# **OPERATING INSTRUCTIONS**

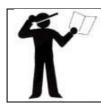
CAE – 2765 & 2725 Tire Changer

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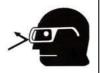
### 1.0 INTRODUCTION

#### **1.1 General Information**



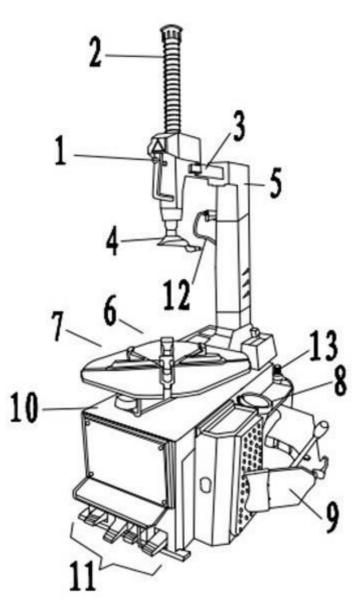
#### THESE INSTRUCTIONS ARE AN INTEGRAL PART OF THE MACHINE. THEY MUST BE READ AND UNDERSTOOD BY THE USER. NO LIABILITY IS ASSUMED FOR ANY DAMAGES CAUSED BY FAILURE TO FOLLOW THESE INSTRUCTIONS OR THE VALID SECURITY PROVISIONS.

| $\mathbf{M}$ | WARNING: Follow the instructions to prevent injury or damage.                              |
|--------------|--|
| -` <b>\</b>  | TIP: Provides more information on functionality and tips for using the device efficiently. |
|              |  |
|              |  |



Appropriate protective clothing must be worn for all work on the described system.

## 1.2 Description

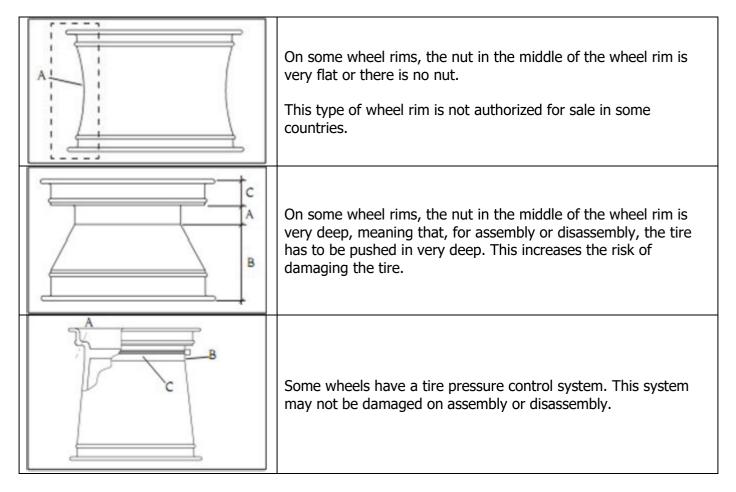


| 1  | Handle with air valve              | To lock/unlock the horizontal & vertical movement of the assembly head |
|----|------------------------------------|--|
| 2  | Hexagonal bar                      | For vertical adjustment of the assembly head                           |
| 3  | Square bar                         | For horizontal adjustment of the assembly head                         |
| 4  | Assembly head                      | To assemble/disassemble tires  |
| 5  | Assembly tower                     | Can be swiveled backwards  |
| 6  | Rotary plate                       | To rotate the wheel  |
| 7  | Clamping claws                     | To clamp the wheel rim   |
| 8  | Grease containers                  | To store the tire grease   |
| 9  | Bead breaker                       | To remove the tire from the wheel rim                                  |
| 10 | Housing                            |  |
| 11 | Foot pedal control                 |  |
| 12 | Tire inflator                      | To inflate the tire  |
| 13 | Compressed air<br>maintenance unit |  |

|   | 4 3        | 2 1  |
|---|------------|--|
| 1 | $\bigcirc$ | Press the pedal down slightly so that the rotary plate<br>moves clockwise.<br>Once the pedal has been pressed down as far as it will go,<br>switch into the faster 2nd gear.<br>Pull the pedal upwards to move the rotary plate<br>anticlockwise.  |
| 2 |            | Press the pedal to work with the bead breaker blade.<br>When you release it again, the bead breaker blade will<br>return to the starting position.   |
| 3 |            | The clamping claws open in the first position.<br>The middle position (gently pressing the pedal) allows you<br>to close the clamping claws and set them to the wheel<br>being used.<br>The clamping claws are fully closed in the final position. |
| 4 |            | Press the pedal to swing the assembly tower backwards.<br>Press it again to swing the assembly tower forwards again.   |
|   |            | When you press the button (1), both the hexagon (2) and<br>the square (3) are held in the position that has been set.<br>These can be unsecured again by pulling the button and<br>released to adjust the assembly head (4).                       |

## 1.3 Operation

#### 1.3.1 Determining the wheel rim cut

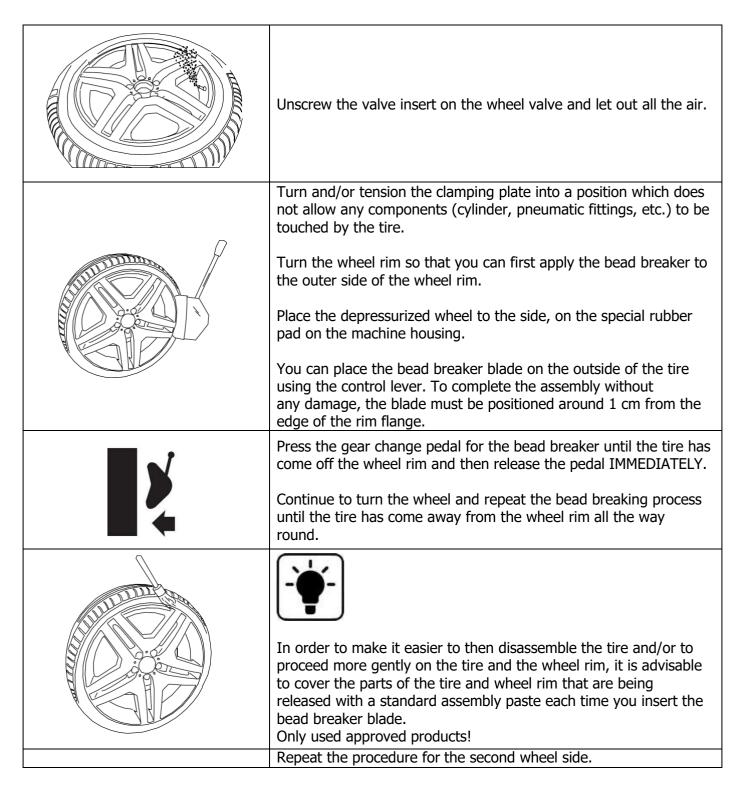


### 1.3.2 Tire bead breaker

#### Preparation

Check the following points before using the device:

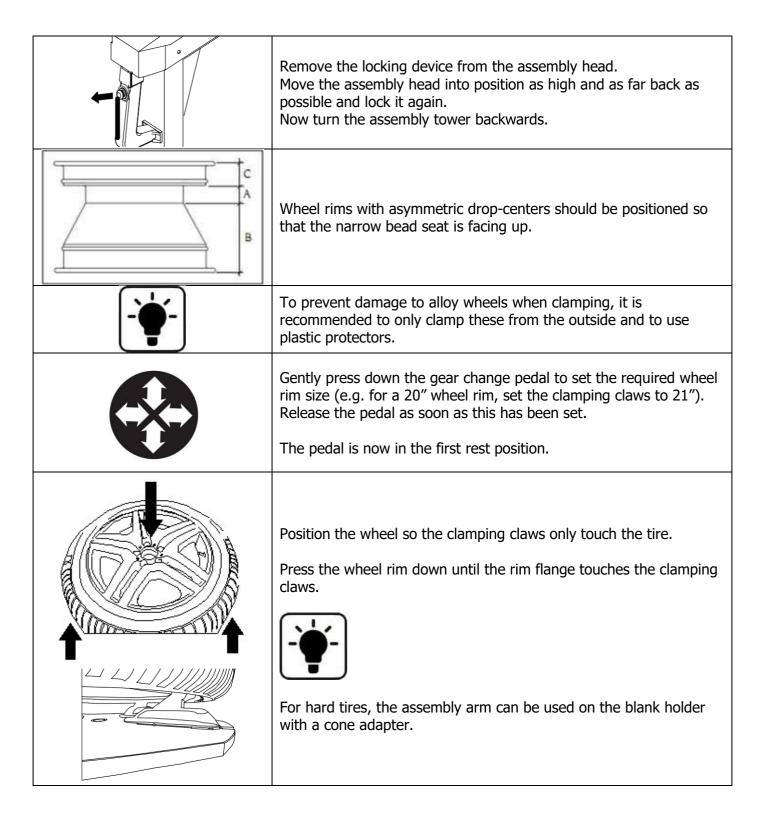
- Check oil level, water level and air pressure on the maintenance unit
- Check whether the power supply is connected properly.



## 1.3.3 Clamping the wheels

### Preparation

Check the following points before you mount the wheel: - Dirt and old balancing weights must be removed from the wheel





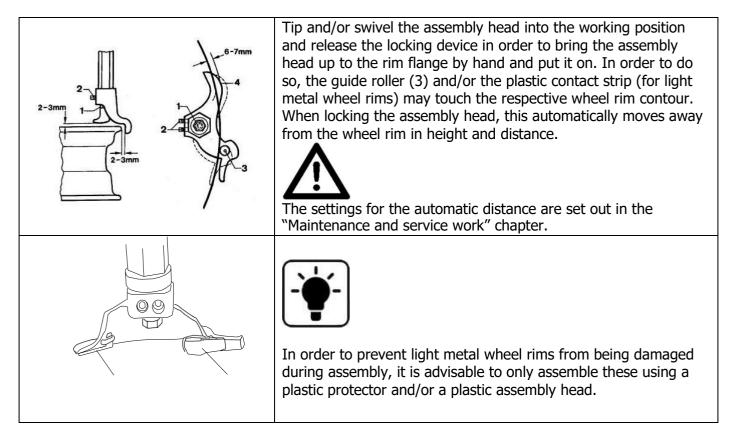
Press down on the gear change pedal to clamp the wheel rim and then release your foot. The wheel has been clamped.

#### 1.3.4 Setting up the assembly head



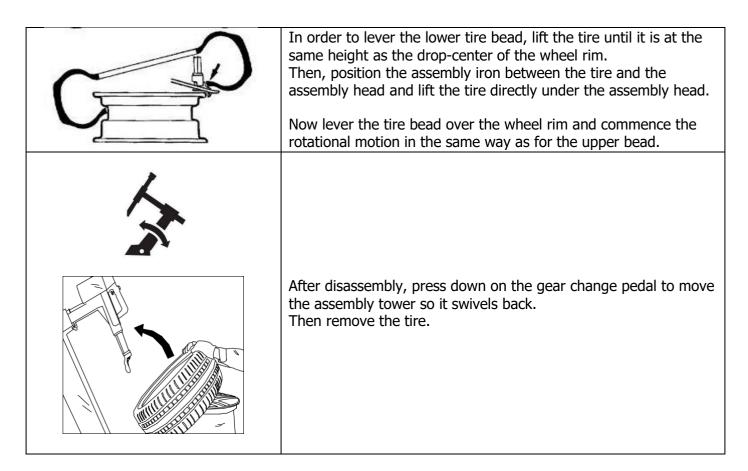
If you are predominantly processing large wheels up to 24" or small 8" wheels, it is advisable to adapt the assembly head settings to the wheel rim diameter.

The settings for the assembly head are set out in more detail in the MAINTENANCE subsection.

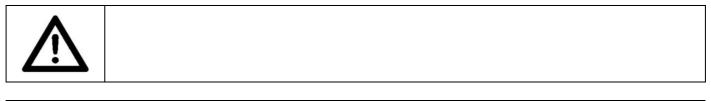


## 1.3.5 Disassembling a tire

| Turn and/or set the stretched wheel so that the wheel valve is approx. 10 cm in front of the assembly head   |
|--|
| Press the tire bead down against the opposite side of the<br>assembly head.<br>Then lever the tire over the assembly head using the assembly<br>iron. During levering, the tire moves into the drop-center of the<br>wheel rim and facilitates simple and damage-free assembly.  |
| In order to make it easier to lift the bead and to protect the wheel, position the bead pusher opposite the assembly head. Press the bead in 3, 6 and 12 o'clock position up to the first wheel rim depression, ensuring that the tire is not compressed whilst doing so.  |
| Press down the gear change pedal for the rotational motion of<br>the clamping plate so the rotational motion starts clockwise.<br>Whilst doing so, continue to hold the assembly iron on the bar of<br>the assembly head by pressing the iron against the assembly<br>head.<br>As soon as approx. 1/3 of the tire bead has passed the rim<br>flange, there should be enough room to remove the assembly<br>iron.<br>Continue with the rotational motion until the whole tire is above<br>the rim flange. |
| When working with tubular tires, the tube should now be removed from the tire.   |



#### 1.3.6 Assembling a tire



| The tire valve should be changed before assembly.<br>Clamp and/or set the wheel rim so that the wheel valve is<br>approximately 180 degrees over the assembly head. |
|---|
| Cover the tire and the wheel rim in a sufficient amount of assembly paste.  |

| Check whether the assembly head is in the correct position for the wheel rim. If necessary, set it up as described in the subsection "Setting up the assembly head".<br>Now place the tire on the wheel rim at an angle so that the assembly head does not touch any parts of the tire when swiveling.<br>Swivel the assembly tower by pressing the corresponding pedal.  |
|---|
| Position the tire so that the tire bead is under the nose, but still on<br>the guideway of the assembly head.<br>When doing so, ensure that the tire is opposite the assembly head<br>in the wheel rim depression.  |
| Start the rotational movement of the clamping plate.         Start the rotational movement of the clamping plate.         During the assembly process, ensure that the bead run is correct.         Failing to ensure this can cause serious damage to the tire.         When working with tubular tires, the tube must be positioned correctly in the tire. Ensure that it is positioned in the tire such thatit will not be damaged during the remainder of the assembly process. |

| When assembling the second bead, follow the exact same<br>procedure as for the first bead.<br>You must also ensure that the tire is positioned correctly in relation<br>to the assembly head. |
|---|
| Start the rotational movement of the clamping plate.<br>During the assembly process, ensure that the bead run is correct.<br>Failing to ensure this can cause serious damage to the tire.     |
| In order to complete the process, release the wheel rim clamp to remove the wheel.  |

## 1.3.7 Inflating tires



The maximum tire pressure may not exceed 3.5 bar.

All parts of the body should be kept away from the tire.

During operation the noise level can reach 85 dB (A), so the operator should take appropriate protective measures.

|          | Ensure that the tire has been fully lubricated.<br>Start the inflation process.  |
|----------|--|
| -\\      | If the air volume of the tire inflator is not sufficient to push the tire<br>over the wheel rim, you can increase the air volume by removing the<br>inner valve. This must be replaced quickly afterwards.   |
| $\wedge$ | Ensure that the tire has been inflated to the correct pressure.<br>Consult the manufacturer's specifications to establish this.<br>If the tire pressure is too low, this can lead to increased wear and<br>decrease the service life of the tire. The inside of the tire can also<br>be damaged. |
|          | The tire pressure must be checked once a week.<br>Only check the tire pressure at normal tire temperatures (i.e. the<br>vehicle has not been driven for more than an hour and not more<br>than 2-3 km)   |

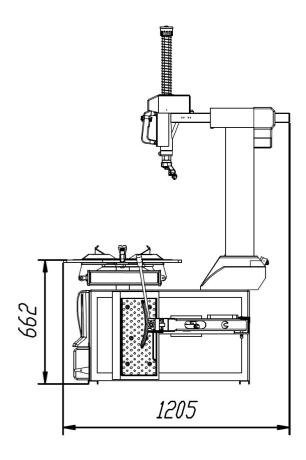
## 1.4 Technical Data

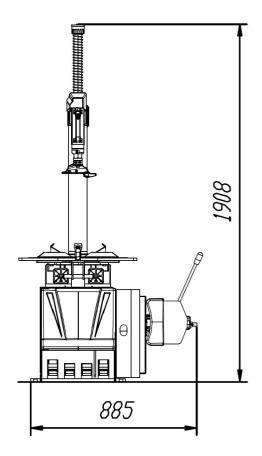
| Outer clamping range (B)           | 12-22 inches             |
|------------------------------------|--------------------------|
| Inner clamping range (B)           | 14-26 inches             |
| Max. entry width (A)               | 4-13 inches              |
| Max. entry diameter (B + tire)     | 960 mm                   |
| Max. working range of bead breaker | 4-13 inches              |
| Max. force of bead breaker         | 2500 kg                  |
| Rotary plate torque                | 1100 Nm                  |
| Rotary plate speed                 | 7 rpm                    |
| Dower ourply                       | 380 / 50 – 16 V/Hz - A   |
| Power supply                       | (220 / 50 – 16 V/Hz - A) |
| Drive newer                        | 0.75 kW                  |
| Drive power                        | (1.10 kW)                |
| Motor speed                        | 1380 rpm                 |
| Working process                    | 8-10 bar                 |
| Working pressure                   | (0.8-1.0 Mpa)            |
| Noise emission                     | < 70 dB                  |
| Net weight                         | 252 kg                   |
| Gross weight                       | 286 kg                   |

### Definition of wheel rim

| A = wheel rim width (without "f" flange)    | A |
|---|---|
| B = wheel rim diameter (without "f" flange) |   |
| f = flange                                  |   |
| h = hump                                    |   |
| t = drop-centre                             |   |
| z = centre ring                             | B |
| ET = offset                                 |   |
| 1 = rim centre                              |   |
| 2 = contact surface                         |   |
| 1 inch = 2.54 centimetres                   | t |

## 1.5 Scale Drawing





## 2.0 INSTALLATION

It is recommended The machine be installed by an authorized person according to the instructions.



#### The operating instructions (including the log) are an important part of the machine / product. !!!PLEASE STORE CAREFULLY!!!

The product must be checked after completion of the installation, handover, if necessary briefing and then regularly in accordance with the applicable regulations and legal provisions in the country of operation by a suitable and approved company or facility.

#### 2.1 Transport & Storage Conditions

When transporting and positioning the machine, always use suitable lifting and material handling equipment and consider the machine's centre of gravity.

The machine should only be transported with the original packaging.

| Data:               |               |
|---------------------|---------------|
| Width               | 1.150 mm      |
| Length              | 850 mm        |
| Height              | 980 mm        |
| Storage temperature | -10 to +50 °C |

#### 2.2 Unpacking the machine

 Remove the top cover of the packaging and make sure that no damage has occurred during transport.
 Remove the safety bolt to remove the machine from the pallet / rack.

 Use a suitable lifting device (possibly with a stopping rope) to lower the machine from the pallet / frame.
 The packaging material used for the machine should be stored carefully.

 Keep the packaging material out of the reach of children as it may be hazardous.
 Remove the top cover of the packaging material out of the reach of children as it may be hazardous.

## 2.3 Delivery Contents

| 1 | Steel assembly head                      |         |      |
|---|--|---------|------|
| 2 | Plastic contact strip                    | -       |      |
| 3 | Tire assembly iron                       |         |      |
| 4 | Impact anchor                            |         | 0    |
| 5 | Seal kit and membrane for rapid air vent |         | 12   |
| 6 | Plastic protector for side bead breakers |         | No.  |
| 7 | Manual tire inflator                     | * * * * |      |
| 8 | Compressed air maintenance unit          |         | () ( |
|   |  |         |      |

### 2.4 Location

The machine should be kept away from flammable and explosive materials, as well as from sunlight and intense light. The machine should be placed in a well-ventilated location.

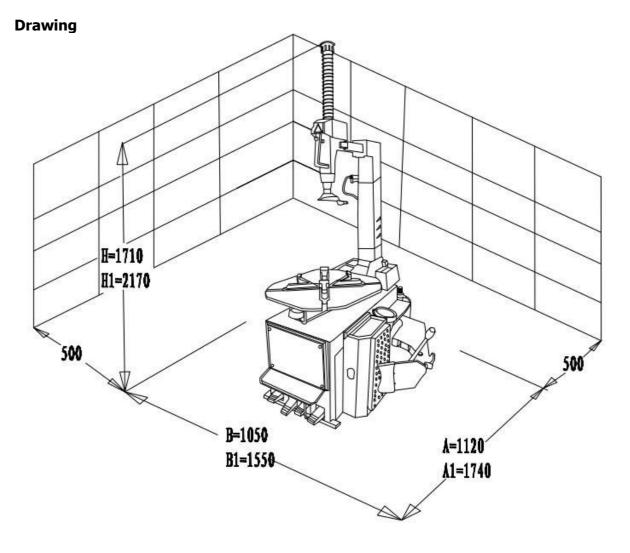
The machine must be set up on sufficiently firm ground, if necessary, according to the minimum requirements of the information given in the foundation plan.

In addition to the ground conditions, the guidelines and instructions of the accident prevention regulations as well as the workplace regulations must be observed when selecting an installation site.

When assembling on floor coverings, check their load-bearing capacity. A construction expert should be consulted for inspection when mounting on floor coverings.

The machine should only be mounted and used within closed rooms. It has no corresponding safety features (e.g. IP protection, galvanized design, etc.).

| Temperature | 4-40 °C                     |
|-------------|-----------------------------|
| Sea level   | < 1500 m                    |
| Humidity    | 50% at 40 °C – 90% at 20 °C |



## 2.5 Fixing



General and local regulations must be observed. Therefore, these steps should only be carried out by a trained professional.

The machine must be set up and fixed on sufficiently firm ground, if necessary, according to the minimum requirements of the information given in the foundation plan.

The machine must be fastened at the points provided with suitable or specified fastening material.

In addition to the ground conditions, the guidelines and instructions of the accident prevention regulations as well as the workplace regulations must be observed when selecting an installation site.

When assembling on floor coverings, check their load-bearing capacity. A construction expert should be consulted for inspection when mounting on floor coverings.

#### 2.6 Electrical Connection



General and local regulations must be observed. Therefore, these steps may only be carried out by a trained professional. Pay attention to the necessary supply line (see technical data).

Voltage deviations should be 0.9 - 1.1 times the nominal voltage range and the frequency deviation should be 0.99 - 1.01 times the frequency range.

Necessary protective measures must be taken to guarantee this.

At the end of the work, the direction that the motor rotates must be checked.

#### 2.7 Pneumatic Connection



For all pneumatic systems, a compressed air maintenance unit (partially included) must be installed between the supply line and the system.

The air pressure of the supply line must at least correspond to the technical data.

The compressed air maintenance unit must be set correctly and checked.

The compressed air maintenance unit must be serviced at regular intervals.

The maximum or minimum pressure ensures perfect functioning without any damage.

#### **Hydraulic Connection** 2.8



Before the system is put into operation or operated for the first time with oil, the following must be observed with regard to the optimal, trouble-free and almost air-free functioning

All hydraulic lines must be connected and tightened according to the hydraulic plan and, if applicable according to the hose designation.

All hydraulic lines and cylinders must be vented according to the hydraulic plan and, if applicable, according to the hose designation.

In order to ensure the faultless and safe functioning of the system and the hose assemblies used, the hydraulic fluids used must comply with the specific instructions and recommendations of the manufacturer.

Used media that do not meet the specific requirements or which have unauthorised contamination damage the entire hydraulic system and shorten the service life of the hydraulic systems used. Warning: (system contamination can also occur when oil is refilled)

The minimum requirement and minimum oil quantity must be checked and ensured.

#### 2.9 Assembly



These instructions are not to be viewed as assembly instructions; hints and tips are provided only for trained expert installers. Suitable clothing and personal protection must be worn for the following work.

Incorrect installation and settings lead to exclusion of liability and warranty.

Partly pre-assembled machines must be checked, introduced and approved by a competent person before commissioning.

Machine assembly must be carried out by a qualified and competent person.

## 2.9.1. Securing the machine

It is recommended that the machine is secured to the floor at the four points provided using M10 anchor screws and the corresponding dowels.

|  | The second secon |   |   |
|--|--|---|---|
| Drill holes, observing<br>the necessary drill depth<br>A and drill diameter of<br>the dowel manufacturer | Clean out the inside of the holes  | Insert the anchor bolts<br>into the holes until they<br>have reached an<br>appropriate depth. | Tighten the nuts to the<br>torque specified by the<br>manufacturer<br>Clamping thickness B<br>varies depending on the<br>floor covering |

## 2.10 Completion of Work



Before commissioning, check all fastening screws, electrical, pneumatic and hydraulic lines and, if necessary, tighten these. Warning: in some cases, this must be checked at regular intervals and tightened if necessary (note in the instructions).

## 3.0 OPERATION

## 3.1 Operating Instructions

| Company:       |   | Operating Instr   | uctions   | Date:   |
|----------------|---|---|---|---|
| Place of work: |   | for   |   |   |
| Operation:     |   | Tire Servicing  | J   | Signature:  |
|                | Danger due  | ler<br>being caught on machine<br>e to uncontrolled moving parts<br>m charged dust in the brake system  |   |   |
|                | Do not wea<br>Wear ear pi<br>Longer hair<br>Only use im<br>Clean whee<br>systems.<br>Remove du<br>Use catego        | -fitting clothes<br>r a watch, rings, chains or similar jew<br>rotection and safety goggles.<br>r should be secured by a hair net or o<br>npact wrenches that don't blow air on<br>els and tires only when wet to avoid d<br>st on the brake drums with an extrac<br>rry U equipment for asbestos-free dus                | ther measure<br>the wheel rim.<br>ust build-up; if pos<br>tion bell with suitat | sible, use wheel washing<br>ble industrial vacuum cleaners. |
|                | Damaged ti<br>When inflat<br>Tire filling n<br>exceeded.<br>Only operat<br><b>For large w</b><br>- On ma<br>carried | urrent GUV regulations)<br>ires must not be used.<br>ing the tire, set up a guard to catch a<br>nust be monitored and the maximum<br>te motor-driven wheel balancers with<br>vheels of trucks and self-driving m<br>chines with vertical wheels, work with<br>out by two people.<br>es with a diameter >1.4 m or a weight | permissible assem<br>a protective hood.<br>achines:<br>heavy tires (for e.      | nbly air pressures must not be<br>xample, EM tires) must be |
|                | Switch off t<br>Damage sh<br>Inform first<br>Treat injurio<br>Enter into t  | fects must be reported to the manufactor<br>the machine and secure against unau<br>ould only be repaired by qualified pe<br>aiders (see alarm/emergency plan).<br>es immediately.<br>he accident book<br>ergency services for serious injuries.   | thorised restart  | γ   |
| E              |   | y number: /   | Ambulance s   | ervice:   |
| •<br>•<br>•    | Repair only<br>Disconnect<br>maintenanc<br>Clean the m  | by instructed and trained persons<br>or secure the machine from the mair<br>e or servicing<br>nachine after operation is ended<br><b>eck</b> of the machine by an authorised  | ns power supply fo  | r set-up, adjustment,                                       |

## **3.2 Basic Information**

Independent operation of the machine may only be carried out by persons over the age of 18 who have been trained in the operation of the machine and have demonstrated their ability to do so to the employer. They must be expressly contracted by the employer to operate the machine. The order to operate the machine must be given in writing.

The machine must only be used for its intended use.

Always use appropriate material during installation and operation.

Before assembly or disassembly check all components for damage.

If necessary, observe special manufacturer instructions for mounting or dismounting of vehicle-specific work.

An important part of the guarantee / warranty is fulfilment of the maintenance plan. This includes in particular, ensuring cleanliness, corrosion protection, checks and repairing damages immediately if required.

During operation attention should always be paid to hazards. As soon as dangers occur, switch off the machine immediately, remove the mains plug and disconnect the air supply. Then contact your dealer.

All warning labels must always be easy to read. If damaged, they must be replaced immediately.

| $\land$      | Pay attention to possible shearing points around the machine.  |
|--------------|--|
| $\triangle$  | During operation, the noise can reach 85dB (A), so the operator should take appropriate protective measures. |
| $\mathbf{N}$ | Moving parts of the machine can catch loose clothing, long hair or jewellery.                                |

## 4.0 MAINTENANCE

The user must maintain the machine regularly to ensure safe operation.

Repair work may only be carried out by authorised service partners or after customer consultation with the manufacturer.

|   | <ul> <li>Before maintenance and repair work:</li> <li>The machine must be disconnected from ALL supply networks</li> <li>Pull main switch out of mains plug, if necessary, discharge compressed air from system</li> <li>Appropriate measures must be taken against a restart</li> </ul> |
|---|--|
| Â | Work on electrical elements or on the supply line may only be carried out by experts or electricians.  |

#### 4.1 Consumables for installation, maintenance and servicing

#### **Hydraulic Oil**

**General** minimum requirement:

| Eni Precis HVLP-D Item No. 00066018 |               |           |                           |  |  |  |  |
|-------------------------------------|---------------|-----------|---------------------------|--|--|--|--|
| Summer                              | (15° to 45°): | HVLP-D 46 | (e.g.: Eni PRECIS HVLP-D) |  |  |  |  |
| Winter                              | (under 10°):  | HVLP-D 32 | (e.g.: Eni PRECIS HVLP-D) |  |  |  |  |

#### Minimum requirement especially for 2-post lifts:

| Eni PRECIS HVLP-D Item No. 00067218 |               |           |                           |  |  |  |  |
|-------------------------------------|---------------|-----------|---------------------------|--|--|--|--|
| Summer                              | (15° to 45°): | HVLP-D 32 | (e.g.: Eni PRECIS HVLP-D) |  |  |  |  |
| Winter                              | (under 10°):  | HVLP-D 22 | (e.g.: Eni PRECIS HVLP-D) |  |  |  |  |

#### Preservative for ropes, welds, screws, corners, edges and cavities.

Minimum requirement: Petec spray translucent - 500 ml Item No. 73550 / Petec wall inlet translucent - 1000 ml Item No. 73510 Petec UBS pistol Item No. 98507

#### **Slideway lubricant**

Minimum requirement: STORER WHS 2002 White EP high performance grease. Item No. KPF1-2K-20

#### Lubricant for bushes, chains, rollers & moving parts

Minimum requirement: White ultra lube, 500 ml aerosol. Item No. 34403 – WUL – White Ultra Lube

#### **Floor anchor**

Minimum requirement **for lifting platforms:** Fischer FIS A M 16 x 200 galvanised in combination with Fischer Superbond reaction cartridge

Minimum requirement for **passenger car and passenger car/truck balancing machine:** Impact anchor M8 x 100

Minimum requirement **for truck mounting machine:** Impact anchor M12 x 100 **Compressed air system**  Minimum requirement: PROMAT chemicals special compressed air oil

Item No.: 4000355209

#### Cleaning

Minimum requirement: Caramba intensive brake cleaner acetone-free

#### Care and protection of metals, painted or powder-coated surfaces

Minimum requirement:Petec spray translucent - 500 mlItem No. 73550Petec wall inlet translucent - 1000 mlItem No. 73510PetecUBS pistolItem No. 98507

# Care and protection of metals, painted or powder-coated surfaces in the tread area and plastic parts

Minimum requirement: Valet Pro Classic Protectant Plastic Sealant 500 ml

## 4.2 Safety Regulations for Oil

Always observe the legal requirements or regulations for handling used oil.

Always dispose of used oil through a certified organisation.

In the case of leaks, oil must be collected immediately with binders or trays so that it cannot penetrate into the soil.

Avoid any skin contact with the oil.

Do not allow oil vapours to escape into the atmosphere.

Oil is a combustible medium. Pay attention to possible hazards.

Wear oil-resistant protective clothing, such as gloves, goggles, protective clothing, etc.

#### 4.3 Notes



Regardless of the level of dirt, the machine must be maintained, cleaned and serviced at regular intervals.

The machine should then be treated with a care product (such as oil or wax spray). Do not use cleaning agents that are harmful to the skin.

IF THE ABOVEMENTIONED POINTS ARE NOT FULFILLED, THE WARRANTY CLAIM IS EXCLUDED

#### 4.4 Maintenance or Service Plan

| Interval  | Immediately | Weekly | Monthly | Every 3<br>months | Every 6<br>monthe |
|---|-------------|--------|---------|-------------------|-------------------|
| Check of ALL safety-relevant parts                          | Х           |        |         |                   |                   |
| Cleaning  | Х           |        |         |                   |                   |
| Check or restore surface protection                         | Х           |        |         |                   |                   |
| Check for leaks in the hydraulic system                     | Х           |        |         |                   |                   |
| Check or restore surface protection or corrosion protection | Х           |        |         |                   |                   |
| Check or restore damage to the paint and components         | Х           |        |         |                   |                   |
| Check or restore rust damage                                | Х           |        |         |                   |                   |
| Check or treat cavities and non-painted areas               | Х           |        |         |                   |                   |
| Check for leaks in the pneumatic system                     | Х           |        |         |                   |                   |
| Control the tightness of screws                             | Х           |        |         |                   |                   |
| Check, lubricate & adjust bearing slack                     | Х           |        |         |                   |                   |
| Check wear parts  |             | Х      |         |                   |                   |
| Check fluids (level, wear, contamination, quality)          |             | Х      |         |                   |                   |
| Check and lubricate sliding surfaces                        |             | Х      |         |                   |                   |
| Remove any dirt inside                                      |             |        | Х       |                   |                   |
| Clean and check electrical components                       |             |        |         | Х                 |                   |
| Check motor and transmission for function and wear          |             |        |         | Х                 |                   |
| Check welds and construction                                |             |        |         | Х                 |                   |
| Visual inspection (according to inspection plan)            |             |        |         |                   | Х                 |

| Symptoms   | Cause  | Solution   |
|--|--|--|
| Machine has no / not   | Air pressure / hydraulic<br>pressure too low                       | Increase air pressure / check oil level                          |
| enough power   | 2-phase running of motor   | Check electrical connection                                      |
|  | V-belt not tightened enough  | Retighten V-belt   |
| Assembly tool has too<br>much slack / loosens again<br>and again | Wear of seals and/or bushings                                      | Have wear parts replaced by a KD technician                      |
|  | Defective pedal / rocker switch                                    | Replace components   |
| Rim cannot be clamped on   | Pneumatic/hydraulic cylinder<br>jams or leaks                      | Replace cylinder or replace seals                                |
| the wheel  | Air pressure / hydraulic<br>pressure too low                       | Increase air pressure / check oil level                          |
|  | Valve block does not respond                                       | Check control  |
| Wheel does not rotate /<br>only rotates in one                   | Pedal / joystick does not  | Replace components<br>Check rotary reversing switch /<br>control |
| direction  | respond  | Check electrical connection                                      |
| Pressing points and/or<br>kinks on the tire                      | Assembly tool used incorrectly                                     | Study the operating instructions again step by step              |
| Product shows (heavy) rust<br>damage                             | Damage or lack of corrosion<br>protection, possibly<br>maintenance | Remove rust, clean and restore surface.                          |

## 4.5 Troubleshooting / Error Display and Solutions

### ALWAYS USE ORIGINAL PARTS AND ACCESSORIES

## 4.6 Maintenance and Service Instructions



All maintenance and service work should be carried out at least according to the maintenance schedule

COMPRESSED AIR MAINTENANCE UNIT (Partial stock if necessary for the activity)

SETTING THE WORKING PRESSURE:

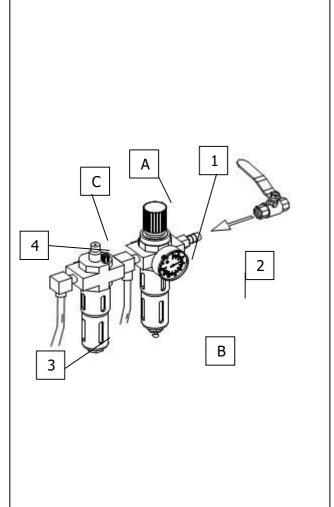
- Check the working pressure displayed by the manometer (1). This must correspond to the technical data.
- The working pressure can be adjusted with a pressure regulator (A).
- Pull the pressure regulator upwards to make adjustments.
- Turn the knob clockwise to increase the pressure in the machine, turn it counter clockwise to decrease.

#### OILER

- Check the oil level in the oil reservoir (3).
- Remove the oil reservoir.
- Now refill the tank with a pneumatic oil with a viscosity of SAE20.
- Check the injection quantity of the oil through the viewing glass (4).
- Generally, the screw must be closed completely in a clockwise direction and then opened again about 1/4 to 1/2 turn by turning it counter clockwise.

#### WATER SEPARATOR

- Check the water level in the separator (2).
- Water is drained when the valve (B) is opened.

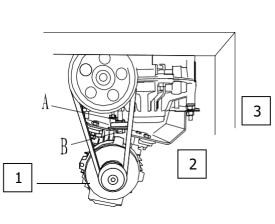


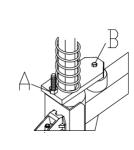
## V-BELT TENSIONING

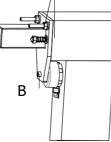
- The machine contains a motor (1) which drives the worm gear (3) using a V-belt (2).
- In order to tension, you must loosen the motor fixing screws.
- Next, loosen the counter nut (B)
- The V-belt is tensioned by turning the screw (A).
  - When pressed down (in the centre), the V-belt should give by a maximum of 8 mm.
- The counter nut (B) and all motor fixing screws must be tightened for final fixing.
- The final stage is to reassemble the cover.

## PNEUMATIC LOCKING OF THE MOUNTING HEAD

- The force and/or tension of the cylinder is set by tightening and/or loosening the screw (B).
- The automatic distance to the rim is set by tightening and/or loosening the nut (A).







Α

SWIVEL SPEED

 The swivel speed to the front and/or rear can be set by opening and/or closing the valves (A+B).

| <ul> <li>CLEANING THE VALVE BLOCK</li> <li>Separate the air pipes (H) from the valve block (V).</li> <li>Clean the valve block (V) using compressed air. The valve block may need to be replaced.</li> <li>Clean the silencers (S). If these are damaged, they must be replaced.</li> </ul>   | V S  |
|---|--|
| <ul> <li>SETTING THE MOUNTING HEAD</li> <li>Loosen the fixing screw (1) on the mounting head</li> <li>The angle of the mounting head to the rim can be set by tightening and/or loosening both grub screws (2)</li> <li>The bead guide (4) projects approx. 6-7 mm over the rim flange. The approach roller (3) contacts the rim flange.</li> <li>After setting, ensure that both grub screws (2) and the fixing screw (1) are secured again.</li> <li>CHECKING AND REFILLING THE GEAR OIL</li> </ul> | 2-3mm<br>2-3mm<br>2-3mm<br>2-3mm<br>3<br>3 |
| <ul> <li>Turn the clamping plate to a position from which it is easy to access the oil filler neck</li> <li>Now remove the protective cover</li> <li>Insert a flexible and transparent hose into the opening and stop when the hose contacts the base of the gear unit.</li> <li>Now, hold the end of the hose shut so that no more air can get in.</li> <li>Next, remove the hose. The oil level must be at least 25 mm.</li> <li>If necessary, refill with the required amount of oil.</li> </ul>   |  |

## 4.7 Disposal

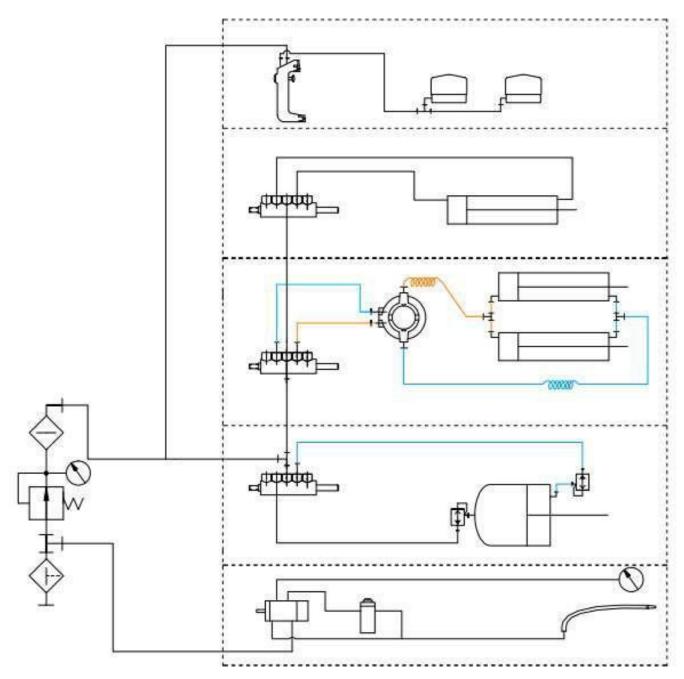
- Remove the air and power supply.
- Remove all non-metallic substances and store them in accordance with local regulations.
- Remove the oil from the machine and store it in accordance with local regulations.
- Recycle all metallic substances.



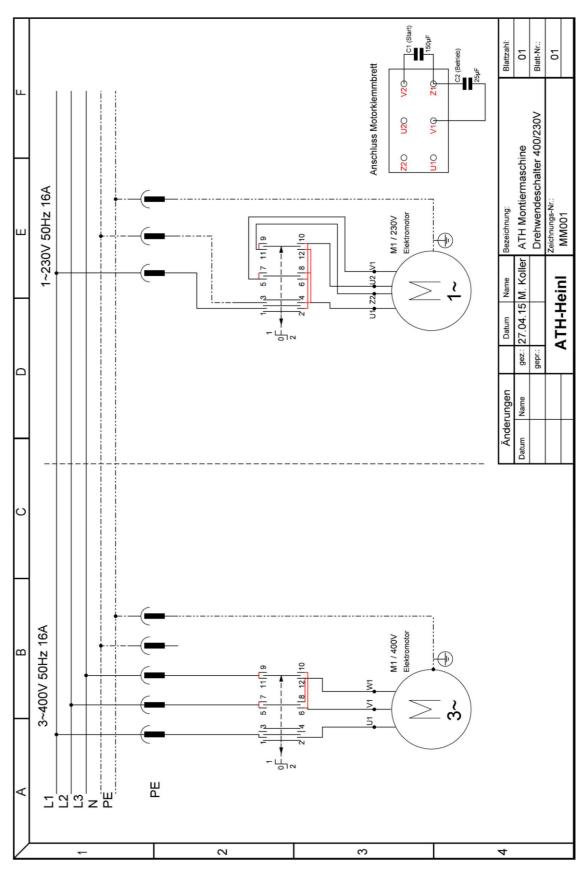
The machine contains some substances that can pollute the environment and cause harm to the human body if not handled correctly.

## 6.0 APPENDIX

## 6.1 Pneumatic circuit diagram



## 6.2 Electric circuit diagram



## **Hydraulic circuit diagram** Not relevant! 6.3

### 7.0 WARRANTY CARD

| Dealer address:               |                | Customer address:             |                   |  |  |
|-------------------------------|----------------|-------------------------------|-------------------|--|--|
| Company (or customer number): |                | Company (or customer number): |                   |  |  |
| Contact partner:              |                | Contact partner:              |                   |  |  |
| Street:                       |                | Street:                       |                   |  |  |
| Postcode & town:              |                | Postcode & town:              |                   |  |  |
| Tel. & Fax:                   |                | Tel. & Fax:                   |                   |  |  |
| Email:                        |                | Email:                        |                   |  |  |
|                               |                |                               |                   |  |  |
| Manufacturer & model:         | Serial number: | Year of construction:         | Reference number: |  |  |
| Message description:          |                |                               |                   |  |  |
|                               |                |                               |                   |  |  |
| Description of required sp    | -              | A                             | <b>.</b>          |  |  |
| Spare part:                   | Item number:   | Amour                         | 1C:               |  |  |

#### IMPORTANT:

Transport damages:

<u>Visible defect</u> (visible transport damage, note on freight forwarder delivery note, immediately send copy of the delivery note and photos to CAE)

Hidden defect (transport damage is only detected when unpacking the goods, send damage report with pictures to CAE within 24 hours)

Signature & Stamp

## 7.1 Scope of the Product Warranty

- Five years for the devices structure
- Power supplies, hydraulic cylinders and all other wear components such as turntables, rubber plates, ropes, chains, valves, switches, etc., are limited to one year under normal circumstances/use under warranty conditions.

The warranty does not extend to:

- Defects caused by normal wear and tear, misuse, transport damage, improper installation, tension or lack of required maintenance.
- Damage caused by neglect or failure to follow the instructions in this manual and/or other accompanying instructions.
- Normal wear and tear on parts requiring service to keep the product in safe working condition.
- Any component that has been damaged during transport.
- Other components that have not been explicitly listed but are considered to be general consumables.
- Water damage caused by e.g. rain, excessive humidity, corrosive environments or other contaminants.
- Blemishes that do not affect function.

#### WARRANTY IS NOT VALID, IF THE WARRANTY CARD WAS NOT SENT TO CAE.

Damage and malfunctions caused by non-compliance with maintenance and adjustment work (according to operating instructions and/or training), faulty electrical connections (rotating field, rated voltage, protection) or improper use (overload, outdoor installation, technical changes) are excluded from the warranty!

## 8.0 INSPECTION LOG



#### This inspection manual (including log) is an important part of the operating instructions and product. !!!PLEASE STORE CAREFULLY!!!

#### Check

The product must be checked after completion of the installation, handover, if necessary briefing and then regularly in accordance with the applicable regulations and legal provisions in the country of operation by a suitable and approved company or facility.

In the case of changes or extensions to the product type, an additional inspection book must be maintained and accepted.

#### **Scope of Inspection**

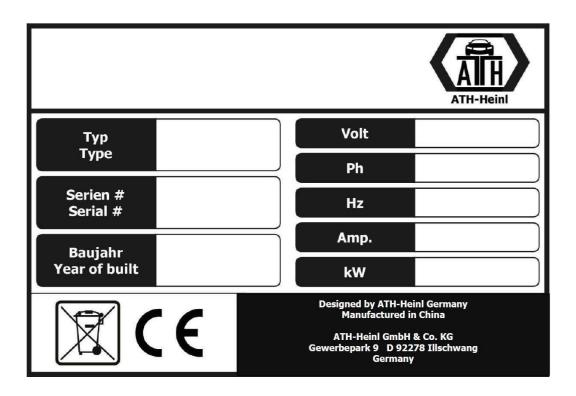
In addition to perfect function, cleanliness and maintenance requirements, it is vital that the safety-relevant components of the entire system are checked.

#### **Technical Data**

- Please refer to the enclosed operating instructions.

#### Nameplate

- Make a note of all the data below
- Manufacturer & type of mounting materials used:



#### 8.1 Installation and Handover Log

Site: Company: Street: Town: Country:

#### Device / system:

| Manufacturer: |  |
|---------------|--|
| Type / model: |  |
| Serial no.:   |  |
| Year of       |  |
| construction: |  |

Responsible retailer:

The above product has been assembled, checked for function and safety and put into operation. Installation was carried out by:

the operator

the technical expert

The operator confirms that the product type has been set up correctly, that he/she has read and understood all information contained in these

operating instructions and the log, and that he/she keeps this documentation accessible to the instructed operator at all times.

The operator confirms that after installation and commissioning by a person trained by the manufacturer or an authorised dealer (expert), instruction in the function, handling, safety-relevant specifications, maintenance and care of the machine has taken place, documents, information and specifications of the machine have been provided and the product is working properly.

#### **IMPORTANT NOTES:**

#### IF THE ABOVEMENTIONED POINTS ARE NOT FULFILLED, THE WARRANTY CLAIM IS EXCLUDED:

The warranty is only valid in conjunction with compliance and evidence of proper assembly, handover, and if necessary training, as well as yearly maintenance carried out by an expert authorised by the manufacturer. The interval between services must not exceed 12 months. In case of non-standard use or multi-shift or seasonal use, a bi-annual inspection and maintenance must be arranged.

Warranty claims are only recognised if all points in the log and operating instructions have been met, the claim is asserted immediately after detection and **this log is sent to the manufacturer along with the maintenance and service logs**.

Further specific information about the warranty, such as scope, requirements and specifications, are described in the operating instructions and must be observed.

Damages and complaints caused by improper handling; failure to maintain and service; use of unsuitable or unspecified assembly, operating, maintenance or service products; mechanical damage; intervening in the unit without consultation or by an unauthorised expert are excluded from the warranty. For systems that have not been installed by an authorised expert, the warranty is limited by agreement of the manufacturer to the provision of the necessary spare parts.

Expert name and company stamp if necessary, number and name of retailer

Date and expert signature

## 8.2 Inspection Plan

| Nameplate                              |  |  |
|--|--|--|
| Quick reference guide                  |  |  |
| Operating instructions                 |  |  |
| Safety label                           |  |  |
| Operation label                        |  |  |
| Other labels                           |  |  |
| Construction (deformation, cracks)     |  |  |
| Fixing dowels and stability            |  |  |
| Condition of concrete flor (cracks)    |  |  |
| Condition / general condition          |  |  |
| Condition / cleanliness                |  |  |
| Condition / care and sealing           |  |  |
| Condition / liquids                    |  |  |
| Condition / lubrication                |  |  |
| Condition / aggregate                  |  |  |
| Condition / drive                      |  |  |
| Condition / motor                      |  |  |
| Condition / transmission               |  |  |
| Condition / cylinder                   |  |  |
| Condition / valve                      |  |  |
| Condition / electrical control         |  |  |
| Condition / electric buttons           |  |  |
| Condition / electric switches          |  |  |
| Condition / electric lines             |  |  |
| Condition / hydraulic lines            |  |  |
| Condition / hydraulic screws           |  |  |
| Condition / pneumatic lines            |  |  |
| ,                                      |  |  |
| Condition / pneumatic screws           |  |  |
| Condition / tightness                  |  |  |
| Condition / bolts and bearings         |  |  |
| Condition / consumables                |  |  |
| Condition / covers                     |  |  |
| Condition / functions under load       |  |  |
| Condition / safety-relevant components |  |  |
| Condition / electrical safety device   |  |  |
| Condition / hydraulic safety device    |  |  |
| Condition / pneumatic safety device    |  |  |
| Condition / mechanical safety device   |  |  |
| Condition / functions under load       |  |  |
| Inspection sticker issued              |  |  |