load Frame	Bâti de chargement	
1A	Z01-24-2618	1	Rohrschelle (Paar)	Pipe Clamp (Pair)	Collier de serrage (Paire)	M18
1B	Z01-24-27	1	Obere Rohrschellenplatte	Pipe Clamp Top Plate	Collier de serrage, Plaque supérieure	
1C	Z26-042B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 35mm
2	1508800	1	Antriebsmotor	Drive Motor	Moteur d'entraînement	
2A	Z10-02-12	2	Unterlegscheibe	Flat Washer	Rondelle plate	M12
2B	Z26-084S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 40mm
2C	Z26-088S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 60mm
2D	1502098	1	Kettenrad	Sprocket	Pignon	3/4"
2E	34270111	1	Passfeder	Key Steel	Clavette acier	8mm x 7mm x 30mm
2F	Z28-008	1	Gewindestift	Grub Screw	Vis sans tête	M8 x 10mm
2G	Z12-02-12	2	Federscheibe	Spring Washer	Rondelle à ressort	M12
2H	Z23-12	2	Feststellmutter	Locknut	Contre-écrou	M12
3	1403056	1	Spannbügel	Tension Bracket	Support tendeur	
3A	Z26-067S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 60mm
3B	Z18-10	2	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M10
4	1403100	1	Antriebsrolle	Drive Roller	Rouleau moteur	
4A	1403041	1	Kettenrad	Sprocket	Pignon	3/4"
4B	1403045	1	Passfeder	Key Steel	Clavette acier	10mm x 8mm x 40mm
4C	Z28-008	2	Gewindestift	Grub Screw	Vis sans tête	M8 x 10mm
5	34810834	1	Kette (Länge 33 3/4")	Chain (33 3/4" Long)	Chaîne (33 3/4" de longueur)	3/4" (33 3/4" Long)
6	1403350	1	Schutzblech	Guard	Protection	
6A	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
6B	Z12-02-08	2	Federscheibe	Spring Washer	Rondelle à ressort	M8
6C	Z26-041S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 30mm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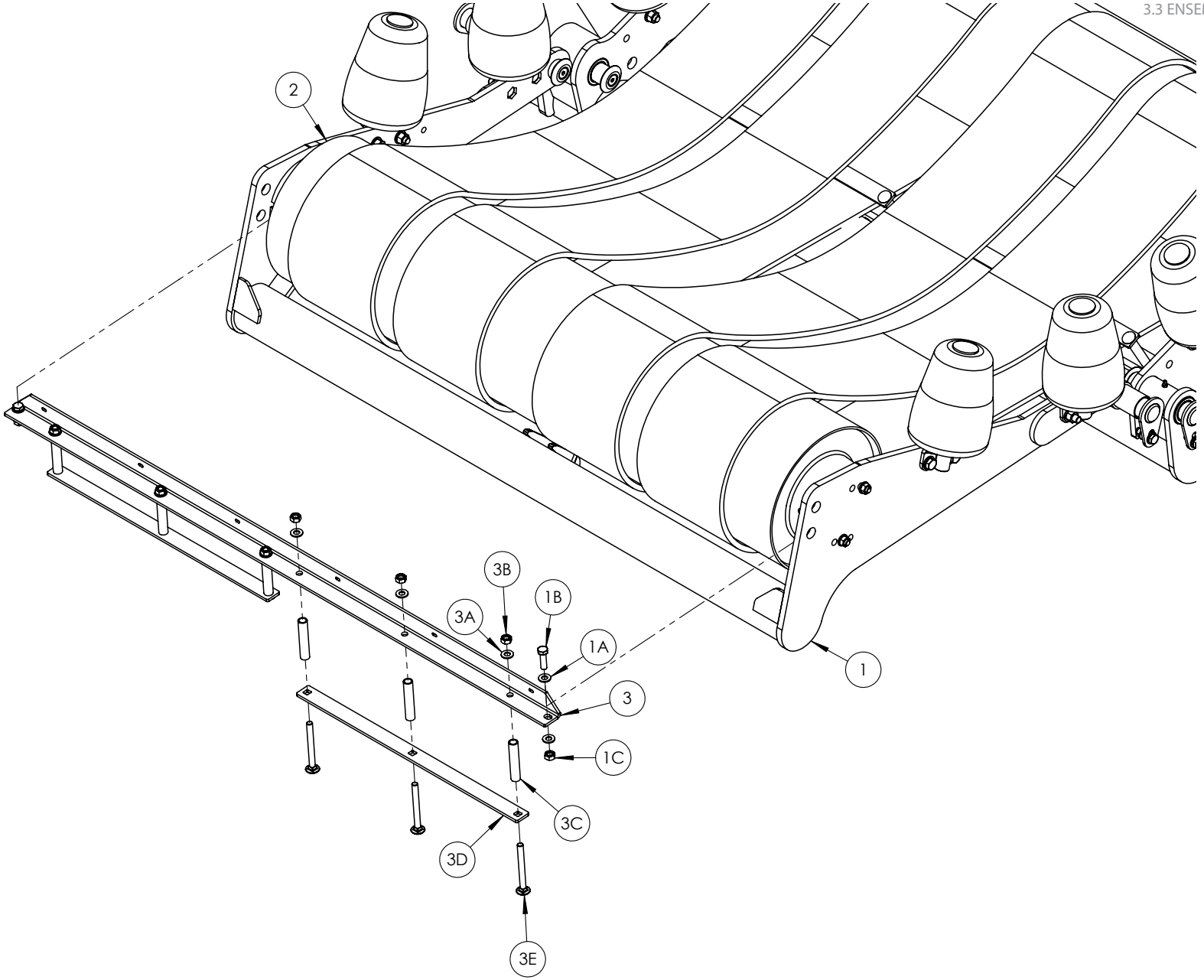
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Entladerahmen	Unload Frame	Bâti Déchargement	
1A	Z10-02-10	4	Unterlegscheibe	Flat Washer	Rondelle plate	M10
1B	Z26-065S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 45mm
1C	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10
2	1403108	1	Spannrolle	Idler Roller	Rouleau-guide	
3	Z05-02-ILS	4	Lamellenband	Strip Belt	Courroie	
4	1403125	1	Walze / Lagerschutz	Roller / Bearing Guard	Protection palier / rouleau	
4A	Z11-02-081	2	Schmutzwascher	Mudwasher	Pare-boue	M8
4B	Z12-02-08	2	Federscheibe	Spring Washer	Rondelle à ressort	M8
4C	Z26-039S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 X 20mm
5	1403013	1	Abdeckungshaltebügel	Cover Mounting Bracket	Support de montage de couvercle	
5A	1804101	1	Lager	Bearing	Palier	SA207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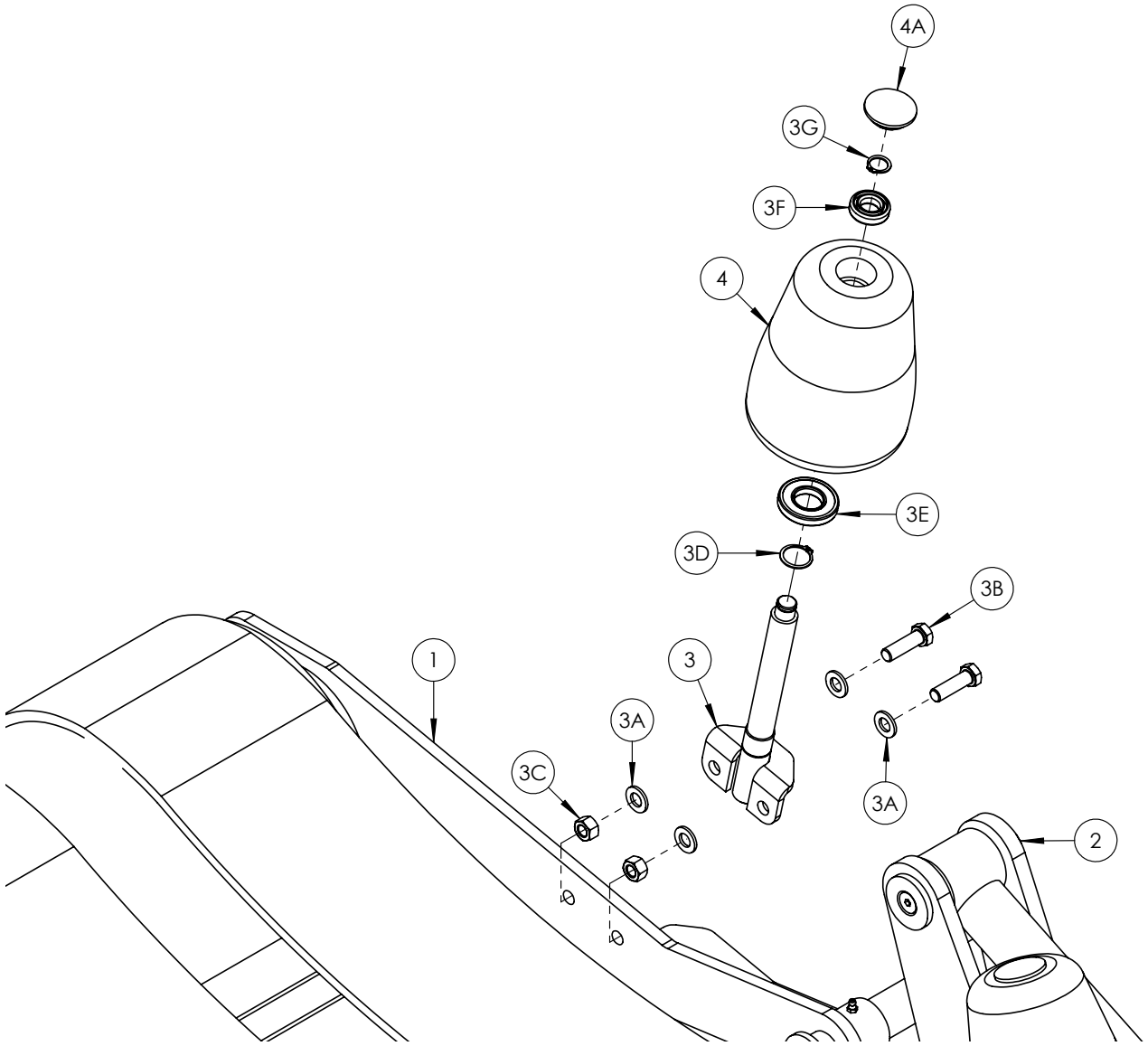
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Entladerahmen	Unload Frame	Bâti Déchargement	
1A	Z10-02-10	4	Unterlegscheibe	Flat Washer	Rondelle plate	M10
1B	Z26-063S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
1C	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10
2	1403108	1	Spannrolle	Idler Roller	Rouleau-guide	
3	1403561	1	Oberes Profil Riemenführung	Belt Guide Top Profile	Profilé haut guide courroie	
3A	Z10-02-10	6	Unterlegscheibe	Flat Washer	Rondelle plate	M10
3B	Z23-10	6	Feststellmutter	Locknut	Contre-écrou	M10
3C	1403563	6	Riemenführungsdistanzstück	Belt Guide Spacer	Entretoise de guide-courroie	
3D	1403562	2	Unteres Profil Riemenführung	Belt Guide Bottom Profile	Profilé bas guide courroie	
3E	Z13-114	6	Rundschraube mit Sechskantansatz	Cup Hex Bolt	Boulon Hex	M10 x 110mm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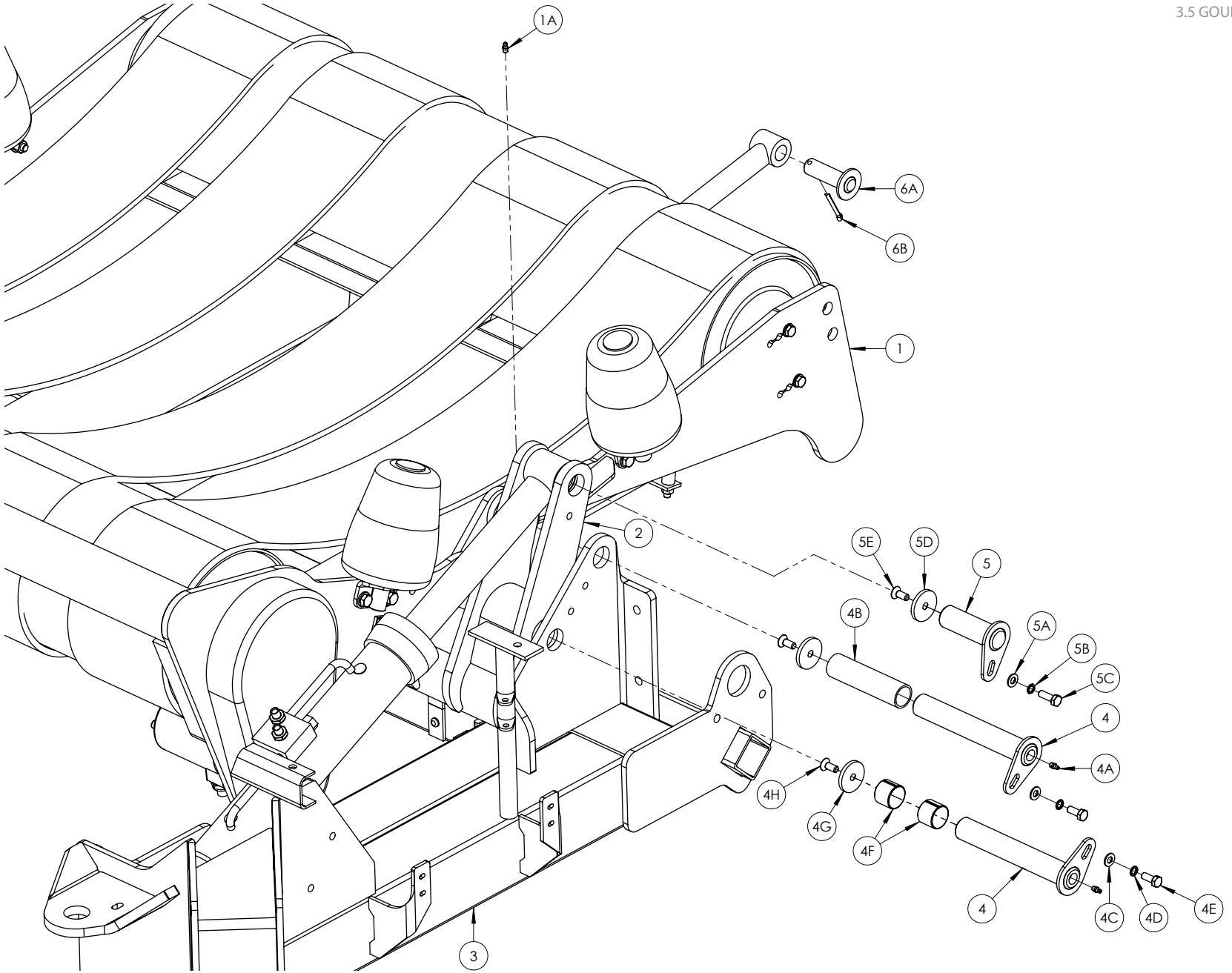
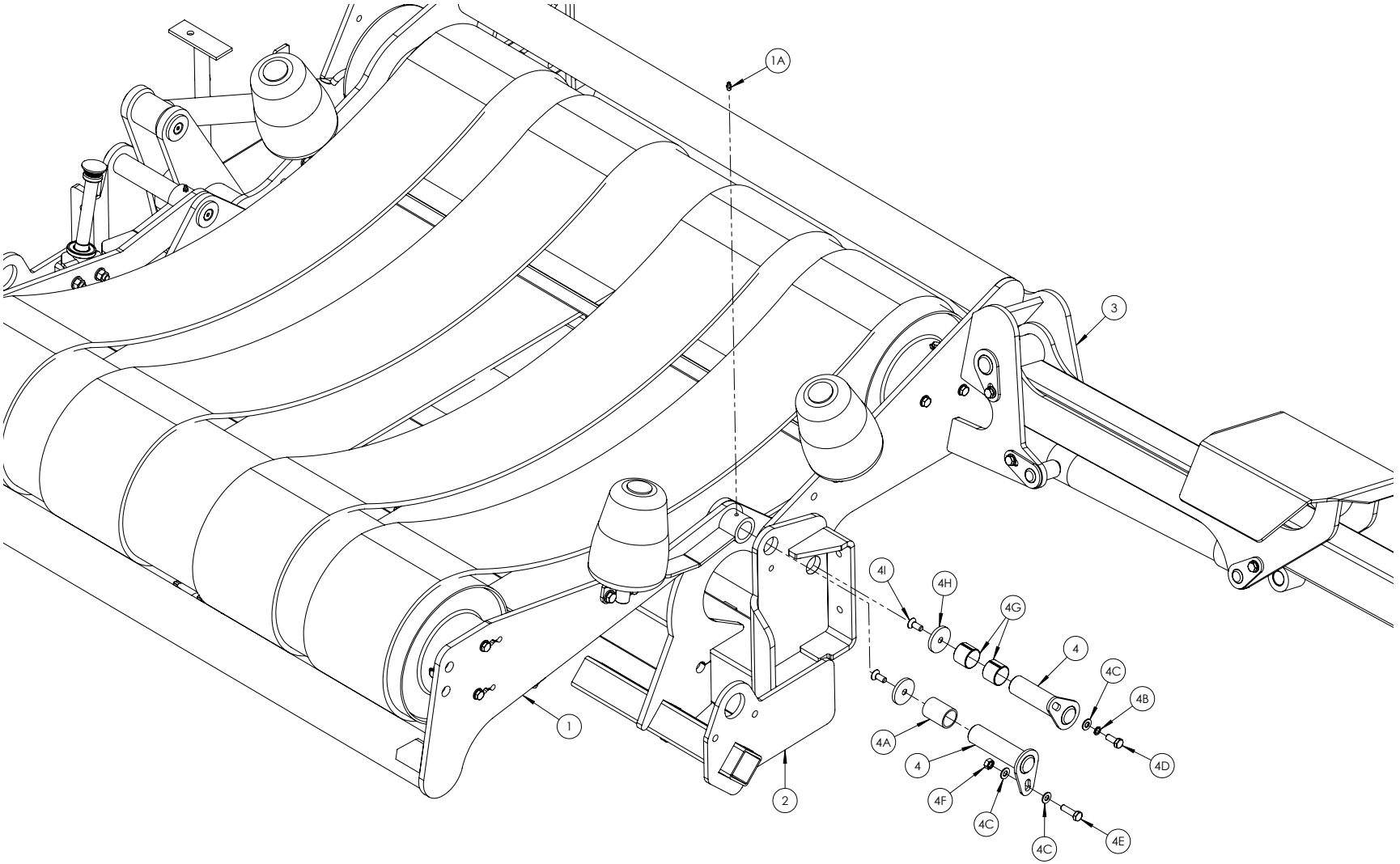
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Entladerahmen	Unload Frame	Bâti Déchargement	
2	1403300	1	Laderahmen	Load Frame	Bâti de chargement	
3	1403055	1	Ballenwalzenwelle	Bale Roller Shaft	Arbre du rouleau de balle	
3A	Z10-02-12	4	Unterlegscheibe	Flat Washer	Rondelle plate	M12
3B	Z26-084S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 40mm
3C	Z23-12	2	Feststellmutter	Locknut	Contre-écrou	M12
3D	Z28-525	1	Externer Seegerring	External Circlip	Circlip extérieur	25mm
3E	Z06-AWRB	1	Kugellager	Ball Bearing	Roulement à billes	
3F	34320515	1	Kugellager	Ball Bearing	Roulement à billes	
3G	34240713	1	Externer Seegerring	External Cir Clip	Circlip extérieur	17mm
4	34340106	1	Ballenwalze	Bale Roller	Rouleau de balle	
4A	Z32-15F	1	Plastikkappe	Plastic Cap	Capuchon plastique	



POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Entladerahmen	Unload Frame	Bâti Déchargement	
1A	34060800	1	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
2	1403300	1	Laderahmen	Load Frame	Bâti de chargement	
3	1401100	1	Fahrgestell	Chassis	Châssis	
4	1401700	2	Gelenkzapfen	Pivot Pin	Axe d'articulation	
4A	1403052	1	Distanzstück	Spacer	Entretoise	
4B	34060800	2	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
4C	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
4D	Z12-02-10	2	Federscheibe	Spring Washer	Rondelle à ressort	M10
4E	Z26-0611S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
4F	1404055	2	DX Buchse	DX Bush	Douille DX	35mm ID x 30mm
4G	1403033	2	Stiftkappe	Pin Cap	Bouton de blocage	
4H	Z13-5-10X25	2	Inbus-C.S.K.-Set	C.S.K Set Allen	Ensemble vis Allen C.S.K.	M10 x 25mm
5	1401706	1	Zylinderstift	Cylinder Pin	Goupille du vérin	
5A	Z10-02-10	1	Unterlegscheibe	Flat Washer	Rondelle plate	M10
5B	Z12-02-10	1	Federscheibe	Spring Washer	Rondelle à ressort	M10
5C	Z26-062S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 30mm
5D	1403033	1	Stiftkappe	Pin Cap	Bouton de blocage	
5E	Z13-5-10X25	1	Inbus-C.S.K.-Set	C.S.K Set Allen	Ensemble vis Allen C.S.K.	M10 x 25mm
6	1408165	1	Zylinderkolben	Cylinder Ram	Cylindre de vérin	
6A	1401722	1	Zylinderkolben	Cylinder Ram	Cylindre de vérin	
6B	Z03-21-29	1	Klappsplint	Linch Pin	Clavette d'essieu	1/4"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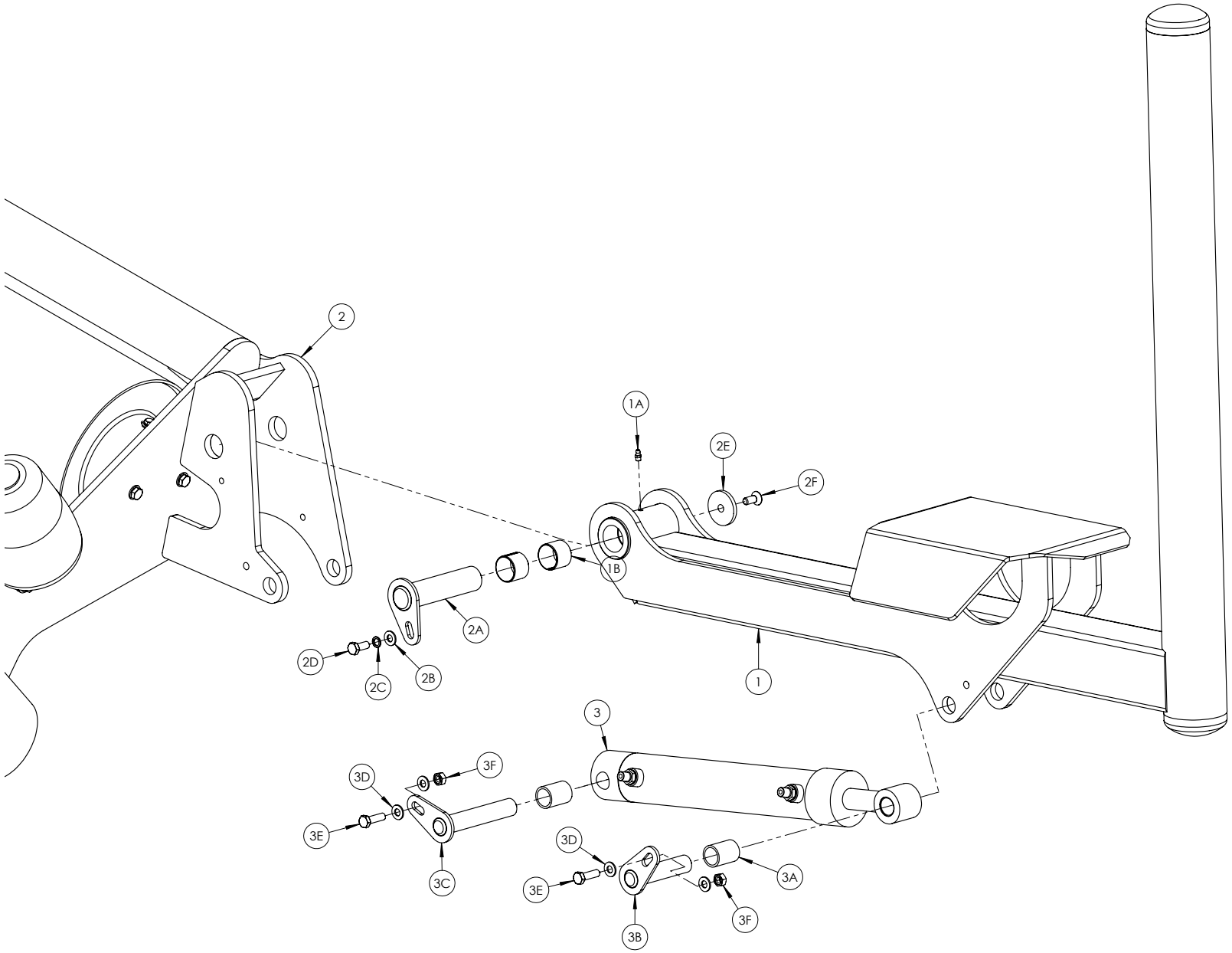
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Entladerahmen	Unload Frame	Bâti Déchargement	
1A	34060800	1	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
2	1403300	1	Laderahmen	Load Frame	Bâti de chargement	
2A	34060800	1	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
3	1401100	1	Fahrgestell	Chassis	Châssis	
4	1401704	2	Gelenkzapfen	Pivot Pin	Axe d'articulation	
4A	1403051	1	Distanzstück	Spacer	Entretoise	
4B	Z10-02-10	3	Unterlegscheibe	Flat Washer	Rondelle plate	M10
4C	Z12-02-10	1	Federscheibe	Spring Washer	Rondelle à ressort	M10
4D	Z26-0611S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
4E	Z26-063S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
4F	Z23-10	1	Feststellmutter	Locknut	Contre-écrou	M10
4G	1404055	2	DX Buchse	DX Bush	Douille DX	35mm ID x 30mm
4H	1403033	1	Stiftkappe	Pin Cap	Bouton de blocage	Counter Sunk
4I	Z13-5-10X25	1	Inbus-C.S.K.-Set	C.S.K Set Allen	Ensemble vis Allen C.S.K.	M10 x 25mm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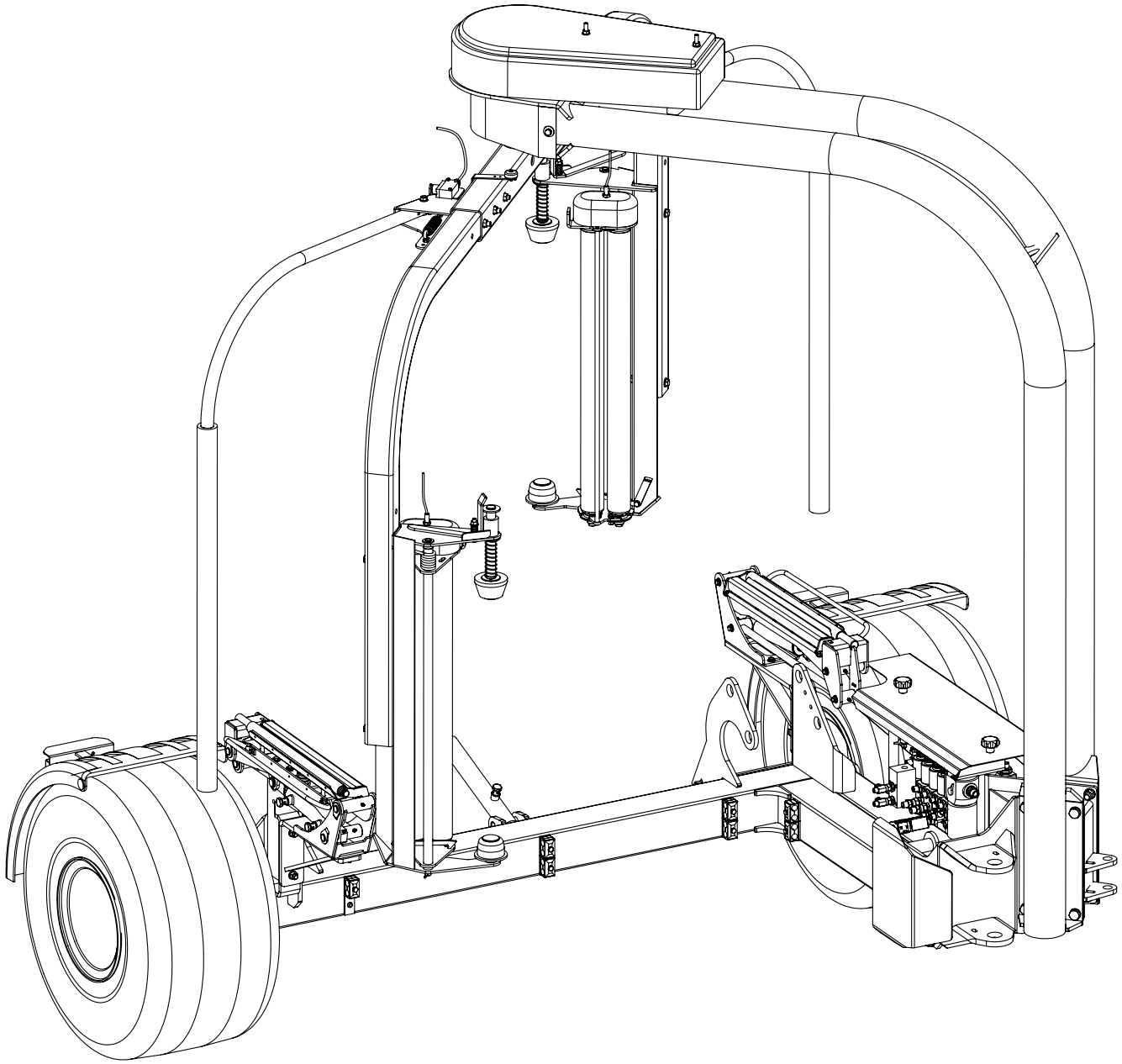
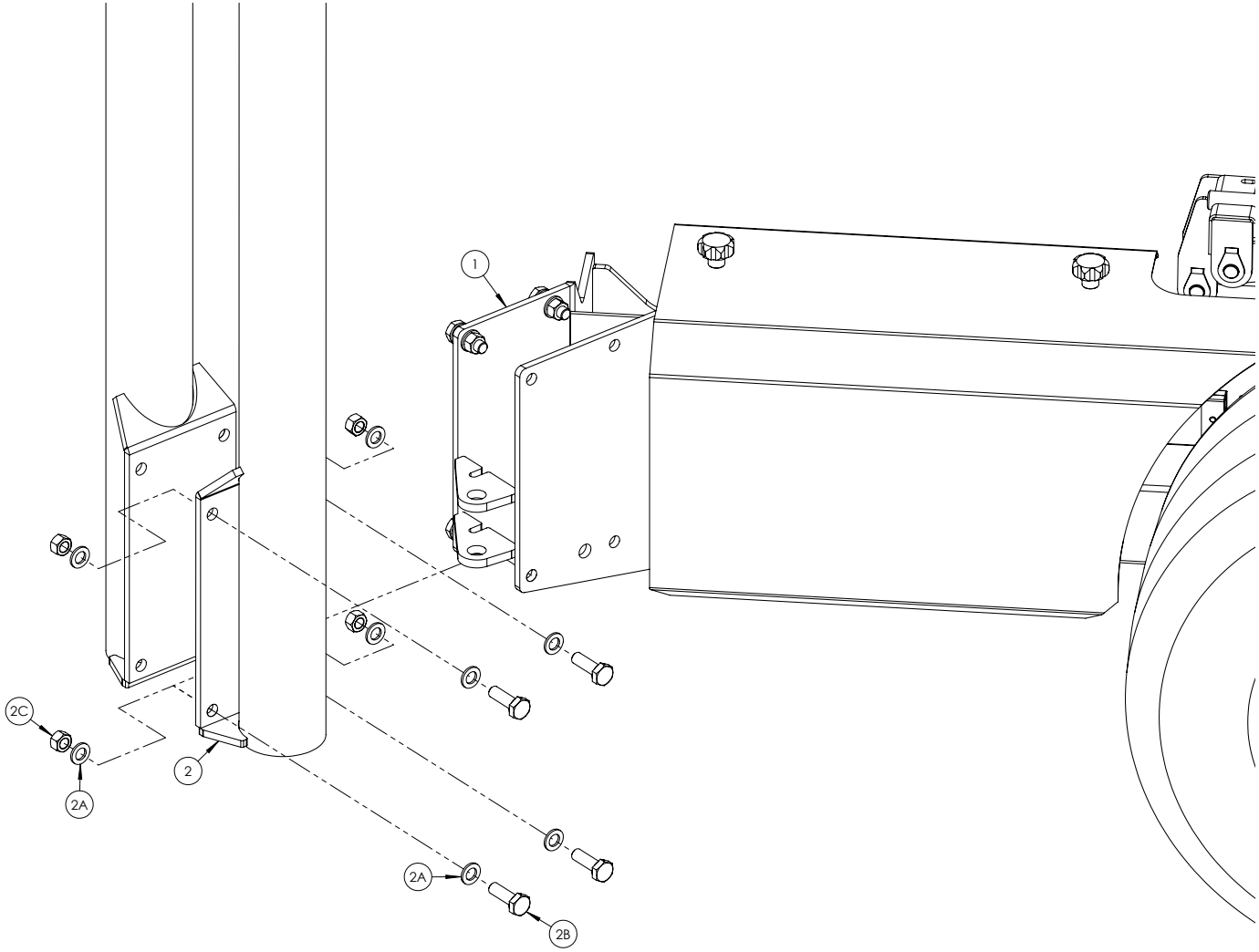
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1402110	1	Ladearm	Loading Arm	Bras de chargement	
1A	34060800	1	Schmiernippel	Grease Nipple	Raccord graisseur	M8 x 1.25
1B	1404055	2	DX Buchse	DX Bush	Douille DX	35mm Bore x 30mm
2	1403300	1	Laderahmen	Load Frame	Bâti de chargement	
2A	1401708	1	Gelenkzapfen	Pivot Pin	Axe d'articulation	Loading Arm
2B	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
2C	Z12-02-10	2	Federscheibe	Spring Washer	Rondelle à ressort	M10
2D	Z26-0611S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
2E	1403033	2	Stiftkappe	Pin Cap	Bouton de blocage	Counter Sunk
2F	Z13-5-10X25	2	Inbus-C.S.K.-Set	C.S.K Set Allen	Ensemble vis Allen C.S.K.	M10 x 25mm
3	1408168	1	Ladearmzylinder	Loading Arm Cylinder	Vérin du bras de chargement	
3A	1403053	2	Distanzstück	Spacer	Entretoise	
3B	1401716	1	Zylinderstift A	Cylinder Pin A	Goupille de vérin A	
3C	1401718	1	Zylinderstift B	Cylinder Pin B	Goupille du vérin B	
3D	Z10-02-10	4	Unterlegscheibe	Flat Washer	Rondelle plate	M10
3E	Z26-063S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 35mm
3F	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10

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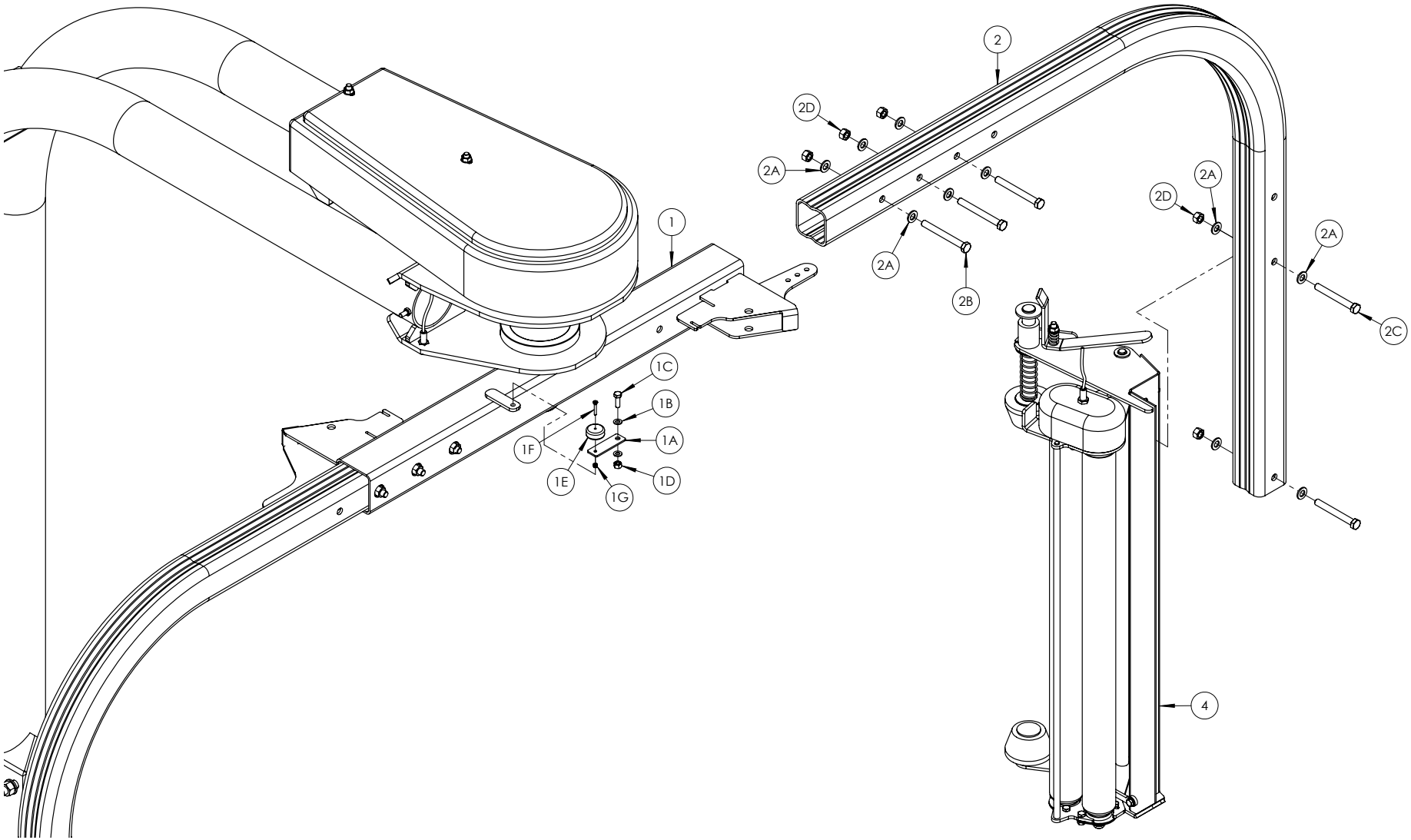
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1401100	1	Fahrgestell	Chassis	Châssis	
2	1404400	1	Turm	Tower	Tour	
2A	Z10-02-16	8	16-mm-Unterlegscheibe	16mm Flat Washer	Rondelle plate 16mm	
2B	Z31B-064	4	5/8" x 2" UNF Sechskant-Set	5/8" x 2" UNF Hex Set	Vis de réglage hex. à filetage UNF 2" X 5/8"	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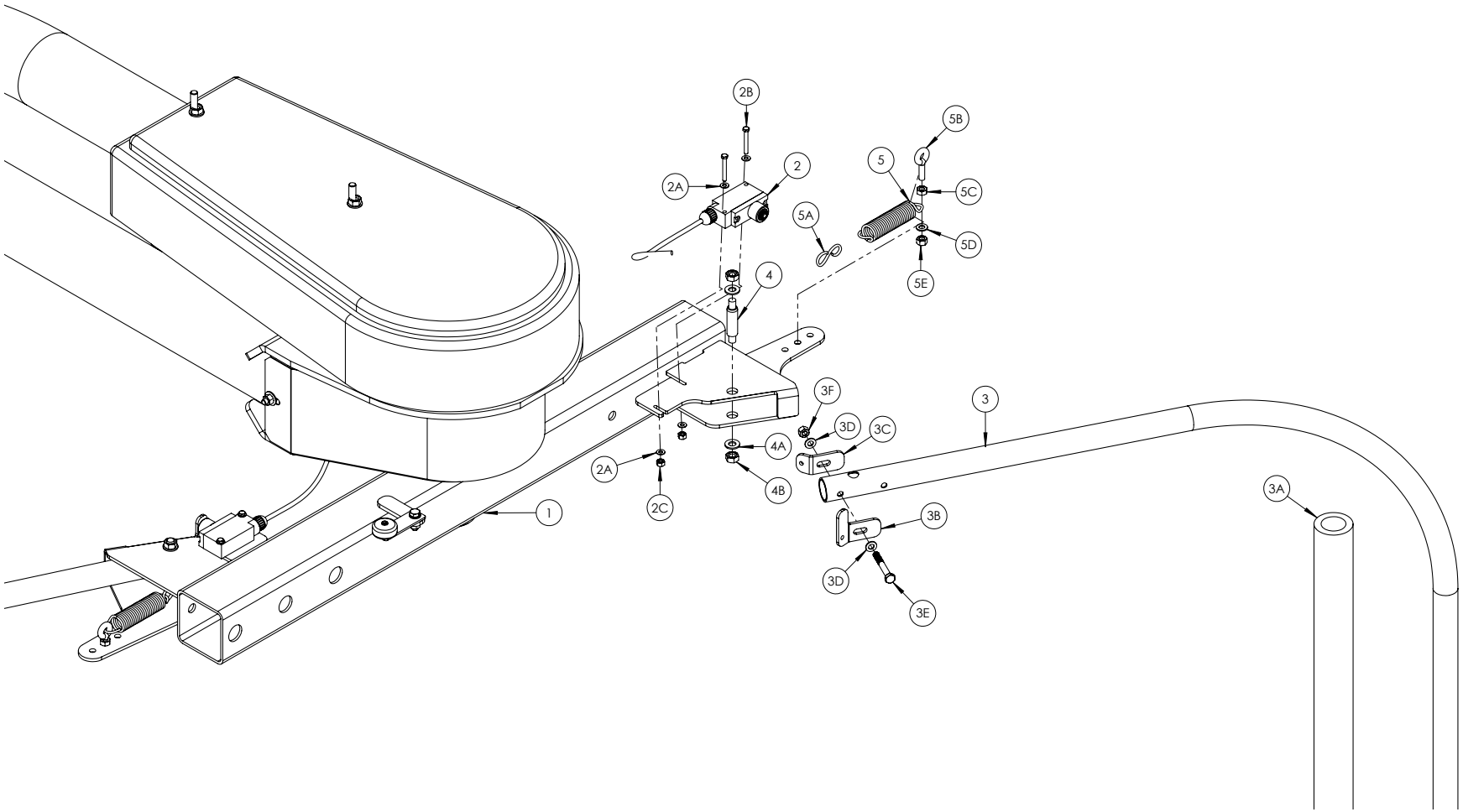
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1404220	1	Wickelarm	Wrapping Arm	Bras d'enrubannage	
1A	1304003	1	Magnetmontagebügel	Magnet Bracket	Support de l'aimant	
1B	Z10-02-08	2	Unterlegscheibe	Flat Washer	Rondelle plate	M8
1C	Z26-040B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 25mm
1D	Z23-08	1	Feststellmutter	Locknut	Contre-écrou	M8
1E	1309201	1	Sensormagnet	Sensor Magnet	Aimant de capteur	
1F	Z13-5-04x30	1	CSK-Inbuskopf-Set	CSK Allen Head Set	Vis noyée à tête à six pans creux	M4 x 30mm
1G	Z23-04	1	Feststellmutter	Locknut	Contre-écrou	M4
2	1404009	1	Anbauarm, Vorstrecker	Dispenser Mounting Arm	Bras de fixation du distributeur	
2A	Z10-02-12	10	Unterlegscheibe	Flat Washer	Rondelle plate	M12
2B	Z26-093B	3	Sechskantschraube	Hex Bolt	Boulon Hex	M12 x 110mm
2C	Z26-092S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 100mm
2D	Z23-12	5	Feststellmutter	Locknut	Contre-écrou	M12
3	1405150	1	Vorstrecker-Baugruppe	Dispenser Assembly	Ensemble Distributeur	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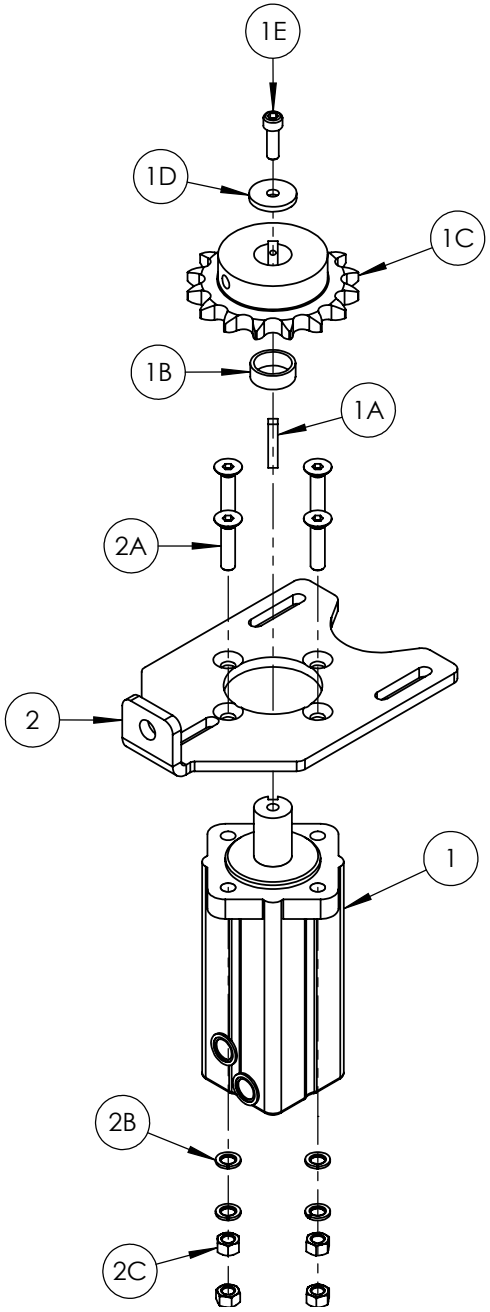
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1404220	1	Dreharm	Rotating Arm	Bras rotatif	
2	34950179	1	Sicherheitsschalter	Safey Switch	Interrupteur de sécurité	
2A	Z10-02-05	4	Unterlegscheibe	Flat Washer	Rondelle plate	M5
2B	Z26-0173S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M5 X 40mm
2C	Z23-05	2	Feststellmutter	Locknut	Contre-écrou	M5
3	34611357	1	Sicherheitsbügel	Safety Arm	Bras de sécurité	
3A	34480020	1	Armabdeckung	Arm Cover	Carter de bras	
3B	1404013	1	Schalterauslöser	Switch Activator	Activateur de l'interrupteur	
3C	34670152	1	Armbügel	Arm Bracket	Support de bras	
3D	Z10-02-08	2	Unterlegscheibe	Flat Washer	Rondelle plate	M8
3E	Z26-047B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M8 x 60mm
3F	Z23-08	1	8 mm Sicherungsmutter	8mm Locknut	Contre-écrou 8mm	
4	34105651	1	Armdrehzapfen	Arm Pivot Bolt	Vis d'articulation du bras	
4A	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
4B	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10
5	34430300	1	Armfeder	Arm Spring	Ressort de bras	
5A	34660111	1	S-Haken	S Hook	Crochet S	
5B	34119043	1	Augenschraube	Eye Bolt	Boulon à œil	M8 x 25mm
5C	Z18-08	1	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M8
5D	Z10-02-08	1	Unterlegscheibe	Flat Washer	Rondelle plate	M8
5E	Z23-08	1	Feststellmutter	Locknut	Contre-écrou	M8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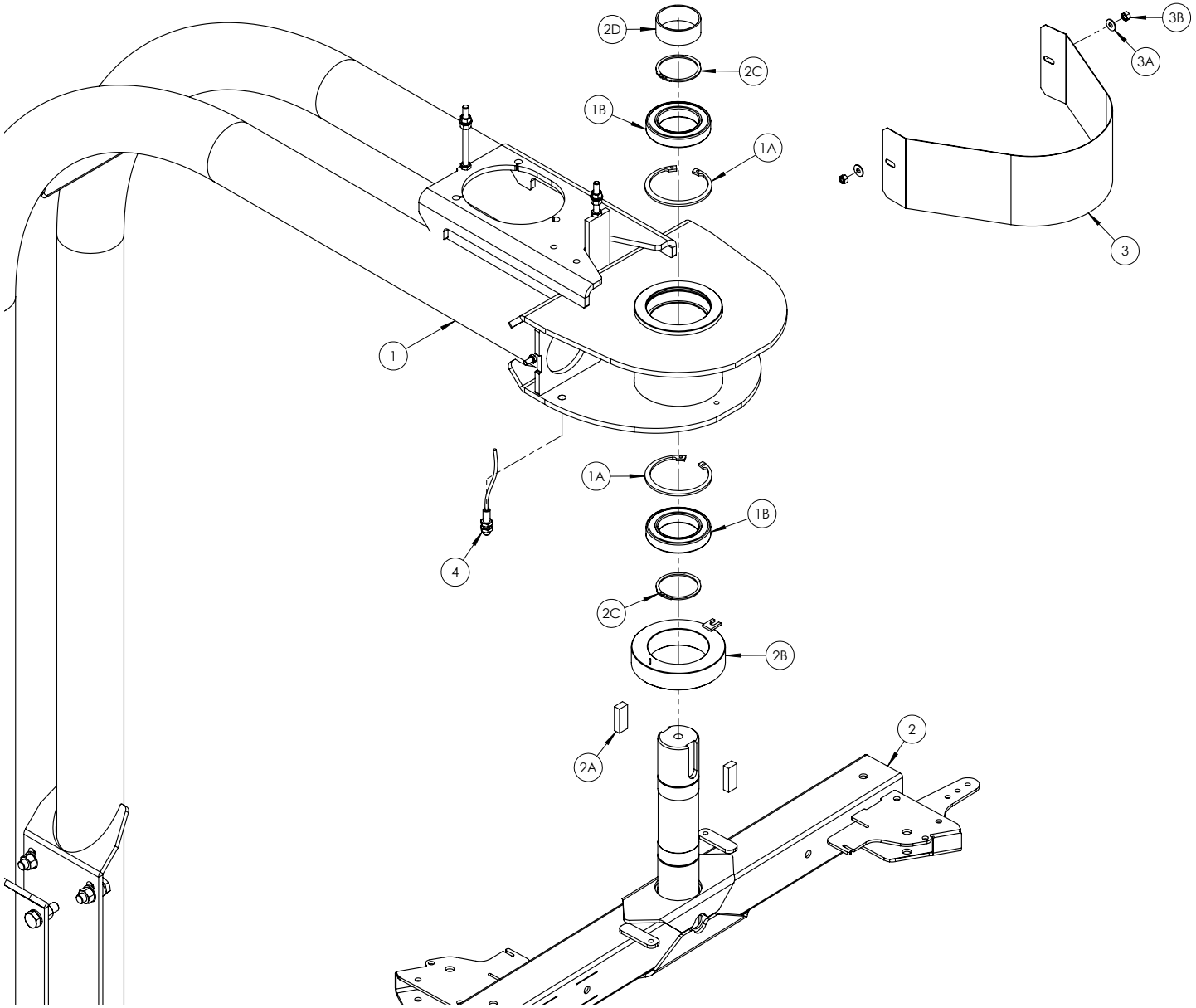
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	Z01-02-RF200	1	Turmmotor	Tower Motor	Moteur tour	
1A	WD64-053		Keilstahl	Key Steel	Clavette acier	5/16" x 5/16" x 45mm
IB	1503172	1	Motorabstandhalter	Motor Spacer	Entretoise moteur	
1C	1404015	1	Zahnkranz	Sprocket	Pignon	1" x 16T
1D	WD623-071	1	Kragen/Manschette	Collar	Collier	
1E	Z13-4-32	1	UNC Zylinderkopfschraube	UNC Socket Cap Screw	Vis six pans creux UNC	1 1/4" x 3/8"
2	1503247	1	Motoranbauplatte	Motor Mounting Plate	Plaque de fixation du moteur	
2A	Z13-5-12X50	4	Inbussenkkopf-Set	Countersunk Allen Head Set	Vis noyée à tête à six pans creux	M12 x 50mm
2B	Z12-02-12	4	Federring	Spring Washer	Rondelle à ressort	M12
2C	Z23-12	4	Sicherungsmutter	Locknut	Contre-écrou	M12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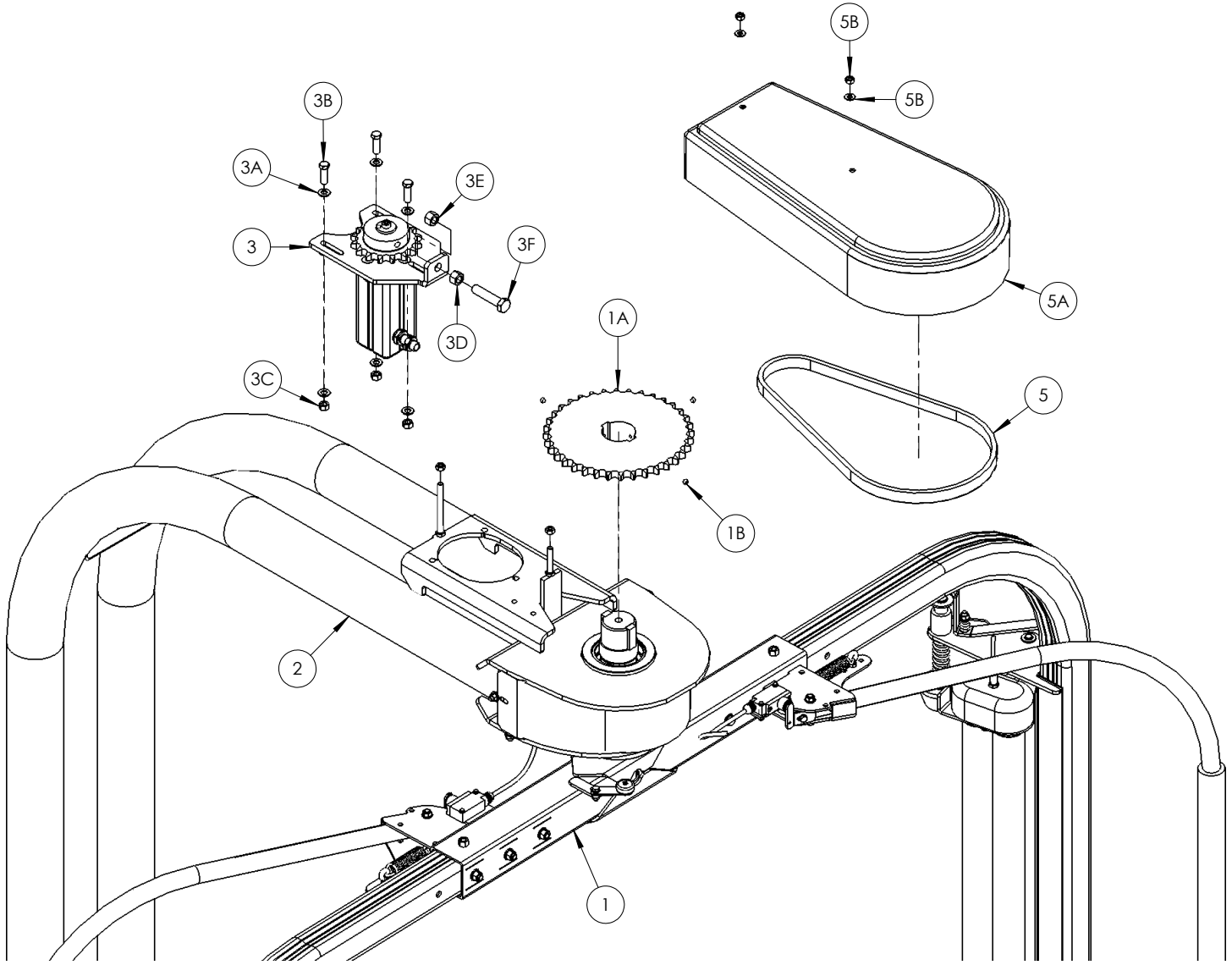
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1404400	1	Turm	Tower	Tour	
1A	1404051	2	Interner Seegerring	Internal Circlip	Circlip intérieur	Dia 110mm
1B	1404052	2	Wellenlager	Shaft Bearing	Palier d'arbre	
2	1404220	1	Dreharm	Rotating Arm	Bras rotatif	
2A	1404024	2	Passfeder	Key Steel	Clavette acier	20 X 12 X 50mm
2B	1319100		Drehkranz	Slew Ring	Couronne de rotation	
2C	1404053	2	Externer Seegerring	External Circlip	Circlip extérieur	Dia 67mm
2D	1403075	1	Distanzstück	Spacer	Entretoise	
3	1404076	1	Vorderes Schutzblech	Front Guard	Protection avant	
3A	Z11-02-081	2	Dichtring	Mud Washer	Rondelle de pare-boue	M8
3B	Z23-08	2	Feststellmutter	Locknut	Contre-écrou	M8
4	1309201	1	Sensormagnet	Sensor Magnet	Aimant de capteur	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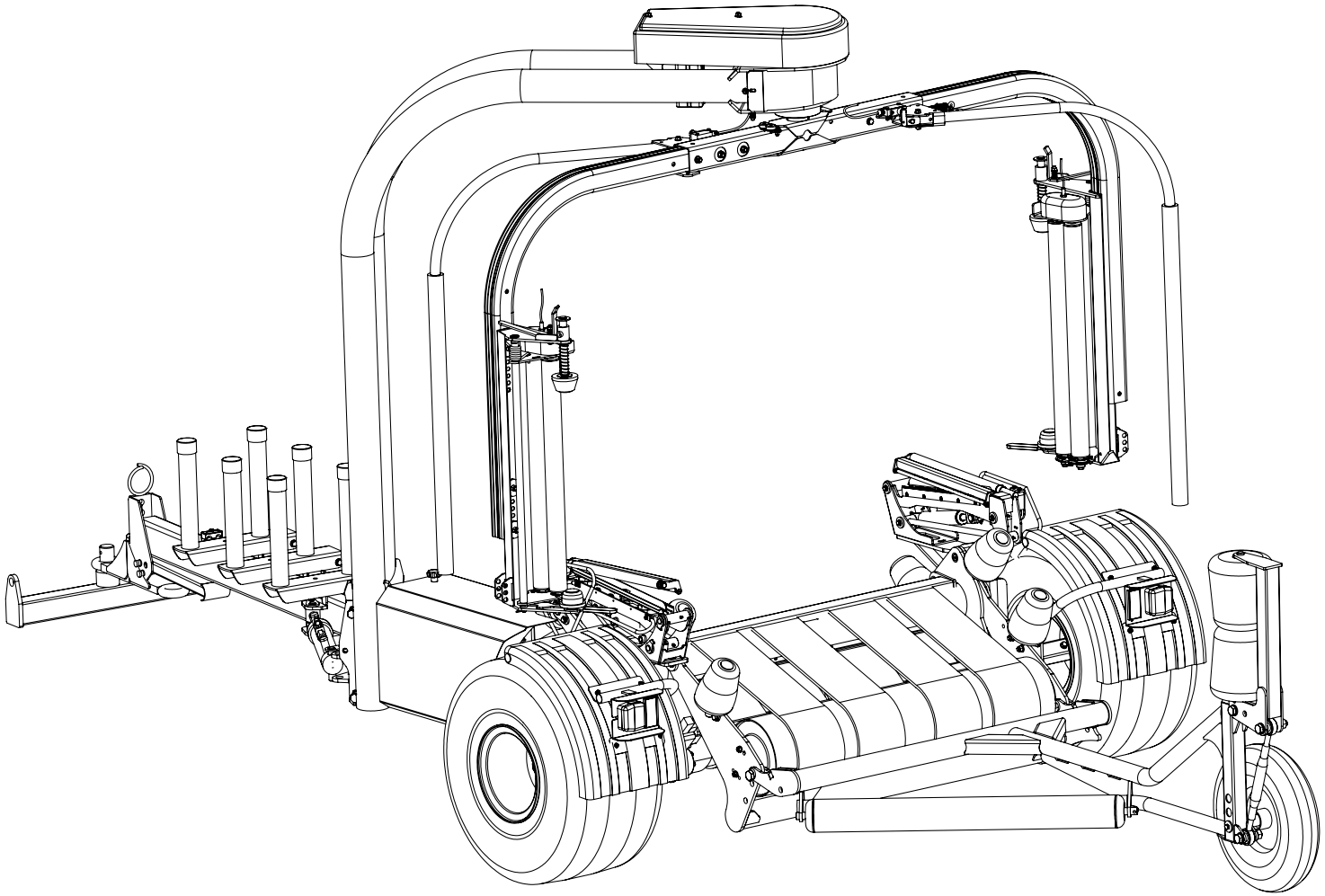
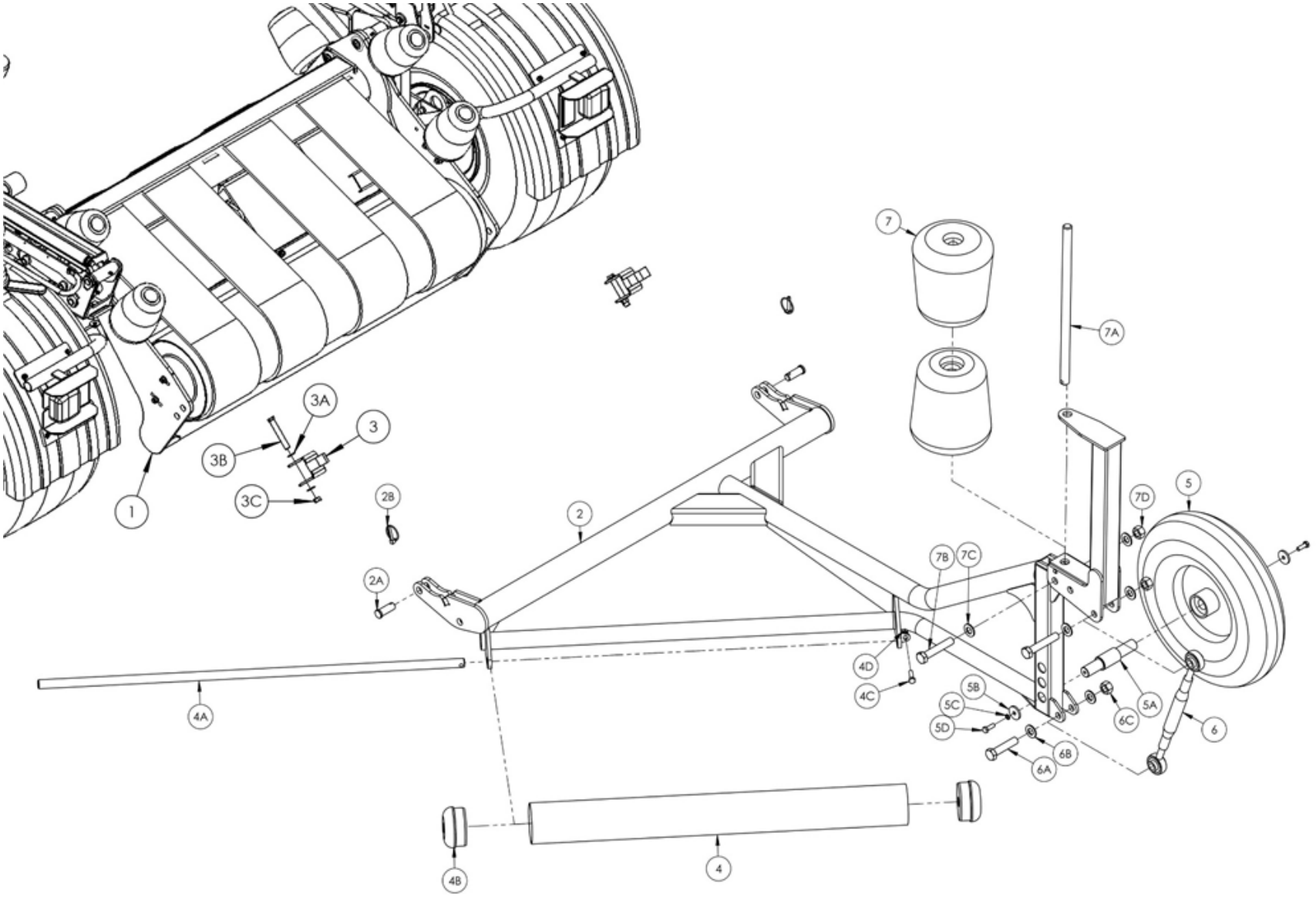
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1404220	1	Dreharm	Rotating Arm	Bras rotatif	
2	1404400	1	Turm	Tower	Tour	
2A	Z10-02-12	6	Unterlegscheibe	Flat Washer	Rondelle plate	M12
2B	Z26-084S	3	Sechskant-Set	Hex Set	Vis de régl. Hex	M12 x 40mm
2C	Z23-12	3	Feststellmutter	Locknut	Contre-écrou	M12
2D	Z26-1291S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M16 x 80mm
2E	Z18-16	1	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M16
2F	Z23-16	1	Feststellmutter	Locknut	Contre-écrou	M16
3	1404010	1	Kettenrad	Sprocket	Pignon	36 T 1" BS
3A	Z28-008	3	Gewindestift	Grub Screw	Vis sans tête	M8 x 10mm
4	1809010	1	6-Wege-Schleifring	6 Way Slip Ring	Bague collectrice 6 voies	
4A	Z10-02-05	3	Unterlegscheibe	Flat Washer	Rondelle plate	M5
4B	Z13-022	3	CSK-Inbuskopf-Set	CSK Allen Head Set	Vis noyée à tête à six pans creux	M5 x 20mm
4C	Z23-05	3	Feststellmutter	Locknut	Contre-écrou	M5
4D	1403119	1	Schleifringbügel	Slip Ring Bracket	Support de bague collectrice	
4E	Z10-02-10	1	Unterlegscheibe	Flat Washer	Rondelle plate	M10
4F	Z26-0611S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 25mm
4G	Z23-10	1	Feststellmutter	Locknut	Contre-écrou	M10
5	Z09-AW9	1	Kette	Chain	Chaîne	1" BS
5A	1404450	1	Kettenschutz	Chain Guard	Carter de chaîne	
5B	Z10-02-10	2	Unterlegscheibe	Flat Washer	Rondelle plate	M10
5C	Z23-10	2	Feststellmutter	Locknut	Contre-écrou	M10
5D	Z18-10	2	Sechskantmutter, glatt	Plain Hex Nut	Écrou plein Hex	M10

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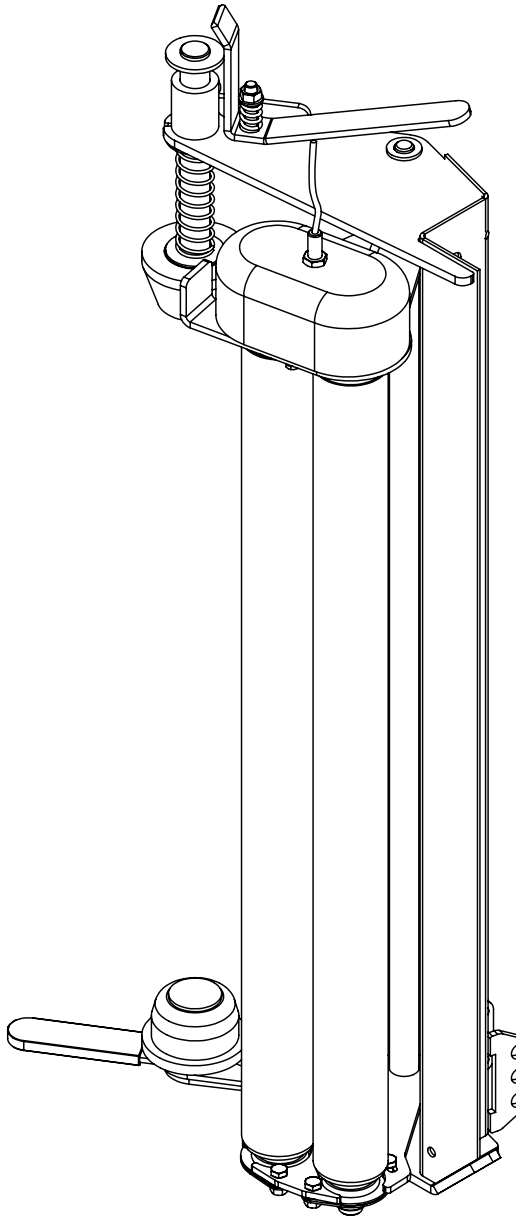
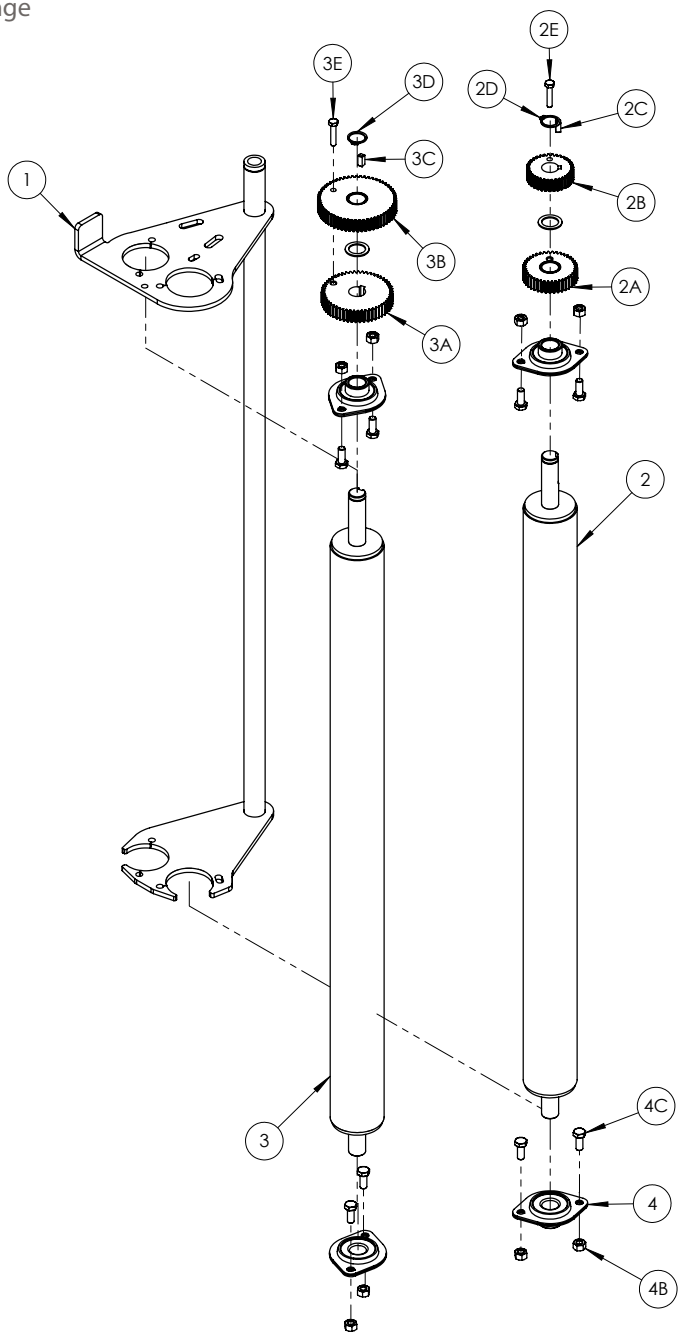
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1403450	1	Tisch – Abladerahmen	Table - Unload Frame	Bâti Déchargement – Table	
2	1407050	1	Ballenaufstellrahmen	End Tip Frame	Châssis d'extrémité	
2A	1407123	4		Wnd Tip Pin		
2B	Z03-22-04	2		5/16" Linch Pin		
3	1407030	2	Arretierbügel	Stop Bracket	Support de butée	
3A	Z10-02-12	4	Unterlegscheibe	Flat Washer	Rondelle plate	M12
3B	Z26-092B	2	Sechskantschraube	Hex Bolt	Boulon Hex	M12 x 100mm
3C	Z23-12	2	Feststellmutter	Locknut	Contre-écrou	M12
4	1407161	1		Roller		
4A	1407160	1	Ballenwalzenwelle	Bale Roller Shaft	Arbre du rouleau de balle	
4B	1407162	2		Tube End Cap		
4C	Z26-064B	1		Hex Bolt		M10 x 40mm
4D	Z23-10	1		Locknut		M10
5	1407025	1	Rad	Wheel	Roue	
5A	1407021	1	Radwelle	Wheel Shaft	Axe de roue	
5B	WD623-071	2	Ring	Collar	Collier	1 1/2"
5C	Z12-02-10	2	Federscheibe	Spring Washer	Rondelle à ressort	M10
5D	Z26-062S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 30mm
6	1206651	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M10 x 30mm
6A	Z27-116B	1		Hex Bolt UNC		3 1/2" x 3/4" H/T
6B	Z10-02-10	6		Flat Washer		M20
6C	Z23-201	3		Locknut		M20
7	Z06-AWR	2		Plastic Cone Roller BWB1		
7A	1407163	1		Cone Roller Shaft		
7B	Z27-134B	2		Hex Bolt UNC		4" x 3/4" H/T

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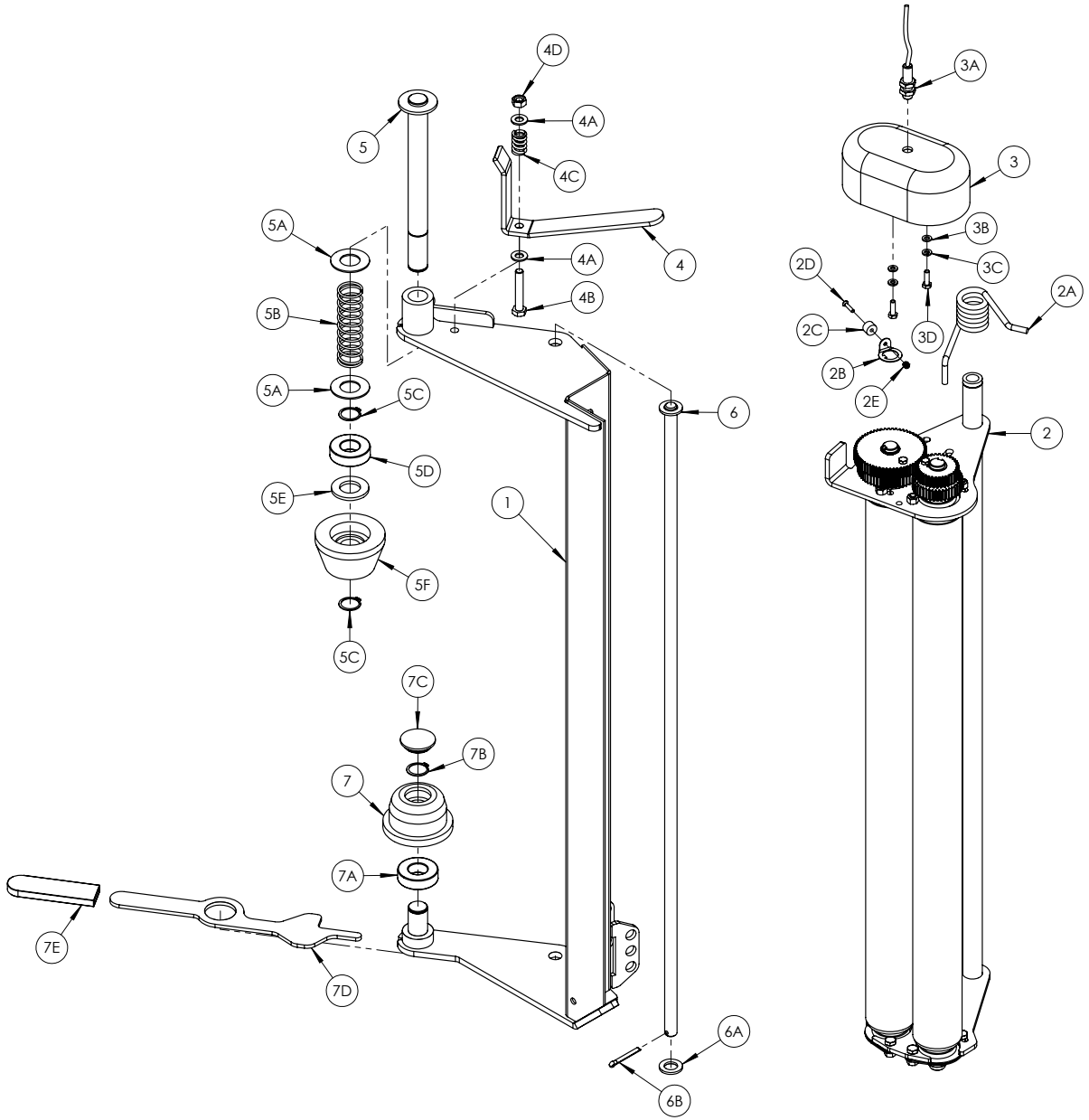
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1505001	1	RA Walzenanbaurahmen	RA Roller Mounting Frame	Cadre de fixation des rouleaux RA	
2	1305120	1	Walze, innen	Inner Roller	Rouleau intérieur	
2A	1305104	1	Zahnrad	Gear	Engrenage	37 T
2B	1305102	1	Zahnrad	Gear	Engrenage	35 T
2C	1305123	1	Keilstahl	Key Steel	Clavette acier	6 x 6 x 15mm
2D	Z28-520	1	Seegerring	Cir Clip	Circlip	A20
2E	Z26-022S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M6 x 30mm
3	1305121	1	Außenwalze	Outer Roller	Rouleau extérieur	
3A	1305101	1	Zahnrad	Gear	Engrenage	60 T
3B	1305103	1	Zahnrad	Gear	Engrenage	58 T
3C	1305123	1	Keilstahl	Key Steel	Clavette acier	6 x 6 x 15mm
3D	Z28-520	1	Seegerring	Cir Clip	Circlip	A20
3E	Z26-022S	1	Sechskant-Set	Hex Set	Vis de régl. Hex	M6 x 30mm
4	1305122	4	Lager	Bearing	Palier	SLFL 20A
4A	Z26-039S	8	Sechskant-Set	Hex Set	Vis de régl. Hex	M8 x 20mm
4B	Z23-08	8	Sicherungsmutter	Locknut	Contre-écrou	M8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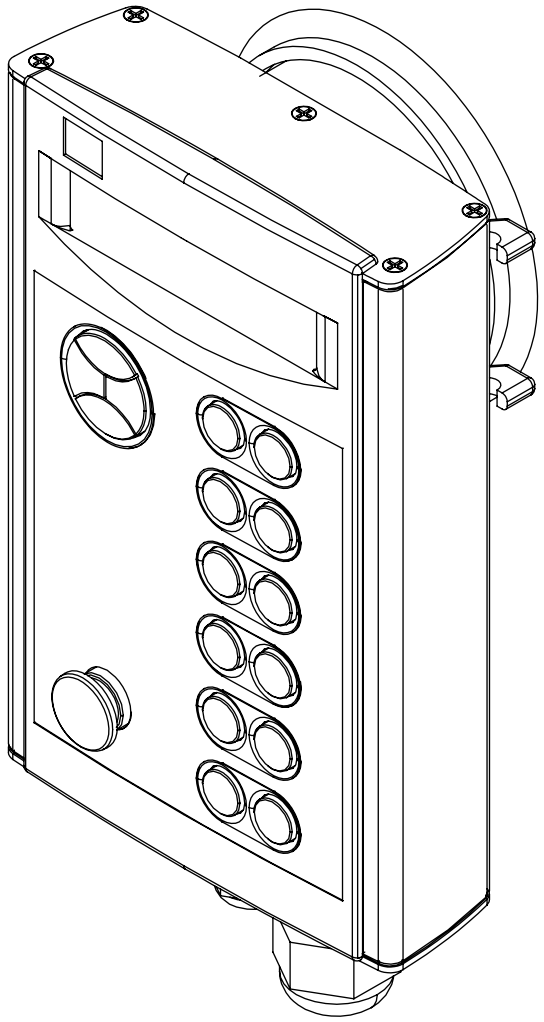
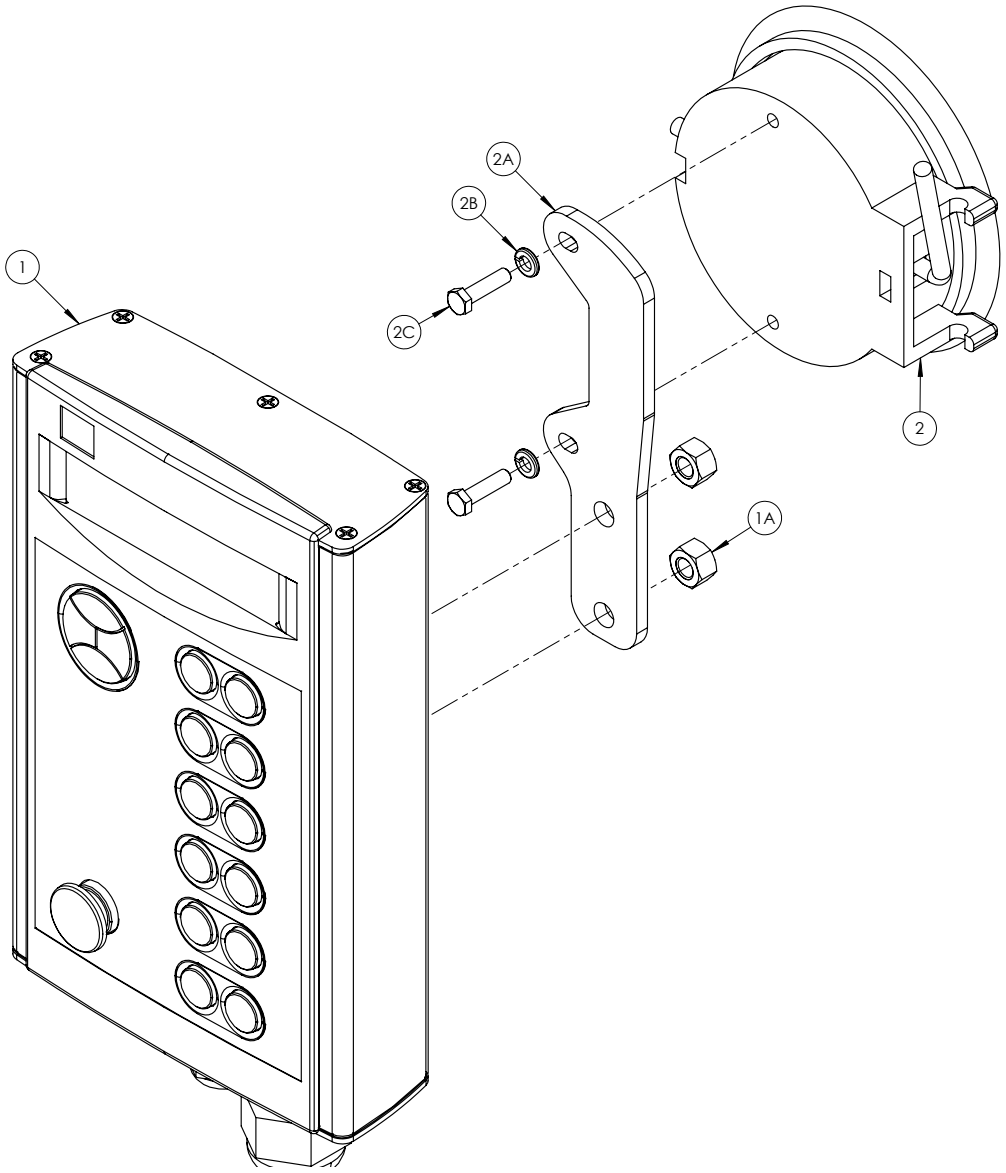
POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1405100	1	Vorstrecker Standardrahmen	Standard Dispenser Frame	Cadre distributeur standard	
2	1305100B	1	Einsatzbaugruppe	Insert Assembly	Insert	70/55%
2A	1305034	1	Torsionsfeder	Torsion Spring	Ressort de torsion	
2B	WD404-052	1	Magnetmontagebügel	Magnet Bracket	Support de l'aimant	
2C	D606C-M	1	Sensormagnet	Sensor Magnet	Aimant de capteur	
2D	Z13-5-04X20	1	Inbussenkkopf-Set	Countersunk Allen Head Set	Vis noyée à tête à six pans creux	M4 x 20mm
2E	Z23-04	1	M4 Sicherungsmutter	M4 Locknut	Contre-écrou M4	
3	1305125	1	Zahnraddeckel	Gear Cover	Carter d'engrenage	
3A	1309203	1	Sensorkabel	Sensor Cable	Câble capteur	4Mtr
3B	Z10-02-06	2	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M6
3C	Z12-02-06	2	Federring	Spring Washer	Rondelle à ressort	M6
3D	Z26-020S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M6 x 20mm
4	1305026	1	Arretierung, oben	Top Latch	Loquet supérieur	
4A	Z10-02-10	2	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M10
4B	Z26-067B	1	Sechskantschraube	Hex Bolt	Boulon Hex	M10 x 60mm
4C	1305027	1	Druckfeder	Compression Spring	Ressort à compression	
4D	Z23-10	1	Sicherungsmutter	Locknut	Contre-écrou	M10
5	1305022	1	Obere Welle	Top Shaft	Arbre supérieur	
5A	Z11-02-25	2	Unterlegscheibe, flach (niedrige Beanspruchung)	Flat Washer (Light Duty)	Rondelle plate (travail léger)	M25 L.D.
5B	1305021	1	Druckfeder	Compression Spring	Ressort à compression	
5C	Z28-525	2	Seegerring	Circlip	Circlip	Ext. M25
5D	Z06-AWRB	1	Lager	Bearing	Palier	6205-ZZ LDK
5E	Z10-02-25	1	25 mm Unterlegscheibe, flach (hohe Beanspruchung)	25mm Flat Washer (Heavy Duty)	Rondelle plate 25 mm (travail lourd)	
5F	1305019	1	Nylonkonus	Nylon Cone	Cône en nylon	
6	1405007	1	Einsatz, Montagestift	Insert Mounting Pin	Goupille de fixation de l'insert	
6A	Z10-02-16	1	Unterlegscheibe, flach	Flat Washer	Rondelle plate	M16
6B	Z03-21-14	1	Sicherungssplint	Split Pin	Goupille fendue	3/16" x 1 1/2"
7	1405006	1	Nylonkonus, unten	Bottom Nylon Cone	Cône en nylon inférieur	
7A	Z06-AWRB	1	Lager	Bearing	Palier	6205-ZZ LDK
7B	Z28-525	1	25 mm externer Seegerring	25mm External Circlip	Circlip extérieur 25 mm	Ext. M25
7C	Z32-15F	1	Kunststoffkappe	Plastic Cap	Capuchon plastique	37mm
7D	2005005	1	Entriegelungsbügel	Release Bracket	Ergot de dégagement	
7E	Z32-165	1	Plastikgriff	Plastic Grip	Embout plastique	




1
2A
2B
2C
2
1A

POS. NR. POS. NR. POS. NO.	TEILE NR. PART NR. PIECE NO.	STUCK QUANTITY QUANTITEE	BENENNUNG	DESCRIPTION	DESIGNATION	TECHNISCHE ANGABEN TECHNICAL DATA DONNEES TECHNIQUES
1	1309006*	1	RA Expert Steuereinheit	RA Expert Control Unit	Contrôleur Expert RA	
*	1409100	-	1400 EH Steuer-Set, komplett	1400 EH Complete Control Kit	Kit de commande complet 1400 EH	
1A	Z23-08	2	Sicherungsmutter	Locknut	Contre-écrou	M8
2	1309012	1	Saugnapf	Suction Cup	Ventouse	
2A	1309011	1	Montagebügel	Mounting Bracket	Support de fixation	
2B	Z12-02-05	2	Federring	Spring Washer	Rondelle à ressort	M5
2C	Z26-017S	2	Sechskant-Set	Hex Set	Vis de régl. Hex	M5 x 20mm