



Transverse 610.440 GANC

Operating instructions

**Before transporting and using the machine,
please read the instructions thoroughly!**

Service and information

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7⁰⁰ – 16⁰⁰

Version:

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BOMAR, spol. s r.o. © – Subject to modifications and amendments.

EC Declaration of Conformity

1) We

BOMAR, spol. s r.o.
Těžební 1236/1
627 00 Brno, The Czech Republic
Id.no: 48908827

declare herewith,

that the following designated device based on its conception and construction as well as the design launched by us meets the relevant basic safety requirements of the decrees of the government. In the event of any device modification not approved by us this declaration shall lose its validity.

Name: **Band Saw**
Type range: **Transverse 610.440 GANC**
Serial number:
Manufacturer: **BOMAR, spol. s r.o., Těžební 1236/1, 627 00 Brno**

Product data

Determination: for cross dividing and cutting of rolled and towed bars and profiles made of steel, stainless steel, non-ferrous metals and plastics.

Description: stand, table, cutting unit with the saw band and drive, clamping device, cooling system, el. switch board with control panel.

Hydraulic YES ☒ NO ☐ Control system YES ☒ NO ☐

Technical data: Cutting rate 20–90 m.min⁻¹, cutting angle from 0° to 60°
Total dimensions in mm (l×w×h) 2635x1775x2005
Supply voltage 3×400 V, 50Hz, TN-C-S
Total power requirement 6,8 kVA, weight 1670 kg

The applied decrees of governments: **No. 176/2008 Coll.** (Directive 2006/42/EC)
No. 616/2006 Coll. (Directive 2004/108/EC)
No. 17/2003 Coll. (Directive 2006/95/EC)

The applied harmonized standards,

National standards and technical specifications: ČSN EN ISO 12 100-2:2004, ČSN EN 13 898+A1:2009, ČSN EN ISO 13857:2008, ČSN EN 982+A1:2008, ČSN EN 61000-6-2 ed. 2:2007, ČSN EN 61000-6-4:2002 ed.2:2007, ČSN EN 60204-1 ed.2:2007

The product is safe on condition of the common and determined usage.

The conformity judging was performed according to §12, par. 3, let. a), of the Law no. 22/1997 Coll. as amended

2) ²⁾ The declaration of conformity was carried out in the cooperation with the TÜV SÜD Czech s.r.o, Novodvorská 994, 142 21 Prague 4 – Czech Republic, Identification number: 63987121 - Inspection body no. 4002

The inspection certificate no. 01.122.123/09/07/02/0 was issued.

BOMAR, spol. s r.o.
Těžební 1236/1, 627 00 Brno
Czech Republic
IČO: 48908827
DIČ: CZ48908827



Alfred Pichlmann, Managing Director

Point of issue, datum

Name and function
of the responsible subject

Signature

1) Name, address and identification number of the subject issuing the conformity declaration (producer of importer)
2) The authorized or accredited body co-operating on the conformity judging



If the equipment is installed without safety equipment offered by BOMAR, spol. s r.o or its agents and used by the customer (or buyer) then EC declaration loses validity.
EC Declaration of conformity is valid only if customer (buyer) installed the BOMAR safety equipment with the machine or with some other with equivalent safety device in accordance with current applicable regulations and standards.
All machine elements and components that were built into the device by BOMAR, spol. s r.o have been declared "identical" to a safety device, as offered by BOMAR, spol. s r.o or its agents.

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1. **Safety notes**

The operating instructions must be read by the person, who keeps in touch with the machine before transportation, installation, using, servicing, reparation, stocking or removal!

The operating instructions include relevant information. The operator must familiarise himself with the install and operation, safety notes and machine servicing, because reliability and service life must be reached. The operating instructions must avoid risks, which are linked to work on the machine. Before transporting and using of the machine, please read the instructions thoroughly!

Attention!

*The operating instructions must be available at the machine!
Keep the operating instructions in good condition!*

1.1. Machine determination

The band saw **Transverse 610.440 GANC** is determined for cutting and shortening of rolled bars and drawn bars and profiles from steels, stainless steels, non-ferrous metals and plastics **with cutting angle** from 0° to 60°.

Combustible materials are excepted for cutting! Any other usage and operation outside this range are unauthorized and the manufacturer/supplier does not accept any responsibility for any damages resulting from such misuse. **The operator has full responsibility!**

The machine is equipped with safety and protective guarding for operator and machine protection. Nevertheless, this safety and protective guarding cannot prevent injury. Service personnel must read this chapter and comprehend it, before he starts to work on the machine. **Always keep instructions about work safety!** Service personnel must take into account other aspects of the risk, which refer to the ambient conditions and the material.

Attention!

Consider the safety signs on the machine. Do not remove or damage them!

1.2. Protective suit and personal safety

Wear tight fitting overalls! Loose fitting clothes may be caught with machine parts and cause serious injury.

Wear protective gloves! Material cuts and saw band have sharp edges and may cause serious injuries.

Attention!

*Gloves you can use only at working material replacement (saw band)! The machine and accessories must be inactive!
If the machine is running, you must not wear gloves! It is dangerous, because some parts of the machine can catch gloves!*

Wear protective shoes with non-skid soles! The unsuitable shoes may cause balance loss and following injury. Falling work pieces may cause serious injuries too.

Wear protective goggles! Chips and cooling liquid may damage your eyes.

Always wear ear protections! Most of the machines emit up to 80 dB and may damage your hearing.

Do not wear jewellery and always tie back long hair! Moving machine parts can catch jewellery or loose hair and may cause serious injuries.

Operate the machine only when you are fit enough to work. Illnesses or injuries diminish concentration. Avoid machine work, which may compromise the safety of you and your colleagues!

1.3. Safety notes for machine operator

Attention!

*Machine can be operated by person older than 18 years!
Machine can be operated only person physically and mentally fit for this activity*

Machine can be operated only by one person. Machine operator is responsible for presence of other persons by the machine.

Keep instructions and orders about work safety!

Read the operating instructions, before you start to work on the machine! Keep the operating instructions in good condition!

Close covers before the machine starting and check, if the covers are not damaged. Damaged covers must be repaired or changed. Do not start the machine, if the cover is removed! Check, if the electric cables are not damaged.

Attention!

Do not connect the machine to electricity if the covers are removed. Do not touch the electrical equipment.

- Do not hold the material for clamping to the vice and for cutting!
- Do not operate with the buttons and the switches on the control panel, when you have gloves!
- For machine starting take care, that there is nobody in the working area of the machine (it means in the working area of the vice, the saw band, the saw arm etc.).
- In no circumstances touch the rotating elements.
- Work on the machine only when the machine is in good condition!
- Check at least once in a shift, if the machine is not damaged. If the machine is damaged, you must bring the machine in order and you must inform your superior!
- Keep your working area clean! Ensure sufficient lighting in the working area.
- Take off the spilt water or the oil from the floor and dry it. Do not touch the cooling liquid with bare hands! Do not set the nozzle of the cooling liquid, when the machine is started on
- Do not remove the chips from the working area of the machine, when the machine is started on!
- Do not use the compressed air for the machine cleaning or for the chips removing!
- Use the protective instruments for chips removal!

1.4. Safety notes for the servicing and repairs

Attention!

Only a qualified professional can carry out the servicing and repairs of the electric equipment! Take special care during the work with electrical equipment. High voltage shock can have fatal consequences! Always keep notes about work safety! Otherwise, there is possibility of heavy injury!

Switch off the main switch and lock it, before you start service work! Otherwise, there is possibility of hazardous machine starting.

Only qualified person can do the servicing and repairs. For parts changing, use only parts, which are identical with the originals. Otherwise, there is possibility of health hazard. Use only recommended type of the hydraulic oils and oils and lubricants!

Do not remove or do not lock the limit switches or safety equipments! Any use of the saw, accessories or machine parts other than that intended by the BOMAR, spol. s r.o. company is not permitted. The guarantee on this product will be afterward lost and BOMAR, spol. s r.o. takes no responsibility for caused damages.

1.5. Safety notes for the servicing and repairs on hydraulic unit

Compliance with the the principles of cleanliness is basic requirement for trouble-free operation of hydraulic equipment. Hydraulic components are products made with high accuracy, and any contamination leads to a reduction lifetime or even malfunction. The consequences are very difficult to remove and expensive.

Always use clean tools. Parts and fasteners, which are part of a hydraulic circuit, never put away the dirty surface. The best cleaning agent is crepe paper, because the fibers of the cleaning cloths can also cause malfunction.

Protective cap from the threaded chamber remove just before the assembly of the unit.

Hoses and pipes before mounting flush with gasoline or other cleaning agent and blow compressed air.

All fittings must be properly tightened. However, do not raw power.

1.6. Safety machine accessories

The machine is equipped with safety accessories. It protects the operator from injuries and the machine before damage. The safety accessories are blocking accessories, emergency switches and covers. Check once in a week the function of the safety accessories. If the safety accessories are functionless, you must stop work and repair or change the safety accessories.

Enhanced risk!

Do not come into or intervene in the cutting area. Otherwise, there is possibility of heavy injury.

1.6.1. Total Stop

TOTAL STOP button is used for emergency switching – off the machine in case defect or health hazard. By pressing **TOTAL STOP** button is interrupted the supply of the electrical power.

If any damages or fault appears, immediately press TOTAL STOP button! Release the pressing button is possible by twisting of the upper part of the button.



1.6.2. Saw arm cover

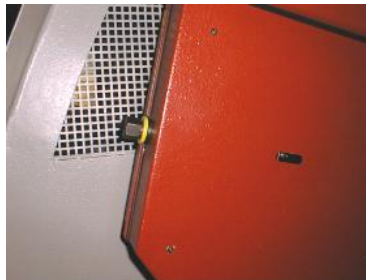
If the cover is opened during operation, the limit switch is opened and the band saw is stopped. The band saw is not possible to start in set mode



The band saw is stated to the operation, when the cover is closed!

1.6.3. Saw band stretching and rupture inspection

This device checks the saw band tension and causes immediate machine stop if the band incidentally ruptures



The device includes a limit switch. Its adjustment is described in chapter „Servicing and adjusting“. Check the switch carefully and periodically – adjust it if necessary

1.6.4. Saw band cover

This protective cover envelops the saw band in the area from guiding cube to the arm.



Never switch the saw band on if this cover is not mounted!

1.6.5. Feeding vice cover

This protective cover avoids the service worker in entrance to the feeding vice during operation and it saves the service worker before injury



1.7. Safety notes for the cooling

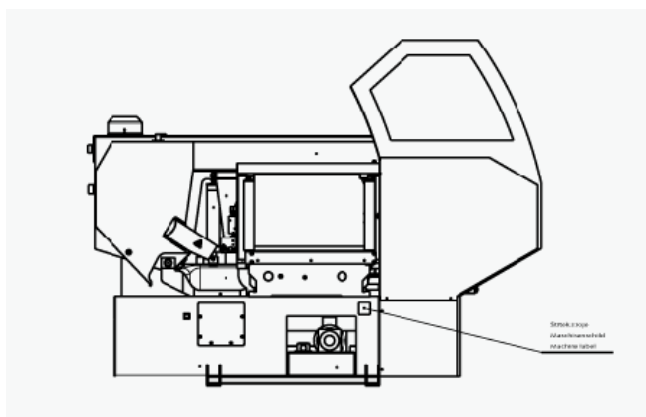
Attention!

- *When handling cooling agents always wear hazardous fluid-proof gloves!*
- *Wear protective goggles!*
- *Cooling liquid can get in contact with your eyes and may cause permanent severe injuries*

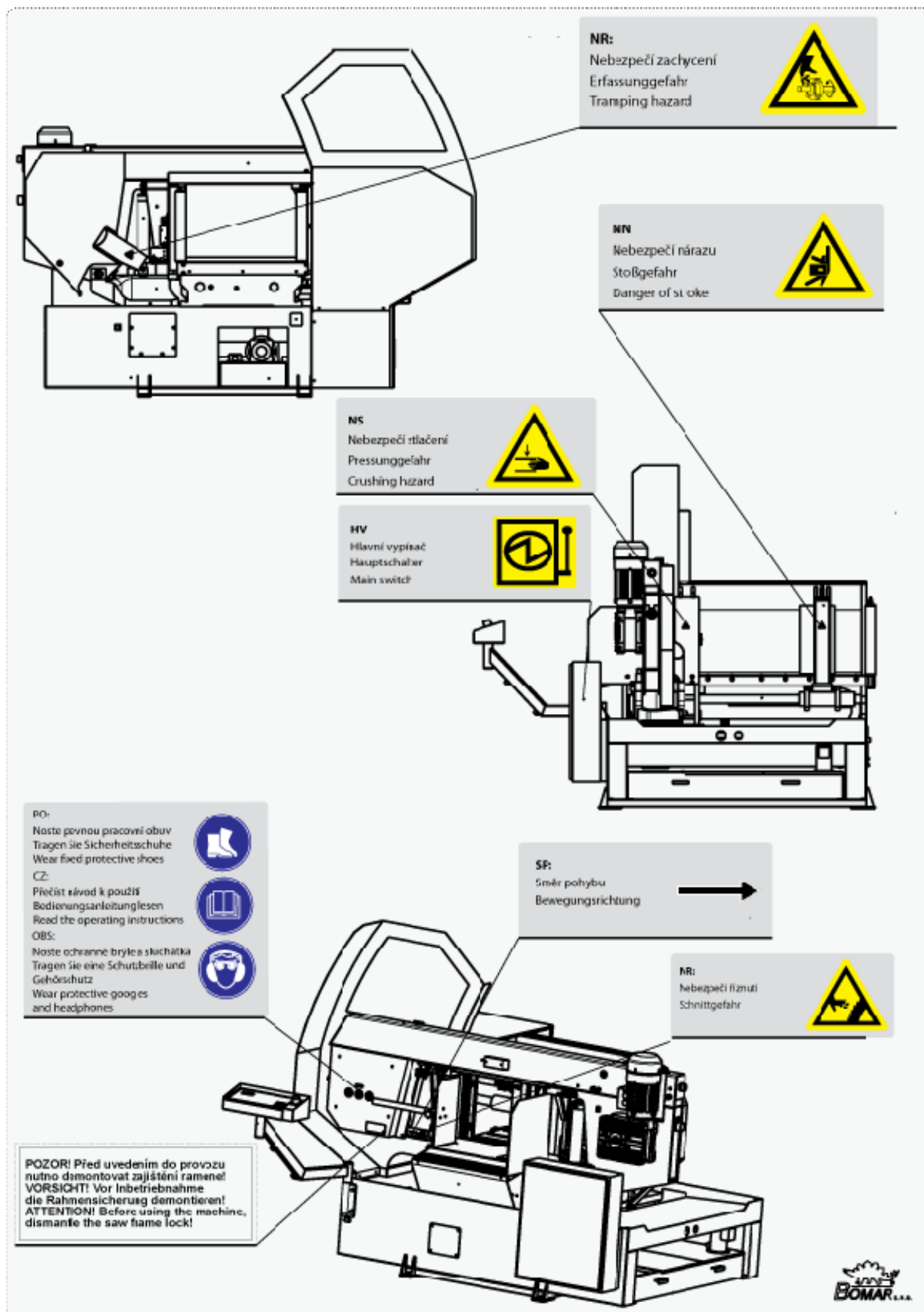
1.7.1. Instructions for first help

1. Pull off and safely remove polluted, soaked clothing.
2. For breathing, go out in the fresh air or look for first aid treatment.
3. Wash with water or use crèmes for contact with the skin.
4. Flush with water for eyes and look for first aid treatment.
5. For swallowing, drink a lot of water and induce vomiting. Look for medical help.

**1.8. Umístění štítku stroje /
Maschinenschild position /
Position of machine label**

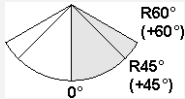


1.9. Umístění bezpečnostních značek / Verteilung der Sicherheitszeichen / Position of safety symbols

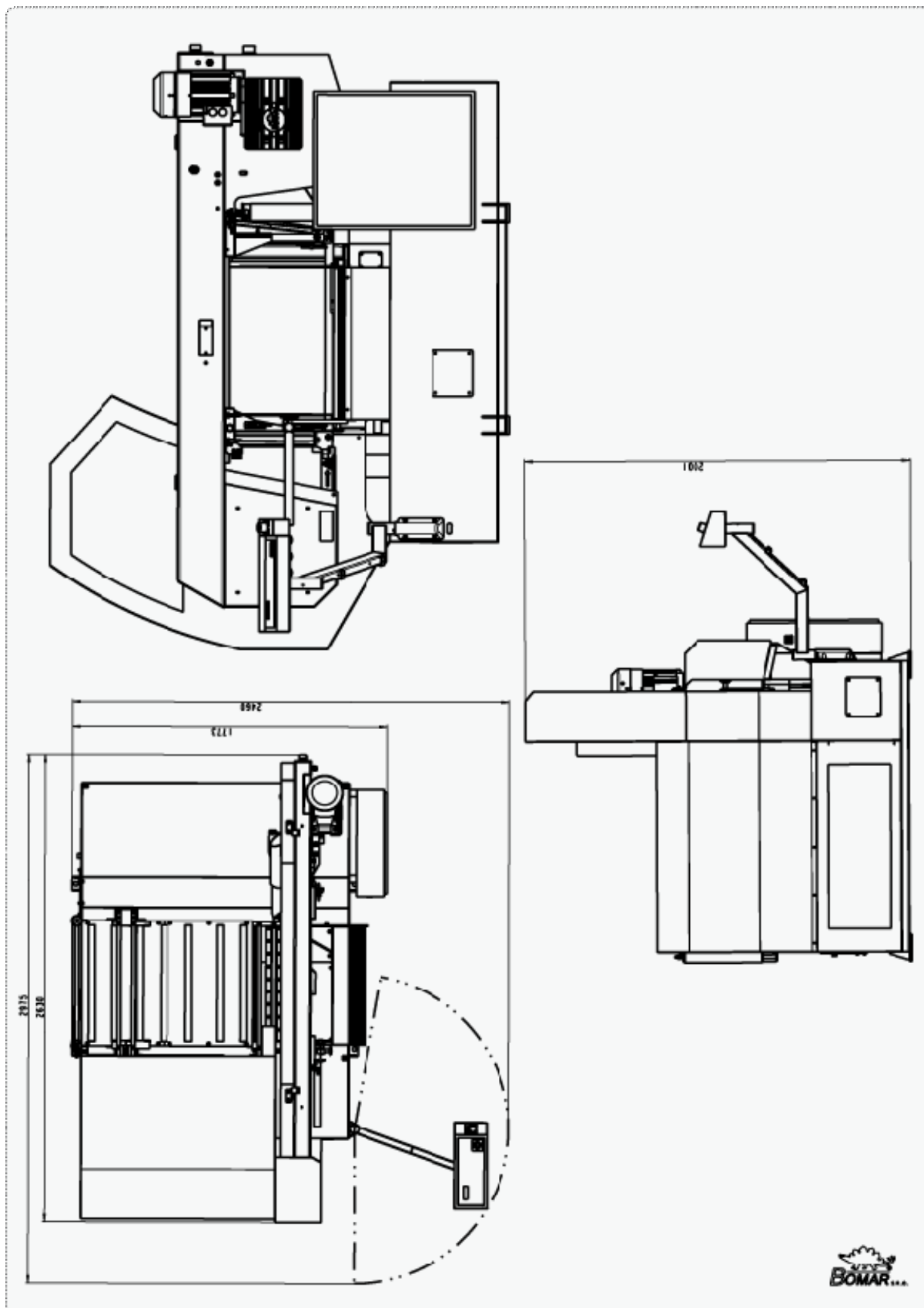


2. **Machine documentation**

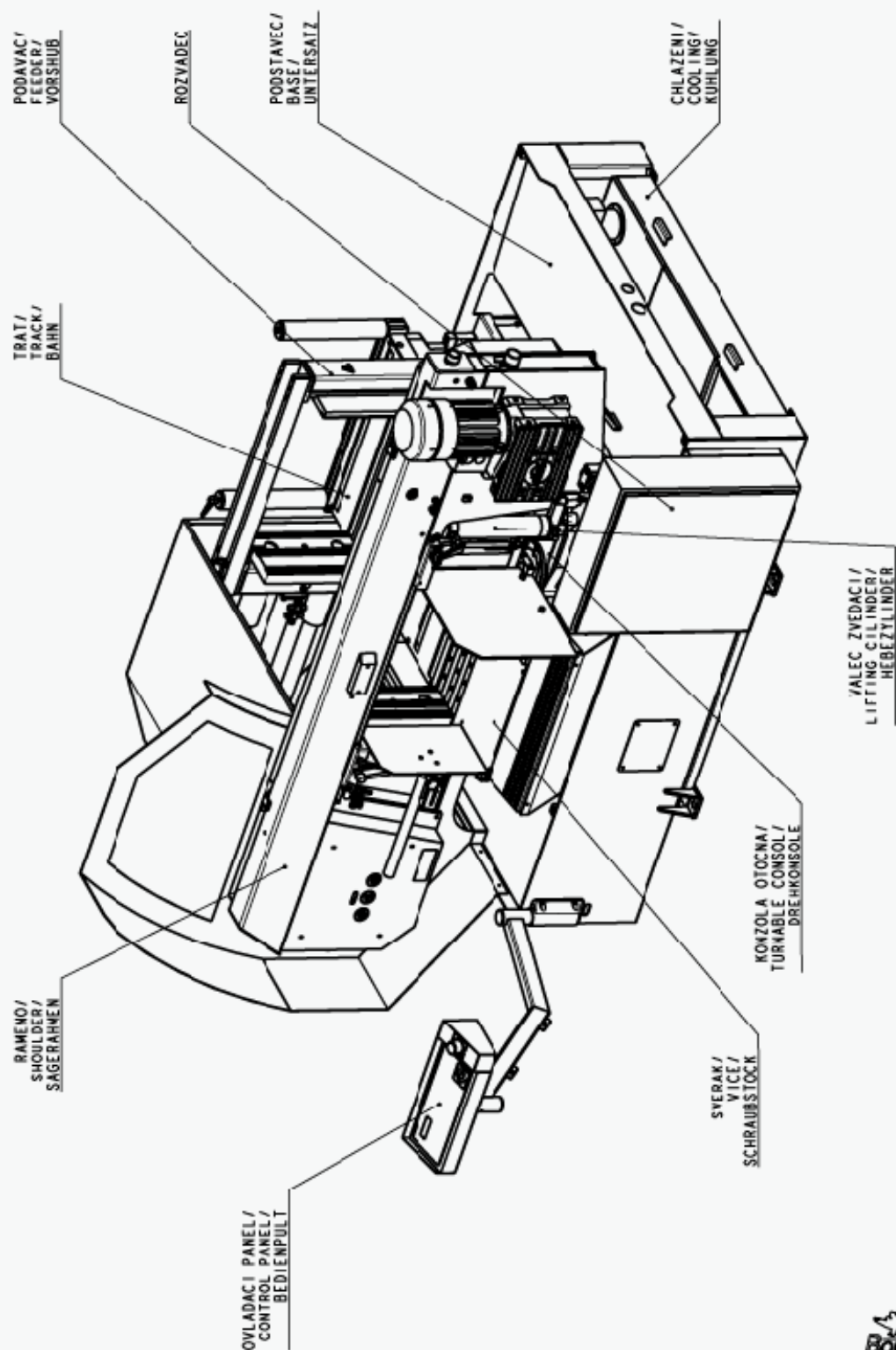
2.1. Technická data / Technische Daten / Technical data

Hmotnost stroje / Maschinengewicht / Machine weight:				
• Hmotnost / Gewicht / Weight	1670 kg			
Rozměry stroje / Maschinengröße / Machine size :				
• Délka / Länge / Lenght	2635 mm			
• Šířka / Breite / Width	1775 mm			
• Výška / Höhe / Height	2005 mm			
Elektrické vybavení / Elektrische Ausrüstung / Electical equipment:				
• Napájení / Versorgungsspannun / Supply voltage	~3 x 400 V, 50Hz, TN-C-S			
• Příkon / Gesamtschlusswert / Total Input	6,8 kW			
• Max.jištění / Max. Vorschaltsicherung / Max. Fuse	16 A			
• Krytí / Schutzart / Protection	IP 54			
Akustický tlak / Schalldruckpegel / Acoustic pressure:				
• Transverse 610.440 GANC	L _{Aeqv} = 76,3 dB			
Pohon / Atrieb / Drive:				
• Typ / Typ / Type	MDERA-XXX32J			
• Napájení / Versorgungsspannung / Supply voltage	~3 x 400V, 50Hz			
• Výkon / Leistung / Output	3kW			
• Jmenovité otáčky / Motornenndrehzahl / Nominal speed	1420 min ⁻¹			
Ostraňovač třísek/ : Entsorgen der Späne / Chips disposal				
• Výkon / Leistung / Output	0,12 kW			
• Jmenovité otáčky / Motornenndrehzahl / Nominal speed	1340 min ⁻¹			
Hydraulické zařízení / Kühlmiteleinrichtung / Hydraulic equipment:				
• Výkon / Leistung / Output	1,1 kW			
• Jmenovité otáčky / Motornenndrehzahl / Nominal speed	1395 min ⁻¹			
Chladicí zařízení / Kühlmiteleinrichtung / Cooling equipment:				
• Výkon / Leistung / Output	0,09 kW			
• Obsah nádrže / Volumen vom Kühlmittel / Capacity	20 dm ³			
Rozměr pásu / Sägebanddimension / Band size:				
5200×34(32)×1,1 mm				
Řezná rychlost / Schnittgeschwindigkeit / Cutting speed:				
20–90 m/min.				
Řezné rozsahy / Schnittbereiche / Cutting size:				
				
0°	   			
Ø440 mm	610×440 mm	610×440 mm	Ø440 mm	
R 45°	Ø420 mm	510×100mm	420×440 mm	Ø420 mm
R 60°	Ø265 mm	340×100 mm	265×440 mm	Ø265 mm
Level of acoustic pressure:				
Equivalent level of acoustic pressure A (noise) at operator position are L _{Aeqv} =76,3 dB. Mentioned values are levels of emission which doesn't have to represent safe levels. Factors which influence real level of acoustic pressure on machine operator are: working place characteristics, cut material, saw band. These factors have significantly influence on acoustic pressure.				

2.2. Rozměrové schéma / Aufstellzeichnung / Installation diagram



2.3. Popis / Beschreibung / Description



2.4. Transportation and stocking

2.4.1. Conditions for transportation and stocking

Keep recommendations for the manufacturers for transportation and stocking! If the recommendations are not kept, damage can occur to the machine.

- Don't use a forklift truck for handling the machine, if you do not have license for it!
- Don't move under suspended loads! Fault in lifting device may cause serious injury.
- Keep a safe distance from the machine during the transport.
- Temperature of the air from -25°C to 55°C , for a *short term* (max. 24 hours) temperature of the air until 70°C
- Do not expose the machine to radiation (for example microwave radiation, ultraviolet radiation, laser radiation, x-ray radiation). Radiation can cause problems with the machine function and deteriorating condition of the isolation.
- Take measures, to prevent damage by dampness, by vibrations and by shakes.

2.4.2. Transport and stocking preparations

Close the vice and thoroughly oil all blank surfaces.

Lower the saw frame to the lowest position.

Make sure to empty the machine of all traces of the cooling agent.

Fasten all loose parts securely to the machine.

Pack and wrap the control desk securely to avoid damage during transport.

Fix the stickers stating the minimum approximate machine weight to at least five well visible places.

2.4.3. Transport and stocking

Handle the machine only with the hand pallet truck or the forklift truck! Use the lifters of the truck according to the schema (num. 1). If the hand pallet truck or the forklift truck is not available it is possible to use suspension cables and the crane. The machine is equipped with screw threads M20 for fixing the shackles (num. 2). Use only shackles with appropriate capacity.

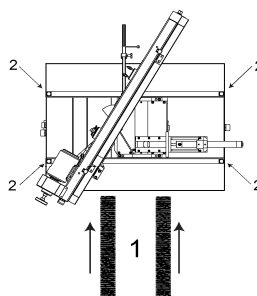
Make sure that the hand pallet truck; the forklift truck or the crane and the suspension cables had sufficient capacity.

Make sure that the van or the trailer had sufficient capacity.

The machine must be secured during transportation.

Screw on the palette to the floor of the van or the trailer.

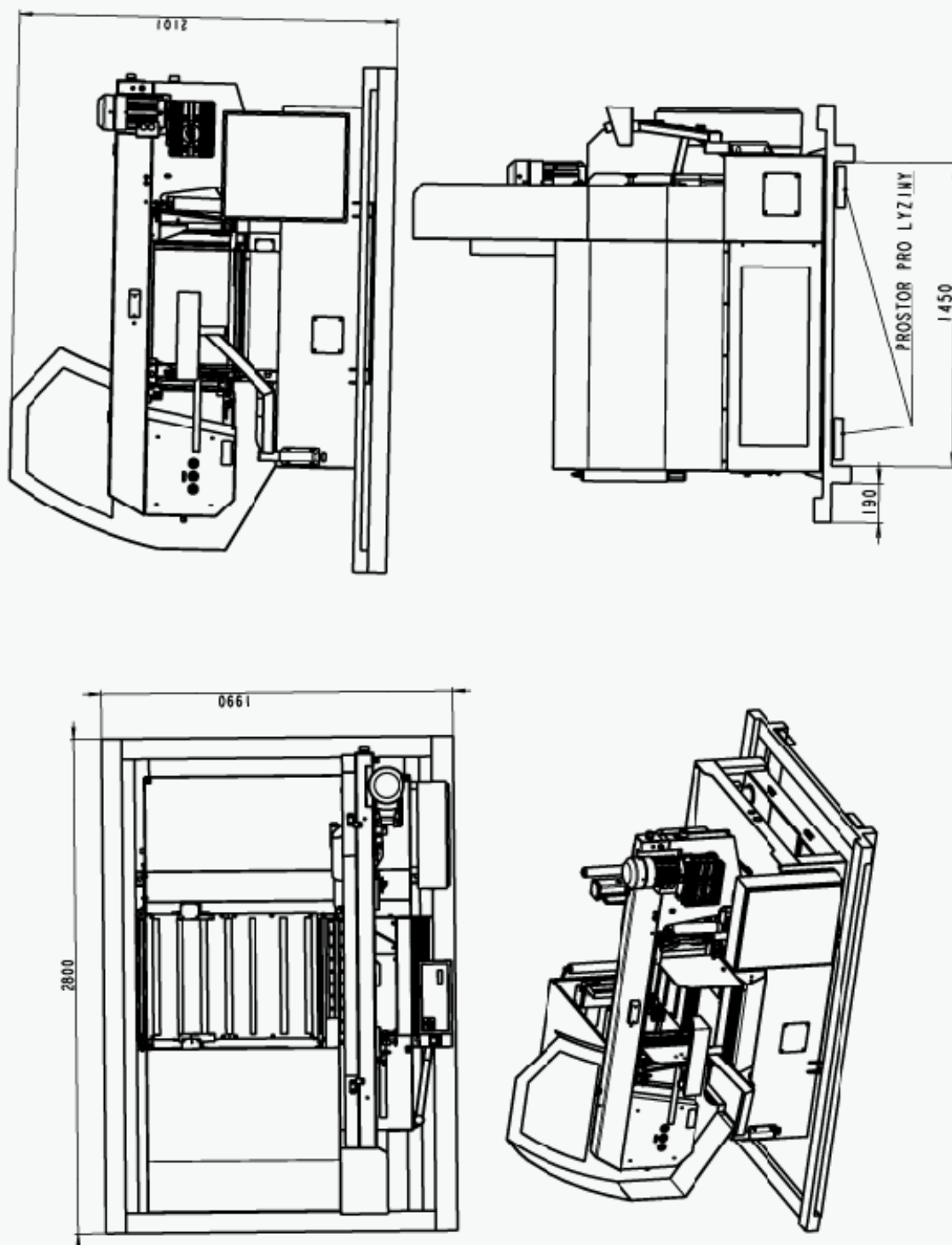
Be careful that the machine is not damaged during transportation. The machine must be secured during transportation...



It is forbidden to handle the machine any other way (for example by, lifting by the saw frame of the band saw), than it is written in this operating instructions, the machine can be damaged!

2.4.4. Transportní schéma / Transport schema / Transport scheme

Dokumentace stroje
Dokumentation der Maschinen
Machine documentation



2.5. Activation

2.5.1. Machine working conditions

Keep the conditions of the manufacturer for machine operating! If recommendations are not kept, damage can occur to the machine.

The manufacturer warrants the correct function of the machine for these conditions:

- At temperature air from **5°C to 40°C**, the temperature average during 24 hours must **not exceed over 35°C**.
- At relative dampness of the air in the extend from 30% to 95% (not concentrate)
- Altitude lower than 1000 metres.
- Do not expose the machine to the radiation (for example microwave radiation, ultra-violet radiation, laser radiation, x-ray radiation). Radiation can cause problems with the machine function and deteriorating condition of the isolation.

2.5.2. Machine installing and levelling

Check the floor supporting capacity before machine installing. If the floor capacity does not agree with requirements, you must prepare the necessary base for the machine.

Minimal requirement:

machine weight – **Transverse 610.440 GANC – 1670 kg**

+ weight of accessories

+ maximum weight of material

- The machine must be levelled at the horizontal position. All feet of the machine must touch with the floor after levelling
- The machine must be levelled by means of the calibrated spirit level. Spirit level is put on the vice area. Set the roller conveyors according to the spirit level.
- For machine levelling, take care that there is sufficient available space for operation, repair work, servicing of the machine and handling the material..
- The machine including appended parts and accessories must be visible from the place of operation.

2.5.3. Machine disposal after lifetime

Blown out all service fluids (cooling liquid, hydraulic oil) into designated reservoir. Dismantle machine into separate parts and dispose them in accordance with valid directives.

2.5.4. First run of the power pack

Before the first run check:

- The direction of the Pump, while run the power pack for max. 2seconds.
- The cooling fan of the motor has to rotate in the same direction as the arrow on the top of the motor cowling indicates.
- In case of wrong rotational direction, the electrical phase in the connection box is to be changed. This check is required after every disconnection from the power source
- Wiring matches with electrical and hydraulic diagrams
- the electric motors (pump and cooler) are properly connected and have the prescribed rotation
- the hydraulic accumulator with nitrogen gas to the specified value
- aux. elements work right (thermometer, level gauge, heater)

First run (Attention – working pressure on securing valve is set by producer in accoring the hydraulic diagram):

- In the short intervals activate an electric pump
- check for leaks and noise
- Bleed the hydraulic circuit
- if possible, test the circuit function with minimum load
- test the electrical equipment
- during operation monitor measuring equipment, noise, height and temperature of oil in the tank
- During this time a careful bleeding off for the whole hydraulic system is necessary. In case there is no bleeder port, the power pack will bleed itself after a while via the air breather on the tank or the return line filter.

After multiple start-up

2.5.5. Filling the reservoir with hydraulic oil

Oil regulations and recommendations of the manufacturer in the technical documentation (appendix) are to be carefully observed. For standard power packs we recommend the oiltype OH-HM32 (DIN 51524) of all known oil manufacturers.

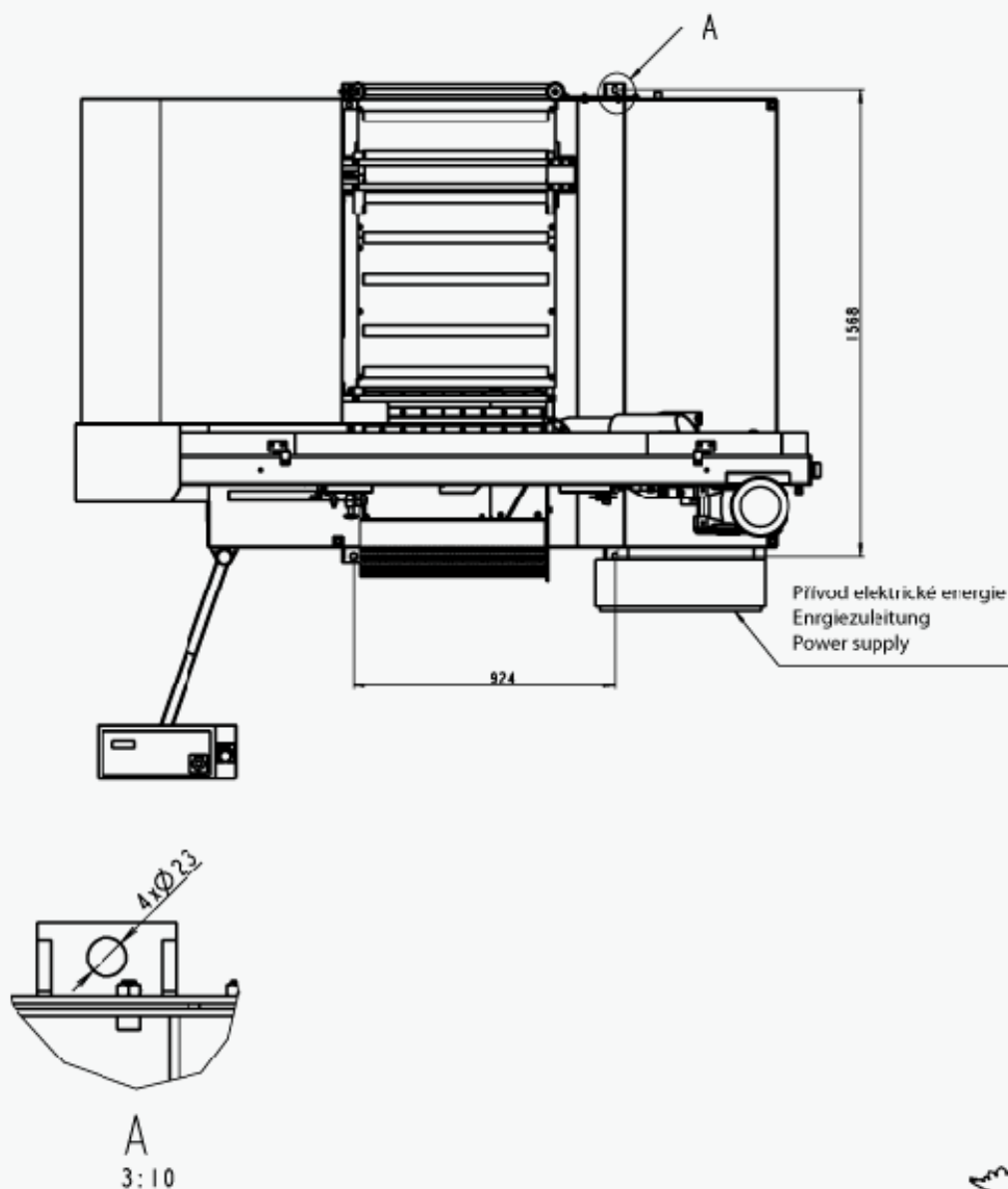
Power packs have to be filled up with clean, pre-filtered oil! The purity of the hydraulic fluid must correspond to the class 10 NAS 1638 (reachable with filter $\beta = 75$)!

Filling from container, such as barrels, buckets, etc. is not recommended or permitted!

The maximum oil level will be shown on the upper marking at the dipstick or the sight level glass. Overfilling has to be prevent. The maximum filling rate of 15 l/min shouldn't be exceed.

Oil type	Kinematic viscosity ν in mm^2/s in relationship to the fluid temperatur					Freezing point
	0°C	20°C	40°C	60°C	80°C	°C
OH-HM 32	220	100	32	15	7	-40
OH-HM 46	400	170	46	18	11	-30
OH-HM 68	700	170	68	26	14	-28
OH-HV 32	180	67	32	17	11	-40
OH-HV 46	350	110	46	25	14	-36

2.5.6. Kotevní plan / Verankerungsplan / Grounding plan



Kotvicí materiál / Verankerungsmaterial / Grouding material

- 4xChemická hmoždina / Chemisch dübel / Chemical plug – $\varnothing$ 8 mm
- Vrtáno do hloubky / In die Tiefe gebohrt / Drilled to – 140 mm
- Šrouby / Schraube / Screws – 4xM16

- Šrouby podložit deskami o min. rozměrech P10x100-100
- Die Schrauben mit Platten mit Minimaldimensionen P10x100-100 unterlegen
- Screw must be bottomed with plates (min. dimensions P10x100-100)

Požadavky na rovinnost podlahy / Anforderungen an die Bodenebenheit / Requirements for floor flatness

± 10 mm / "

2.6. Electrical connection

Attention!

Only a qualified professional must carry out the servicing and repairs of the electric equipment! Take special care during work with electrical equipment. High voltage shock can have fatal consequences! Always keep notes about work safety.

Electrical parameters of the machine:

- Service voltage: $\sim 3 \times 400 \text{ V}$, 50 Hz, TN-C-S
- Total input / Max. fuse: 6,8 kW / 16 A

Before connecting switch off the main switch of the power supply circuit for the machine and ensure dry place when doing connecting works!

Service voltage must agree with the line voltage! Crosscut of the supply line must respond with rated current for max. machine load.

Note:

The values of the crosscut of the conductor and the rated current are in the norms.

Note:

The socket with the fork can be used only at the machines with the rated current less than 16 A and total input less than 3 kW.

In case the machine is connected with a direct connection, an extra main switch must be added which can be locked in zero position.

Attention!

In this case the extra main switch becomes primary and the main switch on the machine has only secondary function.

2.6.1. Check the direction of the saw band



After the machine has been successfully connected, briefly switch on the machine and put the driving engine of the band in the running position. The direction must be in accordance with the arrow direction on the saw band cover. In case the direction of the saw band does not match, two phases at the terminal strip must be switched.

2.7. Filling of the cooling system

Prepare the mixture of the water and the cooling liquid. Keep the concentration specified by manufacturer. Shift away the cover from the drainage hole. Fill the mixture of the water and the cooling liquid to the tank of the cooling system. Area of the tank for the cooling liquid is discovered from the chapter *Technical data*.



Attention!
 When you connect the machine to the electrical network observe correct connection of all phases!
ENGINE IN IN HYDRAULIC AGGREGATE CANNOT BE OPERATED WITH REVERSE TURNING MORE THEN 10 SECONDS!!!






Let the drainage hole opened and with the sieve during operation, because it secures the right work of the cooling system. Filling the tank with the cooling liquid, take care

Note:
 If machine is equiped with microniser, fill microniser with prescribed cooling liquid. This made the Microniser ready for use.

that the liquid does not drip out of the tank and the tank does not overflowed.

2.8. Check machine function

Check, if the machine or some parts of the machine were not damaged during transport.

Check, if covers are installed and functional. Check by means of the Tenzomat if the saw band is correctly stretched. If it is necessary, you can stretch the saw band according to chapter *Selection and replacement of the saw band*. Values of the saw band stretching are on the Tenzomat. Switch on the main switch and check the motors and systems (saw band drive, hydraulic pump, cooling pump, chips conveyor).

Open and close the main vice. Turn the saw frame of the band saw from one outer position to other outer position. Raise the saw frame to the top position and drop the saw frame to the lowest position.

Start the machine with the cooling pump and let it run without load until the cooling system will be filled with cooling liquid. As soon as the cooling liquid starts to escape from the nozzles of the cooling system, the cooling system is ready for the operation. Carry one cycle of cutting without material. Check, if the machine runs with no irregularities. If all machine functions are right, the machine is ready for operation..

2.9. Saw band

Refit the saw band cover only after you have installed and tightened the saw band.

2.9.1. Saw band size

5200×34(32)×1,1 mm

2.9.2. Selection of the saw band tooth system

The manufacturers provide the saw bands with constant and variable tooth system. The important factor for selection of the tooth system is length of the cutting canal with respect to the size of the product

1. *Constant tooth system* – the saw band has parallel tooth pitch all over length. This way is suitable for cutting of solid material.

BOMAR recommended Variable tooth system for band saw.

2. *Variable tooth system* – tooth pitch is variable. Variable tooth system is used for profiled materials and bundle cutting. Variable tooth pitch lowers vibration of the saw band, increases service life of the saw band and quality of the cutting area.

In tables, there are advised type of the tooth system depending on sizes and form of the cutting material.



Footnotes:

Z₊Z – teeth number on one inch S – tooth with zero angle of the teeth K – tooth with positive angle of the teeth

Examples of the tooth system marking:

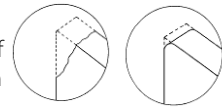
32 S – number „32“ means 32 teeth on one inch (that means constant tooth system), letter „S“ marks teeth with zero angle of the tooth.

4–6 K – number „4–6“ means 4 till 6 teeth on one inch (that means variable tooth system); letter „K“ marks teeth with positive angle of the teeth.

2.9.3. Saw band running-in

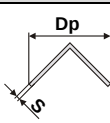
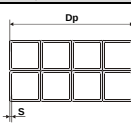
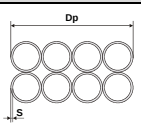
Running-in: Cut the material with the frame lowering reduced to 50% only. When vibrations occur increase or decrease the band speed.

When cutting small pieces run the band until approximately 300 cm² of material has been cut. When cutting large pieces run the band for 15 minutes approximately. When the band has been run, increase the lowering-speed to normal speed. The running in of the saw band avoids micro-breaks on the cutting edges of new saw band ensuing from first excessive stress. This would decrease service life substantially. The optimal running in of the saw band produces ideal rounded cutting edges and therefore the conditions for an optimal service life.

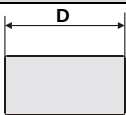
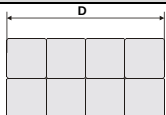
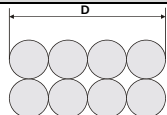


Note: Run regrinding saw bands too.

Tables for teeth selection

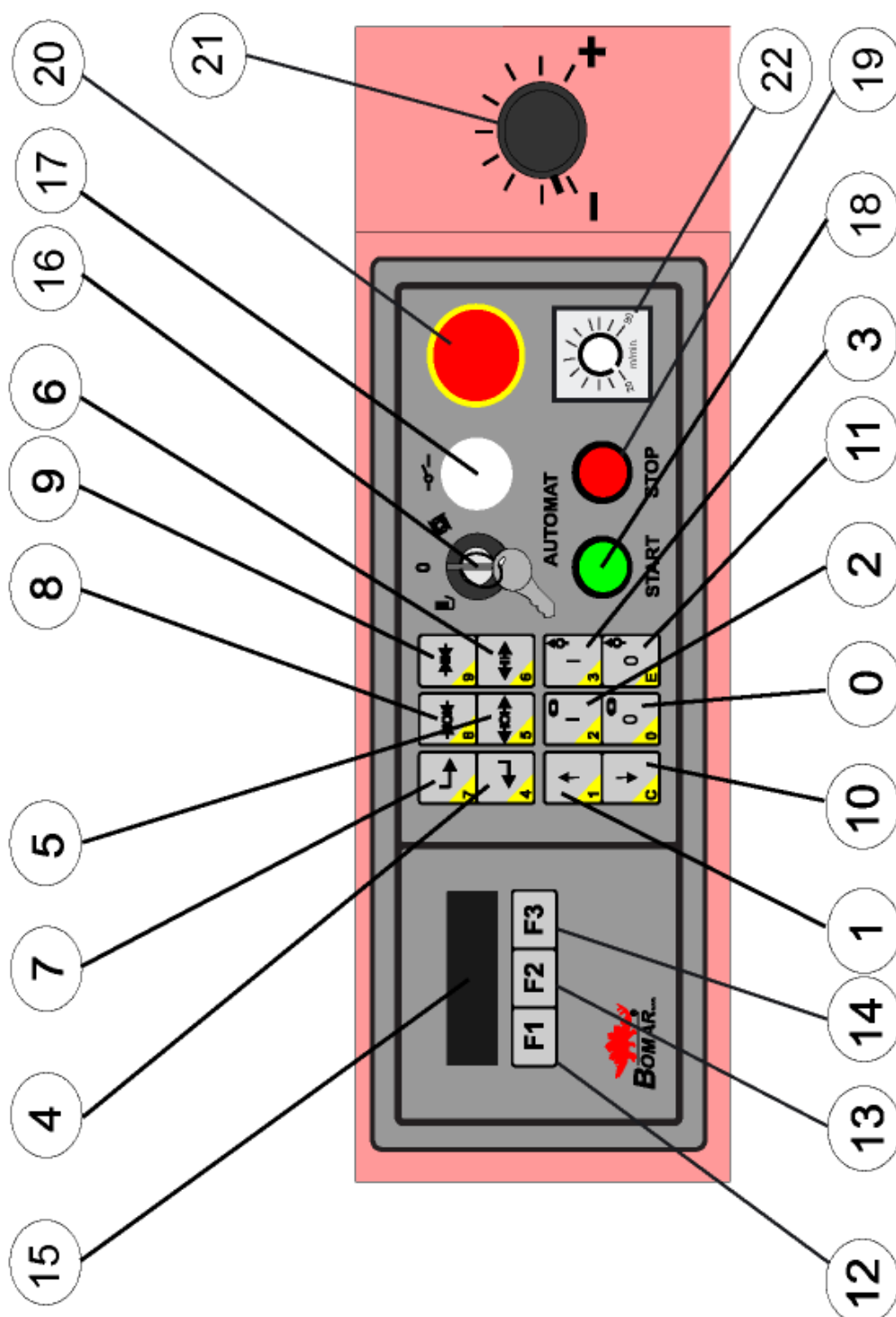
SHAPED MATERIAL ($D_p, S = \text{mm}$)						
						
Note: Table shows tooth system selection for cutting one piece of the profile. For cutting of more pieces of the profiles (bundle), you must think of the size of the wall as double size of the wall of one profile (that means, size „S“ equates to 2xS). In table, there are tooth systems constant and variable.						
Size of the wall S [mm]	Tooth system (Z_p, Z) Outer diameter of the profile D_p [mm]					
	20	40	60	80	100	120
2	32 S	24 S	18 S	18 S	14 S	14 S
3	24 S	18 S	14 S	14 S	10–14 S	10–14 S
4	24 S	14 S	10–14 S	10–14 S	8–12 S	8–12 S
5	18 S	10–14 S	10–14 S	8–12 S	6–10 S	6–10 S
6	18 S	10–14 S	8–12 S	8–12 S	6–10 S	6–10 S
8	14 S	8–12 S	6–10 S	6–10 S	5–8 S	5–8 S
10	-	6–10 S	6–10 S	5–8 S	5–8 S	5–8 S
12	-	6–10 S	5–8 S	5–8 S	4–6 K	4–6 K
15	-	5–8 S	5–8 S	4–6 K	4–6 K	4–6 K
20	-	-	4–6 K	4–6 K	4–6 K	3–4 K
30	-	-	-	3–4 K	3–4 K	3–4 K
50	-	-	-	-	-	3–4 K

Size of the wall S [mm]	Tooth system (Z_p, Z) Outer diameter of the profile D_p [mm]					
	150	200	300	500	750	1000
2	10–14 S	10–14 S	8–12 S	6–10 S	5–8 S	5–8 S
3	8–12 S	8–12 S	6–10 S	5–8 S	4–6 K	4–6 K
4	6–10 S	6–10 S	5–8 S	4–6 K	4–6 K	4–6 K
5	6–10 S	5–8 S	4–6 K	4–6 K	4–6 K	3–4 K
6	5–8 S	5–8 S	4–6 K	4–6 K	3–4 K	3–4 K
8	5–8 S	4–6 K	4–6 K	3–4 K	3–4 K	3–4 K
10	4–6 K	4–6 K	4–6 K	3–4 K	3–4 K	2–3 K
12	4–6 K	4–6 K	3–4 K	3–4 K	2–3 K	2–3 K
15	4–6 K	3–4 K	3–4 K	2–3 K	2–3 K	2–3 K
20	3–4 K	3–4 K	2–3 K	2–3 K	2–3 K	2–3 K
30	3–4 K	2–3 K	2–3 K	2–3 K	1,4–2 K	1,4–2 K
50	2–3 K	2–3 K	2–3 K	1,4–2 K	1,4–2 K	1,4–2 K
75	-	2–3 K	1,4–2 K	1,4–2 K	1,4–2 K	0,75–1,25 K
100	-	-	1,4–2 K	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K
150	-	-	-	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K
200	-	-	-	0,75–1,25 K	0,75–1,25 K	0,75–1,25 K

SOLID MATERIAL ($D = \text{mm}$)				
				
Constant tooth system		Variable tooth system		
length of the cut D	tooth system (Z_p, Z)	length of the cut D	tooth system (Z_p, Z)	
to 3 mm	32	to 30 mm	10–14	
to 6 mm	24	20–50 mm	8–12	
to 10 mm	18	25–60 mm	6–10	
to 15 mm	14	35–80 mm	5–8	
15–30 mm	10	50–100 mm	4–6	
30–50 mm	8	70–120 mm	4–5	
50–80 mm	6	80–150 mm	3–4	
80–120 mm	4	120–350 mm	2–3	
120–200 mm	3	250–600 mm	1,4–2	
200–400 mm	2	500–3000 mm	0,75–1,25	
300–800 mm	1,25			
700–3000 mm	0,75			

3. **Machine control**

3.1. Control panel



Control panel – description

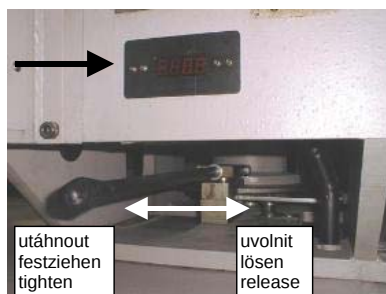
0	Stop the saw band drive
1	Lift the saw frame
2	Start the saw band drive
3	Start the hydraulic aggregate
4	Feeding vice to the back position
5	Open the feeding vice
6	Open the main vice
7	Feeding vice to the forward position
8	Close the feeding vice
9	Close the main vice
10	Saw frame down Press together buttons 10 and 14 (F3) , the frame is sinking quickly
11	Close the hydraulic aggregate
	F1 –Functional button
12	Button function is described in the text
	F2 –Functional button
13	Button function is described in the text.
	F3 –Functional button
14	Button function is described in the text
15	Display There is depicted operating mode and it allows dialogue with service workers
	Lockable switch with key Select the operating mode. In "0" position is possible take off the key
16	 Semi-automatic m
	 Automatic mode
	0 Set mode
17	Start safety circuit Switch on the safety circuit by pressing the button
18	START button- automatic cycle Start of the automatic cycle
19	STOP button- automatic cycle It uses for stopping or breaking of the automatic cycle
20	TOTAL – STOP button Shutting the machine down in emergency situation!
	Governing valve Adjust the speed of the arm sinking to the cut by governing valve
21	Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently.
22	Frequency convertor Turn to change the speed of the saw band

3.2. Angular cut setting

The cut angle is possible set from 0° to $+60^\circ$

Attention! In automatic mode can you cut max 45° by turning of the arm!

1. Lift the saw frame.



2. Release the securing lever of the console and set the desired angle of the cut. Cut angle is depicted on the display above the securing lever.
3. Tighten the securing lever of the console.

Set the saw frame to the position 0° and press button zeroizing of the angle (on the distribution box under the main switch) after main switch starting of the machine. Angles admeasurement is secured.



3.3. Adjusting of the guide cubes span

If you want to achieve a smooth and precise cut, it is helpful to position the guide cube as close as possible to the material.



1. Release the lever of the left listel and move left part of the guide apparatus so that the left guide cube edge is as close to the cut material as possible.

2. Lower the frame to the lower position and check the position of the guide cube towards vice loading area. The guide cube must be a distance of at least 10 mm from the vice loading area.
3. Tighten the lever of the gib and check the guide cube setting once more for possible collision with binding table or vice jaw.

3.4. Cutting speed adjustment

Speed of the saw band is possible change using the frequency convertor. You can effect to adjusting speed of the saw band following

1. Turn the switch 16 to the position „“ (semi-automatic mode).



2. Use the frequency convertor 22 to adjust requested speed of the saw band
3. Turn the switch F2. You can see cutting speed at display

3.5. Swarf conveyor operation

Note: The swarf conveyor is supplied to the band saw only by regist

In semi-automatic cycle

Swarf conveyor ON – press together **F1** and **3** buttons.

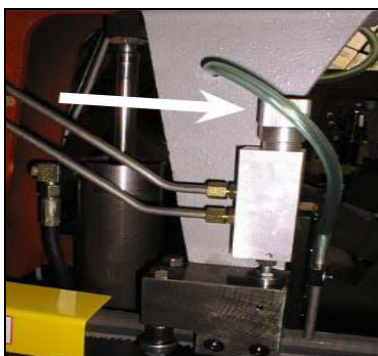
Swarf conveyor OFF – press together **F1** and **E** buttons

In automatic cycle

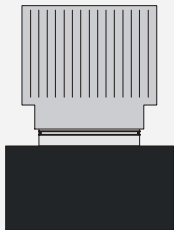
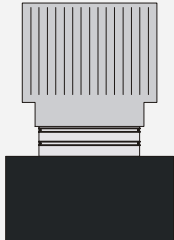
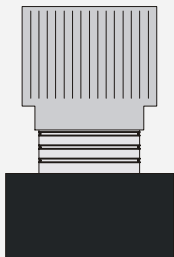
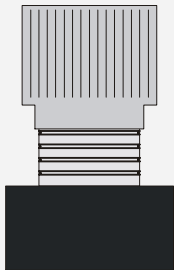
The swarf conveyor operation is adjusted according to chapter Service menu

3.6. Pressure adjusting to the cut

The band saw **transverse 510.330 GANC** is equipped with automatic down-feed regulator on the right guiding cube. The band saw can be equipped with down-feed regulator on the left guiding cube for requirement of the customer.



Adjusting the down-feed regulator is performed with regulating wheel on the guiding cube. Screw on the wheel, the pressure is increased. Screw off the wheel, pressure is lowered.

Picture	Sequence
	One visible neck Solid material over Ø300 mm.
	Two visible necks Solid material to Ø100 - Ø300 mm.
	Three visible necks • Pipes and shapes material with surface from 10 – 15 mm. • I-shaped material from 200 – 500 mm. • Solid material to Ø100 mm.
	Four visible necks • Pipes and shapes material with surface to 10 mm. • I-shaped material to 200 mm.

3.7. Starting the band saw

3.7.1. Switch on the band saw

1. Switch on the main switch of the band saw. The main switch is situated on the side of the switchboard



2. Switch on the safety circuit of the band saw (button 17 – control panel of the band saw)

3.7.2. Feeder reference position

1. Press button **F1**, enter to menu: Reference

" MODE SELECTION "

" Mode select. Switch "

" is in position '0' "

"<REFER> <SERVICE>"



2. Press button **F2**. Feeder drives to the reference position

" AUTOMATIC SETUP OF "

" REFERENCE POSITION "

" FEEDER "

" <START> "



3. As soon as the notice "Feeder reference position is set correctly" appears on the display, press button **F2**. Reference position is set

" REFERENCE POSITION "

" FEEDER "

" SET CORRECTLY "

" <OK> "



3.8. Semi-automatic cycle

3.8.1. Semi-automatic mode

There is possible to make the individual cuts. The adjusting of the desired length is performed semi-automatically

1. Turn switch **16** to position .
2. Open the main and feeding vice by means of buttons **6** and **5**
3. Insert the material to the feeding vice
4. Clamp the material to the feeding vice by button **8**
5. Drive the material to the desired length, which you want to cut by buttons **4** and **7**
6. Clamp the material to the main vice by button **9**.
7. Press button **START**. The band saw cuts the material
8. When material cutting is finished, the saw arm is lifted up and button **START** starts to blink. Now you can remove the blank.

3.8.2. Cycle breaking

The cycle can be stopped by 2 ways:

- a) Press button **STOP** (button 19 – control panel) – the saw interrupts the actual cut, the saw arm lifts to the starting position and it stops

- b) Press emergency button **TOTAL STOP** (button 20 – control panel) in emergency causes! The safety circuit is broken and the saw band drive is stopped too

3.8.3. Speed adjusting of the arm lowering

Set the speed of the arm lowering to the cut by control valve (position 21 – control pane)

Set the lower speed of the arm lowering to the cut by turning the switch clockwise.

Set the higher speed of the arm lowering to the cut by turning the switch anti-clockwise.

Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently

Set the lower speed of the arm lowering to the cut by turning the switch clockwise.

Set the higher speed of the arm lowering to the cut by turning the switch anti-clockwise.

Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently

3.9. Automatic mode

Attention! In automatic mode can you cut max +45 °by turning of the arm!

3.9.1. Cycle preset



Turn switch **16** to position „“ to pre-set the automatic cycle

The band saw allows preset and store 10 programmes. Each of the programs has 20 pre-selections

Definition explain:

Pre-selection is programme part, which includes the length of blank and pieces number of the set length.

Program consists of 20 pre-selections and it is performed during automatic cycle

3.9.2. Preset

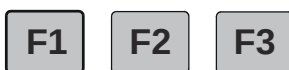
1. Adjust the length of blank. Press button **F2**

" Preselection No.: 1 of 20 "

" Length: 0.0 mm "

" Pieces: 0 pcs "

"<BACK> <NEXT> <DONE> "



2. Adjust the pieces number. Press button **F2**. Pre-selection number 1 is pre-set

" Preselection No.: 1 of 20 "

" Length: 0.0 mm "

" Pieces: 0 pcs "

"<BACK> <NEXT> <DONE> "



- Pre-set the other pre-selections by repeating points 1 and 2. Press button **F3**. Preset is finished

" Preselection No.: 2 of 20 "

" Length: 0.0 mm "

" Pieces: 0 pcs "

"<BACK> <NEXT> <DONE> "



Note: Finish the cycle preset by button F3 is impossible, if the length or pieces number has null value in set pre-selection. That means the length and pieces number must be bigger than null

- Programme will be effected from beginning to the pre-selection, in which will be finished preset by pressing button **F3 <DONE>**. That means, if you pre-set 3 pre-selections and you finish the preset by pressing button F3, pre-selections 1, 2 and 3 will be effected

3.9.3. Program storing

The band saw allows storing of 10 different programs

- Press button **F3**

" Preselection No.: 3 of 20 "

" Length: 0.0 mm "

" Pieces: 0 pcs "

"<BACK> <NEXT> <DONE> "



- Press button **2** to enter Memory menu

" EXTENDED EDITING: "

" 1 = Preselection "

" 2 = Memory "

"<BACK> <DONE> "



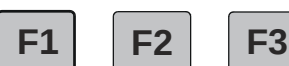
- Press button **F2** to store the program

" *** MEMORY *** "

" F1 = Load program "

" F2 = Save program "

" <BACK> "



- Set the memory number (**0-9**), where you want to store the program. Press button **F2**

" *** MEMORY *** "

" Rewrite mem. No: X "

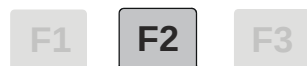
" "

"<BACK> <OK> "



5. Confirm the program storing by pressing button **F2**

" Cutting program was "
" successfully read "
" to memory No: X "
" <OK> "



3.9.4. Program selection

1. Press button **F3** to open the program

" Preselection No.: 3 of 20 "
" Length: 0.0 mm "
" Pieces: 0 pcs. "
"<BACK> <NEXT> <-FN-> "



2. Press button **2** to enter Memory menu

" EXTENDED EDITING: "
" 1 = Preselection "
" 2 = Memory "
"<BACK> <DONE> "



3. Press button **F1** to open the required program

*** MEMORY ***
"F1 = Load program "
"F2 = Save program "
" <BACK> "



4. Set the memory number (**0-9**), from which you want to open the program.
Press button **F2**.

*** MEMORY ***
" Read memory No: X "
" "
"<BACK> <OK> "



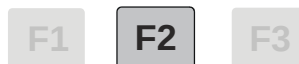
- Confirm the program opening by pressing button **F2**

```
" Cutting program was "
```

```
" successfully read "
```

```
" from memory No: X "
```

```
"          <OK>          "
```



3.9.5. Editing

The length of blank or pieces number is possible to change this way:

- Open the program in which you want to make a change (see chap. Program selection).
- Adjust the pre-selection, which you want to change, by pressing buttons **F1** and **F2**
- Adjust the new length of the blank. Press button **F2**. The length of blank is changed

```
" Preselection No.: 2 of 20 "
```

```
" Length:          200.0 mm"
```

```
" Pieces:           2 pcs. "
```

```
"<BACK> <NEXT> <-FN-> "
```



- Adjust the new pieces number. Press button **F2**. The pieces number is changed

```
" Preselection No.: 2 of 20 "
```

```
" Length:           250.0 mm"
```

```
" Pieces:            2 pcs. "
```

```
"<BACK> <NEXT> <-FN-> "
```



- You can change the other pre-selections by repeating points 2 - 4. Press button F3, editing is finished
- Save the program (see chap. Program storing).

3.9.6. New Preselection inserting

The new Preselection inserting is performed this way:

- Open the program, in which you want to perform the change (see chapter Program selection)
- Select the preselection, where you want to insert the new preselection by pressing buttons F1 and F2. The new preselection is inserted in front of the old one

```
" Preselection No.: 3 of 20"
```

```
" Length:           200.0 mm"
```

```
" Pieces:            2 pcs. "
```

```
"<BACK> <NEXT> <-FN-> "
```



3. Press button F3

" Preselection No.: 3 of 20 "
" Length: 200.0 mm"
" Pieces: 2 pcs."
"<BACK> <NEXT> <-FN-> "



4. Press button 1 to enter Preselection menu

" EXTENDED EDITING: "
" 1 = Preselection "
" 2 = Memory "
"<BACK> <DONE> "



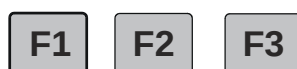
5. Press button F1 to insert the new Preselection to the program. The other Preselections are shifted

"*** PRESELECTION ***"
" F1 = Insert Presel. "
" F2 = Delete Presel. "
" <BACK> "



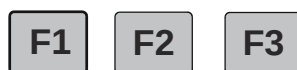
6. Set the new length of the blank. Press button F2

" Preselection No.: 3 of 20 "
" Length: 0.0 mm"
" Pieces: 0 pcs."
"<BACK> <NEXT> <-FN-> "



7. Set the new number of the pieces. Press button F2

" Preselection No.: 3 of 20 "
" Length: 100.0 mm"
" Pieces: 0 pcs."
"<BACK> <NEXT> <-FN-> "



8. Now, you can insert the other Preselection by repeating points 2 to 7
9. Store the program according to the chapter Program storing

3.9.7. Clearing memory

Clear the adjusted Preselection from the memory is possible this way

1. Open the program, in which you want to perform the change (see chapter: Program selection)
2. Select the Preselection, which you want to clear by pressing buttons **F1** and **F2**

```
" Preselection No.: 3 of 20 "
" Length:    200.0 mm "
" Pieces:      2 pcs."
"<BACK> <NEXT> <-FN-> "
```



3. Press button **F3**

```
" Preselection No.: 3 of 20 "
" Length:    200.0 mm "
" Pieces:      2 pcs."
"<BACK> <NEXT> <-FN-> "
```



4. Press button **1** to enter Preselection menu

```
" EXTENDED EDITING:  "
" 1 = Preselection   "
" 2 = Memory         "
"<BACK>              <DONE> "
```



5. Press button **F2** to clear the selected Preselection from the program. The other Preselections are shifted

```
**** PRESELECTION ****
" F1 = Insert Presel. "
" F2 = Delete Presel. "
"                      <BACK> "
```



6. Now, you can clear the other Preselections by repeating points 2 to 5
7. Store the program according to chapter: Program storing

3.10. Automatic cycle with material cutting

If you want to cut the material end before starting of the automatic cycle pre-set, you must continue this way:

1. Make following after finishing of the automatic cycle pre-set.
2. Adjust the arm cca 3 cm above the material by pressing buttons „Saw arm up“ (1) and „Saw arm down“ (C). The saw arm will be returned to this height always

"SETUP OF THE RETURN "
"POSITION OF SAW-ARM "
" (pos. after the cut)"
" <END> <DONE> "



3. Store the adjusted position by pressing button **F2**

Note: Return to the pre-set by pressing button **F1**

4. Press button **F1** <YES> for material trim cut

" AUTOMATIC TRIM CUT "
"
" <YES> <NO> "



5. Press button **START** (18). The saw makes the trim cut

" AUTOMATIC TRIM CUT "
" Press the START "
"

6. The report about course of cutting appears on the display during material cutting

" AUTOMATIC TRIM CUT "
" Wait until "
" the cut is finished "

7. When the cutting is finished, press button **START** again. The saw makes the pre-set of automatic cycle

" AUTOMATIC CYCLE "
" Press button "
" START "
"

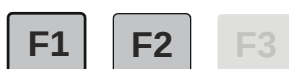
8. Button **START** starts to blink after finishing of the automatic cycle. Now you can remove blanks

3.11. Automatic cycle without material cutting

If you **do not want** to cut material end before starting of the automatic cycle pre-set, you must continue this way:

1. Make following after finishing of the automatic cycle pre-set.
2. Adjust the arm cca 3 cm above the material by pressing buttons „Saw arm up“ (1) and „Saw arm down“ (C). The saw arm will be returned to this height always

" SETUP OF THE RETURN "
" POSITION OF SAW-ARM "
" (pos. after the cut)"
" <END> <DONE> "



3. Store the adjusted position by pressing button **F2**

Note: Return to the pre-set by pressing button **F1**.

4. Now press button **F3** <NO>, you do not want to make the trim cut

```
"  AUTOMATIC TRIM CUT  "
"                        "
"  <YES>                <NO>  "
```



5. Press button **START**. The saw makes the pre-set of automatic cycle

```
"  AUTOMATIC CYCLE  "
"  Press button    "
"      START      "
"                  "
```

6. Button **START** starts to blink after finishing of the automatic cycle. Now you can remove blanks

3.12. Cycle breaking

Cycle can be broken by 2 ways:

- a) Press button **STOP** (button 19 – control panel) – the saw finishes the actual cut, arm lifts to the starting position and cycle is stopped
- b) Press emergency button **TOTAL STOP** (button 20 – control panel) in emergency causes! The safety circuit is broken and saw band drive is broken too

3.13. Setting the speed of the saw arm lowering

Set the speed of the arm lowering to the cut by control valve (position 21 – control panel).

Set the **lower** speed of the arm lowering to the cut by turning the switch **clockwise**.

Set the **higher** speed of the arm lowering to the cut by turning the switch **anti-clockwise**.

Notice: If you keep closing the throttle valve too tightly, the valve seat may wear off which causes its leakage. Therefore, close the valve always gently

3.14. Service menu

Service – adjusting of the cutting parameters. All parameters are possible to find in service menu

3.14.1. Entrance to service menu

Turn switch (16) to position „0” and press button **F3** to enter to service menu

```
"  MODE SELECTION  "
" Mode select. Switch "
" is in position '0' "
"<REFER>          <SERVICE> "
```



3.15. Vice parameters

By setting the time opening of both vices you can set, distance of the movable jaw vices opening, it means, the vice is opened any more, when the time is set longer. This function is used in case of the cutting of the rough materials. Is necessary to set longer vice opening, that the material will be released. Smooth materials has set shorter vice opening. Shorten the time of the cycle. Time of the vices opening is 1 second

1. Press button **1** to enter to menu: Vice parameters

```
" 1 = Clamp params.  "
" 2 = Cooling params. "
" 3 = Cutting params. "
"      <NEXT> <DONE> "
```



2. Feeding vice (upper row) – adjust the time, press button **F2**

```
" CLAMP OPENING TIME "
" <-]0[-> : x.x sec  "
" <-] [-> : x.x sec  "
"      <NEXT> <MENU> "
```



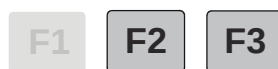
The main vice (lower row) – adjust the time, press button **F3** for returning to main menu

3.16. Cooling parameters

You can adjust the type and mode of the band cooling

Press button **2** to enter to menu: Cooling parameters.

```
" 1 = Clamp params.  "
" 2 = Cooling params. "
" 3 = Cutting params. "
"      <NEXT><DONE>  "
```



3.16.1. Cooling type

You can select the cooling with the water, Microniser or without cooling

1. Press button **1** to enter to menu: Cooling type

```
" 1 = Cooling type  "
" 2 = Cooling mode  "
"                  "
"                  "
"      <MENU>      "
```



- Select the desired cooling mode. The selected item is marked „x“.

```
" 1= Water cooling [x]"
" 2= Microniser   [ ]"
" 3= No cooling    [ ]"
"                  <MENU> "
```



button **1** – saw band cooling with the water

button **2** – saw band cooling with Microniser

button **3** – without cooling of the saw band

- Press button **F3**. The selected cooling type is stored and you can return to the previous menu

3.16.2. Cooling mode

You can select, if you want to stop the cooling in upper or lower position or do not stop the cooling

- Press button **2**, to enter to menu: Cooling mode

```
" 1 = Cooling type  "
" 2 = Cooling mode  "
"                  "
"                  <MENU> "
```



- Select the desired mode of cooling stopping. The selected item is marked „x“.

```
"1=Top pos shutoff [x]"
"2=Bot.pos shutoff [ ]"
"3=No shutoff      [ ]"
"                  <MENU> "
```



button **1** – stop the saw band cooling after cutting finishing in **top** position of the saw arm.

Button **2** – stop the saw band cooling after cutting finishing in **down** position of the saw arm.

Button **3** – **do not stop** the saw band cooling after cutting finishing

- Press button **F3**. The selected cooling type is stored and you can return to the previous menu. To another pressing button **F3**, you can return to the service menu

3.17. Cutting parameters

You can select, if you want to stop the saw band drive in upper or lower position of the saw arm, or do not stop the drive

- Press button **3** to enter to menu: Cutting parameters

```
" 1 = Clamp params  "
" 2 = Cooling params "
" 3 = Cutting params  "
"      <NEXT><DONE>  "
```



2. Select the desired mode of the saw band stopping. The selected item is marked „x“.

```
"1=Top pos shutoff [x]"
"2=Bot.pos shutoff [ ]"
"3=No shutoff      [ ]"
"      <MENU>      "
```



button **1** – saw band stopping in **top** position after cutting finishing.

Button **2** – saw band stopping in **down** position after cutting finishing.

Button **3** – **do not stop** the saw band after cutting finishing

3. Press button **F3**. The selected mode of band stopping is stored you can return to the previous menu

3.18. Swarf conveyor operation

Note: The swarf conveyor is added to the band saw only by customer request

You can select from 3 possibilities of swarf conveyor operation in automatic cycle

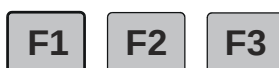
1. Press button **F2** – other. Shift to the next menu

```
" 1 = Clamp params  "
" 2 = Cooling params "
" 3 = Cutting params  "
"      <NEXT><DONE>  "
```



2. Press button **3** to enter to menu: Swarf conveyor operation

```
" 1 = Machine params. "
" 2 = Language         "
" 3 = Swarf conve.mode"
"<BACK> <NEXT> <DONE> "
```



3. Select the desired swarf conveyor operation. The selected item is marked „x“.

```
" 1=Along with band[ ]"
" 2=Manual shut-off[ ]"
" 3=Manual control [x]"
"      <MENU>      "
```



Button **1** – starting and stopping of the swarf conveyor together with saw band.

Button **2** – starting of the swarf conveyor automatically, but stopping of the eliminator is performed manually.

Button **3** – starting and stopping of the swarf conveyor is performed manually

4. Press button **F3**. The selected mode of swarf conveyor operation is stored, you can return to the previous menu

3.19. Machine parameters

1. Press button **1** – Machine parameters to shift to the next menu, where you can set the required parameter

```
"1 = Machine params.  "
"2 = Language          "
"3 = Swarf conve.mode "
"<BACK> <NEXT> <DONE> "
```



2. Set the required parameter:

Correct - use numerical keyboard to set the required correction value. This value sets correction of feeding in mm/inch by reason of the width of the saw band.

Feeder - use numerical keyboard to set the required feeding length.

Button **F1** – press to use a pressure device

3.20. Language

Press button **2** – Language to shift to the next menu, where you can set the required language

```
"1 = Machine params.  "
"2 = Language          "
"3 = Swarf conve.mode "
"<BACK> <NEXT> <DONE> "
```



First level password (user) is required to enter this menu:

- password: 947

3.21. Length units selection

You can select the length units: millimetres or inches.

1. Press button **F2** – other. Shift to the next menu

```
"1 = Machine params.  "
"2 = Language          "
"3 = Swarf conve.mode "
"<BACK> <NEXT> <DONE> "
```



2. Select the length units: millimetres or inches by repeated pressing button **F1**

```
"1 = Regulator      "
"2 = Length correct  "
"F1= mm(1) inch(0)[1]"
"                   <MENU> "
```



1 = millimetres

0 = inches

3. Press button **F3**. The selected parameters are stored and you can return to the previous menu

3.22. Regulator

Reserved for the service purposes

```
" 1 = Regulator      "
" 2 = Length correct  "
" F1= mm(1) inch(0)[1]"
"                   <MENU> "
```



Second level password (service) is required to enter this menu.

3.23. Length correct

In case of multi-feeding it is possible to set a plus or minus correction value. This value sets correction of each other feeding (except the first) in mm/inch

1. Press button **2** – Length correct to shift to the next menu

```
" 1 = Regulator      "
" 2 = Length correct  "
" F1= mm(1) inch(0)[1]"
"                   <MENU> "
```



First level password (user) is required to enter this menu:

- password: 947

2. Use numerical keyboard to set the required correction value

```
" Korekce =      0,2 mm"
" Korekce = 0,008 inch"
" F1=0=(t)   1=(-) [1]"
"                   <MENU> "
```



Press button **F1** to change the plus or minus correction value

3. Press button **F3**. The selected parameters are stored and you can return to the previous menu

3.24. Service menu closing

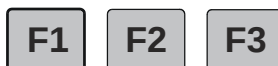
Press button **F3**. Service menu is closed

"1 = Machine params. "

"2 = Language "

"3 = Swarf conve.mode "

"<BACK> <NEXT> <DONE> "



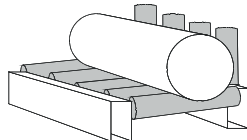
3.25. Material insertion

- Never walk under a suspended load!
- Never climb onto the gravity-roller conveyor!
- Do not hold the material for clamping material to the vice! The vice can cause injury!

3.25.1. Handling agent selection

- Use the strong handling agents to lift and transfer the material!
- Handle with the material only with the lift truck or use the suspension strands and the crane!
- Do not use the lift truck or crane in case that you do not have the license to handle with it!

3.25.2. Insertion



Insert material to the vice and ensure that the material cannot move in the vice or fall from the vice after the clamping. If you cut long pieces of the material (for example rod, tube), you must use the roller conveyors for material shifting to the band saw. Contact Bomar for more information about roller conveyors

Make sure the conveyor is long enough and the material cannot tip off the conveyor.

Be especially careful with round materials that it always stays on two vertical rollers and that it cannot fall off the conveyor!

3.25.3. Bundle material cutting

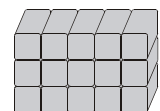
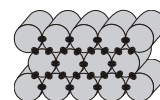
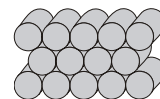
If you want to cut the material in the bundle, there are suggestions for the positioning of bundles

Round material bundle: Take care especially with round material that the bars are put according to the picture. If the bars are put differently, you may have problems with movement.

Always weld the material at the rear end of the bundle to secure it from moving.

Before welding always, switch the machine off at the main switch! The magnetic fields, which often occur during welding, may damage the controls!

Square material bundle:



Attention:

Not all material shapes are suitable for bundle cuts. Keep the recommendation of your supplier of the saw bands for material insertion to the bundle.

4. Machine service

4.1. Saw band dismantling

1. Raise the saw frame to the top position and stop the saw frame in top position by governing valve
2. Dismantle yellow protective cover of the saw band. The cover is fastened with the screw



3. Open the cover of the frame



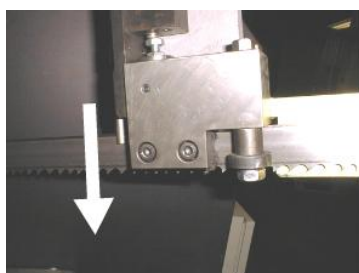
4. Release the saw band stretching by stretching screw



5. Pull off the saw band from the wheels

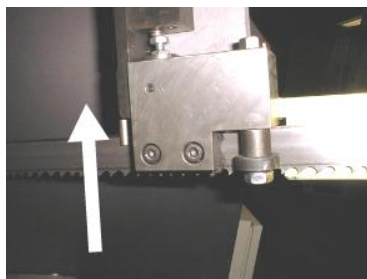


6. Pull up the saw band from guiding cubes after saw band dismantling



4.2. Saw band installation

1. Prior to installation clean all track wheels and guide shoes thoroughly, removing all traces of chips and dirt. Respect teeth direction for saw band installation
2. Install the saw band to both guiding cubes. Make sure the saw band lies on both track wheels and it is pushed all the way to the top



3. Insert the saw band on both guiding wheels. Make sure the rear part of the saw band suits to the edge of the wheels. Push the saw band to the recess of the wheel



4. Stretch the saw band by stretching screw. Remove the plastic cover from the teeth
5. Set the brush to the saw band and secure the holder with screws



6. Close the cover of the frame



7. Install yellow protective cover of the saw band. The arrow on the cover must match with arrow direction on the saw band. If they point in the wrong direction, turn the saw blade round



4.3. Saw band stretching and inspection

Right saw band stretching is one of the most important criteria's, which influents accuracy and saw band service life. Stretch the saw bands according to the selected saw band and the band saw. Keep the recommendation of your manufacturer.

4.3.1. Saw band stretching

For saw band stretching use Tenzomat – Special accessories

Right saw band stretching is one of the most important criteria's, which influents accuracy and saw band service life. Stretch the saw bands according to the selected saw band and the band saw. Keep the recommendation of your manufacturer

1. The saw band must not fall from the wheels after setting.



1. Install the Tenzomat on the saw band and secure it with screws
2. Stretch the saw band until it is stretched to the recommended value

In case of use hydraulic band tensioning, BSPA indicator, you must tighten a blade, **up to green arrow** on the manometer

4.3.2. Check the saw band in the guiding cubes and on the wheels

1. Check, if the saw band is right in the guiding cubes..
2. Switch on the saw band drive and then after 10 seconds switch off saw band drive. If the saw band drive is not possible to switch on, set the limit switch of the saw band stretching.
3. Switch off the main switch.
4. Open cover(s) of the wheels and check position of the saw band on the both wheels..
 - If the distance between backside of the saw band and the offset wheel is **1 - 3 mm**, setting is right..
 - If the distance is bigger than **3 mm**, or the saw band is on the offset of the wheel, set the saw band.
5. Close cover of the saw band.

4.4. Saw band run adjustment on stretching wheel

Saw band run on the stretching wheel must be regularly inspected. The inspection has to follow every saw band replacement.

4.4.1. Saw band run inspection

If the run is not correct, the following problems may occur:

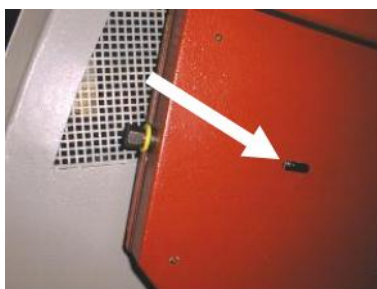
- **The saw band falls off the wheel** – The saw band and protective cover can be damaged.
- **The saw band runs on the wheel rim** – The saw band and wheel rim can be damaged



1. Start and stop saw band drive.
 2. Stop the main switch!.
 3. Open rear cover of the saw frame.
 4. Check saw band placing on the wheels.
- If the distance of the rear part of the saw band from wheel rim is **1 - 3mm**, setting is right.
 - If the distance is bigger than **3 mm**, or the saw band runs on the wheel rim, saw band run must be set.

4.4.2. Saw band setting

The saw band run is set with screw in the stretching cube on the saw frame. Optimal distance has been determined at **1mm**.



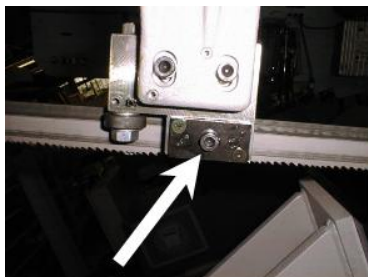
- Turn by screw to the right, the saw band approximates to the stretching wheel rim.
- Turn by screw to the left, the saw band departs from the stretching wheel rim.

Check saw band run again after setting.

4.5. Hard metal guides adjustment

Hard metal guides adjustment is one of the most important criterions which influences cutting accuracy and saw band life. Therefore it is essential to regularly check that hard metal guides adjustment is correct

1. Tighten the screw on the guiding cube; the band is released



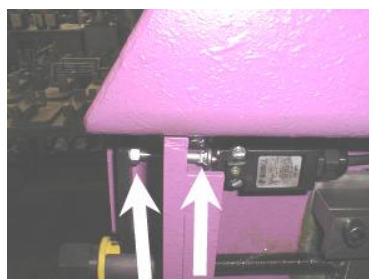
2. Loosen the screw and let the hard metal plate to sit on the saw band. The screw is turned slightly by hand. Set the hard metal guides on the right cube.

4.6. Guide cubes adjustment

The guiding cubes are set from the manufacturer. Cubes are secured with two pins. It is not necessary to set the guiding cubes all the while of the lifetime.

4.7. Limit switch setting of the saw band stretching

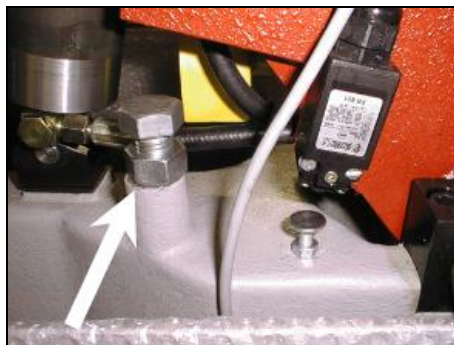
After the saw band is replaced, the saw band stretching must be checked. If the limit switch is not adjusted correctly, the band is stretched too little or too much



1. Tighten the saw band by means of the TENZOMAT on the optimal value (table is on the Tenzomat)
2. Release nut of the stop screw
3. Switch on the engine of the saw band drive. Two cases can arise
 - a) If the engine is switched on, but it does not run, turn the screw to the left until the engine starts to run
 - b) If the engine runs turn the screw to the right until it stops to run, then turn the screw shortly to the left until the engine starts to run again
4. Secure the stop screw with nut. Check the limit switch setting again

4.8. Saw frame lower stop position adjustment

The lower stop limits the lowest position of the saw frame. This stop point has to be checked at least once a month. If the lower stop point is incorrectly adjusted, the cutting table can be damaged or the material will not be cut completely.

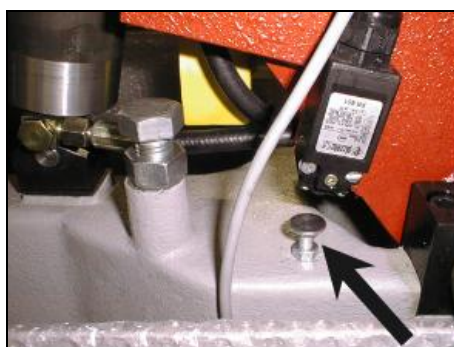


1. Lift the saw frame to the top position.
2. Release the nut of the screw and set it to the desired value.
3. Secure the screw with nut.
4. Set the limit switch of the saw frame lower position

4.9. Limit switch of the saw frame lower position adjustment

If the lower stop of the saw frame was set, the limit switch must be set again

Lower the saw frame to the bottom position. If the saw frame is on the lower stop and the limit switch was responded, the limit switch adjustment is right. If the limit switch is not right, it must be set.

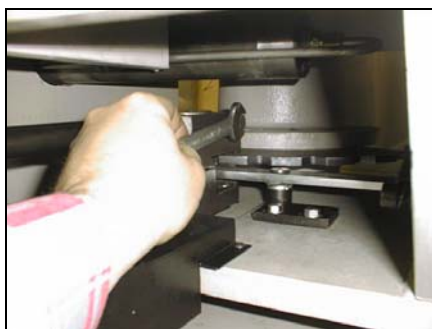


Limit switch setting

1. Release the nut of the stop screw of the switch and screw the screw.
2. Lower the saw frame to the lower stop and start saw band drive..
3. Screw off the stop screw of the switch, until the saw band drive is not stopped.
4. Secure the screw with the nut and check limit switch adjustment again.

4.10. Adjustment of the securing cube of the turning lever

The securing cube is adjusted right from the manufacture, but if the saw frame is not secured, the securing cube must be adjusted. Check the functionality of this cube regularly; if the console is not fastened correctly, inaccuracy may occur.



1. Release the fixative screw of the securing lever. By lever is possible to move
2. Turn by lever to the left side to the stop and fasten the fixative screw again.



3. Secure the console by lever and carry out the inspection
- If the adjustment is correct, the saw frame cannot be turned around

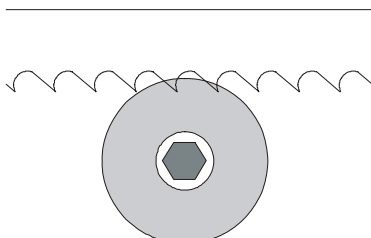
4.11. Brush adjustment

The brush for chip removal from the saw band influences cutting durability, saw band lifetime and wheels lifetime, hard metal guides and finally the cut accuracy. Brush adjustment must be checked every shift

1. Release screws on the brush holder



2. Set the brush to the saw band. The brush must not touch the bottom of the saw teeth



3. Tighten the screws and start of the saw band drive

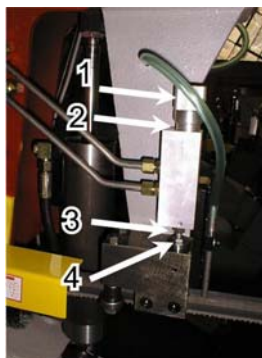
4.12. Adjustment of the regulating pressure to the cut

Set the body of the regulation by adjusting handle. It is under the handle. Set it on the second groove. There is visible one neck (pos. 1, 2).

Notice!

*The brush **must not** touch the bottom of the saw teeth!!*

Screw the stopper screw to the maximum, or the valve will be blocked (pos. 3)



Now the frame can be freely moved up only, because the saw frame movement is blocked with the governing valve

Press button „ saw frame down „ screw on the setscrew

Screw in the stop screw as long as you reach the optimal speed of the frame sinking

Optimal speed of the frame sinking is between 35 sec

Secure the adjusting screw by means of the nut after reaching of the sinking speed

Switch on the engine of the drive and check speed of the saw frame sinking again

4.13. Pressure switch adjustment

In hydraulic system is residual pressure after hydraulic aggregate stopping!

The pressure switches are in the block of the hydraulic aggregate

The pressure switch of vice is marked with yellow band **SQ xx** or pressure switch of feeding vice with yellow band **SQ 1** must be adjusted on occasion :



Pull off the elastic cover of the pressure switch (carefully – outlets must not be broken)

Set the sensitivity of the pressure switch by means of the screwdriver

Turn by screwdriver to the left, the sensitivity is bigger

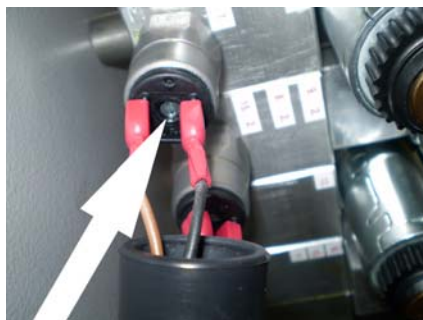
Turn by screwdriver to the right, the switch will be clip with higher pressure

Check limit switches adjustment

- The vice is clamped - The pilot light 10.1 of the control system are lighted
- The vice is opened – The pilot light 10.1 of the control system are not lighted

- The vice is on the move – The pilot light are not lighted, they are not winked

Return the cover on the pressure switch after adjustment



4.14. Pressure adjustment of the hydraulic systém

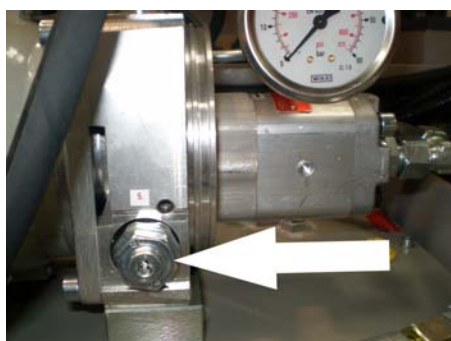
In hydraulic system is residual pressure after hydraulic aggregate stopping!

Pull off the black cover of the pressure valve

Release the nut of the pressure valve

Higher pressure – turn the pressure valve to the clock's direction

Lower pressure – turn the pressure valve against the clock's direction

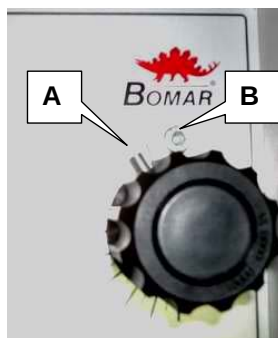


Set the pressure by means of the pressure valve and manometer

If the pressure is adjusted, tighten the nut

4.15. Adjustment of a throttle valve

1. Switch off the machine by its main switch. Let the sawing head down at the bottom. Close the throttle valve gently.
2. The worm screw (pos. A) must be next to the stop (pos. B), when the valve is closed



3. Otherwise, you must loosen the worm screw, lift the plastic knob and close the throttle valve to the maximum. Next loosen the worm screw and take off the plastic knob. Put it back so that the worm screw must be next to the stop while the valve is closed. Then tighten the worm screw again



4. Turn the machine on and test the down-feed control

4.16. Cooling agents and chips disposal

The quality of the cooling agent will deteriorate due to:	If the solution is too weak:	If the solution is too strong:
• use of contaminated water • impurity • outside oil contamination (hydraulics, gears) • high operating temperatures • lack of air circulation • wrong concentration	• corrosion protection is diminished • lubrication decreases • microbial attack is more likely	• the cooling ability is decreased • foam behaviour increases • emulsions stability deteriorates • sticky residue develops

4.16.1. Cooling liquid preparation

Prepare the mix of the water and cooling liquid. Conform the notes of the manufacturer and keep manufacturer-approved concentration

All instructions are stated on the tank of the cooling liquid or in documents of the cooling liquid. For cooling liquid using and liquidation reads date of cooling liquid manufacturer, which it is necessary to keep

Fill the mix of water and cooling liquid to the tank of the cooling system. The capacity of the tank for the cooling liquid is stated in chapter „2.1

When filling tank with the cooling liquid take care that the liquid will not drip out of the tank and the tank will not overflow

Keep manufacturer specified recommendations for adding the anticorrosive agents, the antifreeze or other agents! For mixture of two different mixes can produce toxic and aggressive mixes, which can peril your health or damage cooling system of the machine

Note: If the machine is equipped with Microniser (see. **Special accessory**), fill the tank of the Microniser by specified cooling liquid. Microniser is ready for the operation

The quality of the cooling agent will deteriorate due to:

- use of contaminated water
- impurity
- outside oil contamination (hydraulics, gears)
- high operating temperatures
- lack of air circulation
- wrong concentration

If the solution is too weak:

- corrosion protection is diminished
- lubrication decreases

- microbial attack is more likely

If the solution is too strong:

- the cooling ability is decreased
- foam behaviour increases
- emulsions stability deteriorates
- sticky residue develops

4.16.2. Coolant device inspection

The state of the cooling agent has significant influence on the cutting quality and on the operational life of the machine. Lifetime of the cooling liquid is 1 year, after this time we recommend change the cooling liquid. This time is dependent on the degree of pollution cooling liquid (especially with oils) and on the other factors.

Check level of the cooling liquid and function of the pump periodically!

Note:

If the state of the cooling liquid is not satisfactory, the cooling liquid must be changed.

Check the state of the cooling agent according to the following table:

Testing	Interval	Method	Condition	Precaution
Liquid level	daily	visually	too low	after concentration check, refill with water or emulsion
Concentration	daily	refractometer densimeter	too high too low	refill water refill base emulsion
Smell	daily	by sense of smell	unpleasant smell	good ventilation, add biocides or renew coolant
Contamination	daily	by sense of smell	visible oil leaks, sludge fungi	surface cleaning, fix leaks, add biocides or fungicides, or coolant renewal after added system cleanser*
Corrosion-protection	when necessary	visually chip test Herbert-test	insufficient corrosion protection	test stability, if necessary – increase concentration or pH value
Stability	when necessary	refractometer	oiling	add concentrate, enquiries to supplier
Foam reaction	when necessary	shaking test	too much foam, foam disperses too slowly	avoid aeration, increase water hardness, ix with defoamer

* According to manufacturers' instructions

4.16.3. Chips disposal

Chips resulting from cutting operations must be disposed of in accordance with the relevant regulations.

- Let the chips drip excess fluid!
- Fill a watertight container with the chips! Be careful that the container does not leak, because even after a long dripping time, they still contain coolant residue.
- *Place the container into the care of a disposal company equipped for the disposal of chips contaminated with cooling liquid.* In case the machine is equipped with micro-spray installation, the chips must also be handed over to a disposal company.

4.17. Hydraulic, Greases and oils

4.17.1. Gearbox oils

In gearboxes, oil is used for the whole lifetime of the gearbox. We recommend replacing of the filling oil in case of repair.

Use oils with specification DIN 51517 in the gearboxes. Select the viscosity grade ISO VG according to the original oil fill.

Attention:

When replacing, use oils recommended by BOMAR or oils, which has comparable parameters from the other manufacturers. Do not forget, that mineral and synthetic oils must not be mixed!

Recommended oils and quantity according to the type of the band saw

Band saw	Gearbox oil	Capacity
Transverse 610.440 GANC	Shell Tivela S 320	1,8 l
Swarf conveyor	Shell Tivela S 320	0,075 l

Comparative table of the gearbox oils

Manufacturer	Viscosity grade		
	ISO VG 100	ISO VG 220	ISO VG 320
BP	Energol GR-XP 100	Energol GR-XP 220	Energol GR-XP 320
Castrol	Alpha SP 100 Alpha MW 100	Alpha SP 220 Alpha MW 220	
Elf	Reductelf SP 100	Reductelf SP 220 Reductelf Synthese 220	Reductelf SP 320
Esso	Spartan EP 100	Spartan EP 220	Spartan EP 320
Mobil	Mobilgear 627	Mobilgear SHC 220 Mobilgear 630	Mobilgear 632
ÖMV		PG 220	
Paramo	PP 7	Paramo CLP 220	Paramo CLP 320
Shell	Shell Omala 100	Shell Omala 220 Shell Tivela S 220	Shell Omala 320 Shell Tivela S 320
Total	Carter EP 100	Carter EP 220	Carter EP 320

4.17.2. Lubricant greases

We recommend using lithium based saponified grease, class NGLI-2 for lubrication. Different greases are mixable, if their oil bases and consistence type are identical.

Comparative table of the lubricant greases:

Manufacturer	Type of the lubricant grease
BP	Energrease LS - EP
DEA	Paragon EP1
Esso	FETT EGL 3144
	Beacon EP 1
	Beacon EP 2
FINA	FINA LICAL M12
Klüber	Microlube GB0
	Staburags NBU8EP
	Isoflex Spezial
Optimol	Optimol Longtime PD 0, PD1, PD2
Shell Aseol AG	ASEOL Litea EP 806-077
Texaco	Multifak EP1

4.17.3. Lubrication

There are several places on the machine, which are necessary to grease periodically. It secures the right function of the machine.

Lubrication place	Lubrication
	The guiding cubes leading – grease with oil from both sides once a week.

4.17.4. Hydraulic oils

Replace the hydraulic oil once in 2 years, because the oil can deteriorate its properties and cause problems the hydraulic equipment. If the hydraulic system is equipped with filter (2SF 56/48-0,063), replace the filter too.

Use oils with specification DIN 51524-HLP, ISO 6743-4 and viscosity grade ISO VG 46 in hydraulic aggregates. Hydraulic oils quantity – see chapter **Hydraulic oil level check**.

Note:

When replacing, use oils recommended by BOMAR or oils, which has comparable parameters from the other manufacturers. Do not forget, that mineral and synthetic oils may not be mixed!

Comparative table of the hydraulic oils

Manufacturer	Type	Manufacturer	Type
Agip	Oso 46	Ina	Hidraol 46 HD
Aral	Vitam GF 46	Klüber	Lamora HLP 46
Avia	Avilub RSL 46	Hungary	Hidrokomol P 46
Benzina	OH-HM 46	Mobil	Mobil DTE 25
BP	Energol HLP 46	ÖMV	HLP 46
Bulgaria	MX-M/46	Poland	Hydrol 30
Castrol	Hyspin AWS 46	Rumania	H 46 EP
Čepro	Mogul HM 46	Russia	IGP 30
DEA	Astron HLP 4hy6	Shell	Tellus Oil 46
Elf	Elfolna 46	Sun	Sunvis 846 WR
Esso	Nuto H 46	Texaco	Rando HD B 46
Fam	HD 5040	Valvoline	Ultramax AW 46
Fina	Hydran 46		

4.18. Hydraulic unit service

After 50 hours working time, or the latest 3 month after the first run, the first service should be carried out. This includes:



- checking off all screws and connections, fixing points, tubes and hoses for leakage
- Check hydraulic oil level
- During time of duty the oil temperature shouldn't exceed 60-70°C
- check function of signaling components (thermometer, level gauge, dirty filter indicator)
- Check the adjustment of working pressure

To realise a high reliability of the power pack, the manufacturer lays down following inspection intervals

Interval	daily	weekly	monthly	three monthly	six monthly	annually
Hydraulic fluid						
Level	-	•	-	-	-	-
Temperature	-	•	-	-	-	-
Condition	-	-	•	-	-	-
Change interval	-	-	-	-	-	•
Filter						
Change interval	-	-	-	-	-	-
Other checks						
External Leakages	•	-	-	-	-	-
Contamination	•	-	-	-	-	-
Damages	•	•	-	-	-	-
Noise-(level)	•	-	-	-	-	-
Gauges	-	-	•	-	-	-

4.19. Hydraulic oil level check

Note: This chapter is only for the band saws, which has hydraulic equipment

Recommended type of the hydraulic oil is placed in chapter **Hydraulic oils**

Pull up the gauge and check the state of the oil. The oil level must be situated between water-glas



Fill the hydraulic oil, if it is necessary (arrow). Use always the filter (25 µm or better) when you fill the oil. You avoid impurities penetration to the hydraulic system and troubles in hydraulic system



4.20. Machine cleaning

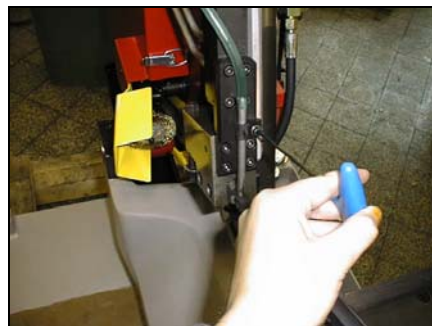
Clean the machine from the cooling liquid and impurities after every shift stopping. Conserve the guiding surfaces, mainly.

- Clamping jaws guiding of the vice.
- The guiding of the feeder.
- Loading surface of the vice.

4.21. Worn pieces replacement

4.21.1. Hard metal guides replacement

If the hard metal guides cannot be adjusted, they have to be replaced.



1. Remove the hosepipe leading to the cooling agent and dismantle saw band and saw band guiding cube.



2. Fasten the guiding cube to the vice. Release clamping screws of both hard metal guides and remove them.



3. Screw out the adjusting screw of the adjustable hard metal guide.



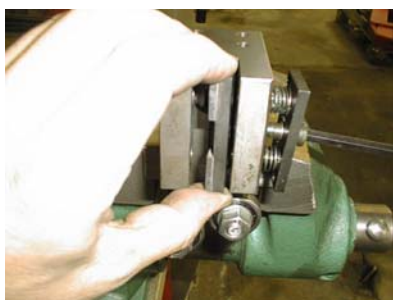
4. Screw out the adjusting screw of the adjustable guide as far from the guiding cube so that it is not possible to see it from the inner side.



5. Remove the adjustable guide.



6. Insert new hard metal guides and screw on them.



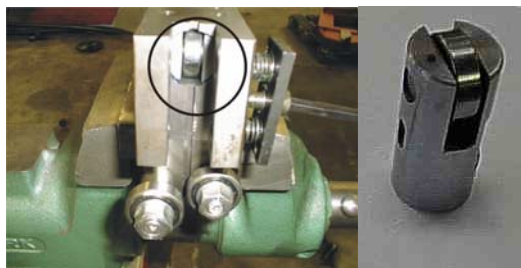
7. Install the cube on the holder and connect the cooling.



8. Adjust hard metal guides.

4.21.2. Pushing bearing replacement

If it is impossible to adjust the bundle gripping assembly and the pushing bearing is worn, it needs to be replaced.



The bearing condition is possible discover, on the cube from the bottom side, for a better inspection is possible to put out the holder of the bearing from the cube.

If the bearing is worn, there is a visible channel on it.

Bearing replacement:

Disconnect the hosepipe from the cooling agent supply, screw off the cutting pressure regulation. The gripping assembly regulation should stay connected to the hydraulic system.

1. Dismantle the guiding cube of the saw band



2. Fasten the guiding cube to the vice by means of the wrench no.3, release fixative screw of the bearing holder



3. Take out the bearing holder from the guiding cube



4. Insert the pivot to the vice

Attention:

The vice has aluminium jaws, eventually, there has to be an aluminium agent to protect the pivot from damage.

5. Remove the bearing pivot from the bearing holder by means of the swanger



6. Check all parts and remove the worn ones



7. Fasten the holder to the vice

Attention:

The vice has aluminium jaws, eventually, there has to be an aluminium agent to protect the pivot from damage.

8. Insert the bearing and washers and return the pivot to its original place
9. The pivot may not extend past the holder, otherwise, the bundle gripping assembly regulator gets worse.



10. Insert the holder to the guiding cube and fasten it by means of the screw and wrench.
11. Install the cube on the holder of the guiding cube, fasten cutting pressure regulation and connect cooling distribution



12. Set the guiding cube, hard metal guides and cutting pressure regulation

4.21.3. Fixed bearing replacement of the saw band guiding

If the fixed bearing is worn, replace it

1. Dismantle hard metal guide



2. Remove the screw by means of the wrench. It secure pivot of the bearing



3. Put the guide cube on the vice with its hole pointing up. The pivot of the bearing can release from the cube
4. Remove the bearing pivot by means of the hammer
5. Remove the bearing and washers from the cube



6. Check all parts and damaged parts and replace bearing



7. Insert bearing with washers to the groove in the cube and beat pivot
8. Complete the guiding cube according to the previous chapters. Install the guiding cube on the machine and set it

4.21.4. Saw band guiding pulleys replacement

If the saw band is not sufficiently guided by guiding pulleys or if the pulleys are obviously worn, the pulleys should be replaced

ATTENTION! Guiding pulleys must be replaced together on both guiding cubes!

1. Dismantle the saw band
2. Disconnect the hosepipe from the cooling agent input, screw off the cutting pressure regulation
3. The gripping assembly regulation should stay connected to the hydraulic system
4. Dismantle the guiding cube of the saw band



5. Tighten the guiding cube to the vice and dismantle both eccentrics with bearings following way
6. Remove the washers from the eccentrics



7. Remove eccentrics from the bearings by means of the swager



8. Pull up the eccentrics from the cube



9. Change both bearings and other worn parts



10. Install eccentrics to the cubes



11. Insert washer on the shorter eccentric and insert ring on the longer eccentric.
12. Further add both eccentrics of bearings and attach them to the eccentrics with the help of a pipe

ATTENTION!! Do not forget the eccentrics' position in the cube

13. Shorter eccentric is located on the side of binding screws of the guide cube



14. Put the washers on the bearings



15. Screw on the securing nuts on the eccentrics by means of the two wrenches



16. Insert piece of the saw band to the guiding cube (c. 15 – 20cm)
17. Set the eccentrics by means of the wrenches, the saw band must run in the centre. Guide pulleys must not press too much on the band, but must spin freely during the band run
18. Optimal distance between the band and the pulley is 0,05 mm.
19. Remove the testing piece of saw band from the guide cube and attach the guide cube on the machine; adjust it

4.21.5. Round brush replacement

If the chip removing brush is so worn, that it does not fulfil its function, the brush must be replaced

1. Hold shaft of the brush by wrench
2. Release the nut on the brush, replace worn brush on the new brush, screw on the nut
3. Set the brush to the saw band



4.22. Stretching wheel replacement

1. Dismantle the saw band.



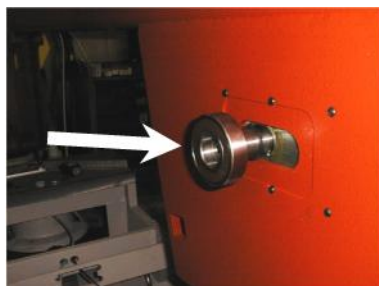
2. Screw off the screw and take down the washer.



3. Pull off the wheel from the shaft by means of the three-armed puller. If bearing stayed on the shaft, pull off it too
4. Check score of the bearings of the stretching wheel and replace them for new.



5. Clean the shaft and grease it with oil. Insert retaining ring to the groove.



6. Install bearing on the shaft and move it to the retaining ring. Insert the distance ring on the shaft and move it to the bearing.



7. Insert the retaining ring to the hole in the wheel.



8. Insert the bearing to the hole in the wheel and press it to the retaining ring.



9. Put the wheel on the shaft and screw on the preparation to the wheel stretching to the hole in the shaft.



10. Pull on the wheel on the shaft.



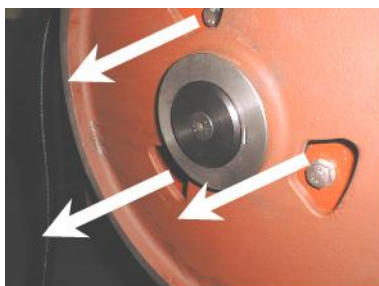
11. Screw on washer and screw back..
12. Install the saw band. Wheel replacement is ready.

4.22.1. Driving wheel replacement

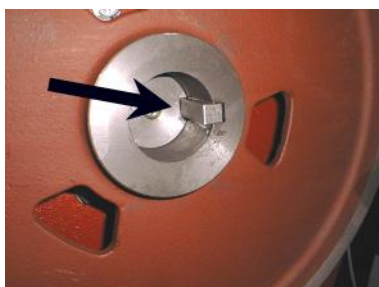
1. Dismantle the saw band



2. Screw off the screw and remove the washer.



3. Pull off the wheel from the shaft by means of the three-armed puller.



4. Install the wheel on the shaft. Insert the feather to the groove.



5. Screw on the preparation to the wheel stretching to the hole in the shaft. Pull on the wheel on the shaft.



6. Screw on washer and screw back.
7. Install the saw band. Wheel replacement is ready

Attention:

**Only a qualified worker can carry out the connection!!
High-voltage shock may have fatal results.
Further instructions are needed for qualified personnel!
Do not do the work yourself!!!**

4.22.2. Cooling pump replacement



- The tank with cooling agent is fastened to the pedestal by screws
- Screw off the screws and remove the tank from the pedestal
- Remove the hosepipe leading to the cooling agent from the plug on the pump
- Unscrew four screws on the cooling pump flange and pull out the pump from the sheet metal holder
- Remove the pump clamp box cover. Disconnect 4 clamps of the input cables
- Loosen the bushing and pull the cable out of the pump
- Dismantle new pump clamp box cover
- Push the cable through the bushing and fasten it
- Connect the cable clamps on the pump clamps as is described in the previous case
- Install again the clamp box cover; do not forget the rubber gasket
- Seal the hosepipe leading to the cooling agent connection
- Put the pump on the sheet metal holder and secure it to the pedestal with the four screws

5. **Závady / Troubleshooting**

5.1. Mechanical problems

Problem	Possible causes	Repair
1. Slanting cut	- Wrongly adjusted hard metal guides.	Set according to the chapter „Servicing and adjustment“
	- Worn hard metal guides.	Replace to the chapter „Worn pieces replacement“
	- Wrongly adjusted cubes of the saw band guiding.	Set according to the chapter „Servicing and adjustment“
	- Worn bearings of the saw band guiding.	Replace according to the chapter „Worn pieces replacement“
	- Wrongly adjusted swarf brush.	Set according to the chapter „Servicing and adjustment“
	- Worn swarf brush.	Replace according to the chapter „Worn pieces replacement“
	- Insufficient saw band stretching.	Rise the saw band stretching and set the limit switch.
	- Wrongly chosen tooth system of the saw band.	Replace the saw band and keep the instructions of manufacturer on new saw band choice.
	- Worn saw band.	Replace the saw band.
	- Wrongly balanced roller conveyor.	Set the roller conveyor.
	- Dirty feeding board.	Cleanse the feeding board from debris, chip and residue material.
	- Guiding arm and guiding cube are loosened.	Clamp the guiding arm.
	- Guiding arm and cube are too far from the material.	Set the guiding cube to the material.
	- Too fast cutting rate.	Lower the material feeding speed.
	- Unexpected oscillation in material quality.	Set the cut and feeding speed to the relevant material.
2. The cut is not cut upon desired angle	- Securing lever is loosened.	Check the securing lever efficiency and carry out its adjustment according to chapter „Servicing and adjustment“.
	- Set angle does not match the cut angle.	Check the angle adjustment with a protractor and possibly set it according to chapter „Servicing and adjustment“.
	- Insufficient saw band stretching.	Stretch the saw band and set the limit switch according to chapter „Servicing and adjustment“.
	- Guiding arm and guiding cube are loosened.	Fasten the guiding arm and the cube.
	- Dirt between material and clamping jaw.	Cleanse the material and mating jaw.
3. Short lifetime of the saw band	- Insufficient saw band stretching.	Raise the tightening of the saw band set the scanner of saw band tightening according to chapter „Servicing and adjustment“.
	- Worn swarf brush.	Check the swarf brush condition and replace it in case of excessive use as described in chapter „Worn pieces replacement“
	- Wrongly adjusted swarf brush.	Check swarf brush adjustment, set it according to chapter „Servicing and adjustment“
	- Over stretched saw band	Lower stretching of the saw band and set the limit switch of the saw band stretching according to chapter „Servicing and adjustment“
	- Wrongly adjusted hard metal guides.	Check the adjustment of the hard metal guides and carry out adjustment as described in chapter „Servicing and adjustment“
	- Worn hard metal guides of the saw band.	Check the condition of the hard metal guide and if it is too worn, replace hard metal guides according to chapter „Worn pieces replacement“

Problem	Possible causes	Repair
	- Worn saw band guide bearings.	Check guiding bearings and if you notice some sort of excessive damage, replace them according to chapter „Worn pieces replacement“
	- Wrongly adjusted guiding cubes of the saw band.	Set guiding cube according to chapter „Servicing and adjustment“
	- Wrongly adjusted down feed and saw band speed.	Adjust the feeding and speed of a saw band according to values published by saw band manufacturer.
	- Different material quality.	Adjust feeding and speed of a saw band according to desired material (try cut-test).
	- Low-class saw band	Replace the saw band (contact your local accessory supplier for more information)
	- Wrongly chosen saw band tooth system.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrongly adjusted tracking.	Check the space between top of a saw band and driving wheel. Perhaps adjust the tracking as described in chapter „Servicing and adjustment“
4. Insufficient cut output.	- Worn saw band.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrong saw band tooth system.	Replace the saw band and keep instructions of the manufacturer on the choice.
	- Wrongly set down feed and speed of a saw band.	Set feed and speed of a saw band according to values published by saw band manufacturer.
5. The cut is not finished.	- Wrongly adjusted lower stop point of the saw frame.	Check lower limit switch and screw.
	- Stop point surface is messed-up.	Cleanse stop point surface of the limit switch from debris and residue material.
6. By choke is not possible turn	- Metal clamps between valve and panel.	Clamps must be removed and put on the shaft O-Ring about 10x2 mm.
	- Metal clams are in body of valve.	Valve must be cleared or changed.
7. Saw band drive cannot be started.	- Pressure switch is adjusted wrong.	Set the pressure switch according to chapter „Servicing and adjustment“
	- Pressure switch is defective.	Replace defective parts of the pressure switch.
8. The saw bands are cracked.	- In stretching wheel is wrong adjusting geometry.	Adjust distance band from recess wheel c.2 mm according to operating instructions.
	- Hard metal plates of circuit saw band are not adjusting.	Hard metal plates of circuit saw band must be adjusting according to operating instructions.
	- Guiding cubes are not adjusting (bearings + hard metal circuit)	Guiding cubes must be adjusting (bearings + hard metal circuit) according to operating instructions.
	- Bearings of guiding cubes are used (rolling elements are damaged or outside ring of bearing has conical form).	Bearings of guiding cubes must be replaced. Bearings must be adjusting according to operating instructions.
9. Damage tooth system of the saw band	- In gripping the lifting cylinder is backlash.	
	- Squeezed pin upper or downer holder of the lifting cylinder.	Exchange complete upper or downer holder of lifting cylinder.
10. The saw is cut downing.	- Geometry of hardmetal guiding cubes is wrong adjusted.	Hardmetal guiding cubes must be adjusted.
	- Bearings of guiding cubes are used.	Bearings of guiding cubes must be replaced.
11. Cleansing of the saw band is not functional.	- Elastic wheel of the brush drive is worn-down.	Elastic wheel of the brush must be changed.
	- Knurling of the driving wheel is worn-down.	Driving wheel must be changed.
	- The shaft of the brush drive is rusted.	The shaft of the brush must be cleaned and oiled.

Problem	Possible causes	Repair
	- The brush position and the brush cover is adjusted wrong – with the brush cannot be turned.	The brush cover must be posed, in order to the brush can be turned.
12. The saw arm periodically rise and fall during the cut; this cause short lifetime of the saw band.	- Backlash in driving wheel lodgement on the shaft.	Change the driving shaft for a long one, new bearings, distance ring, new driving wheel, spring, two covers on the forehead of the shaft + screws.
	- Worn channel for spring.	

5.2. Electric problems

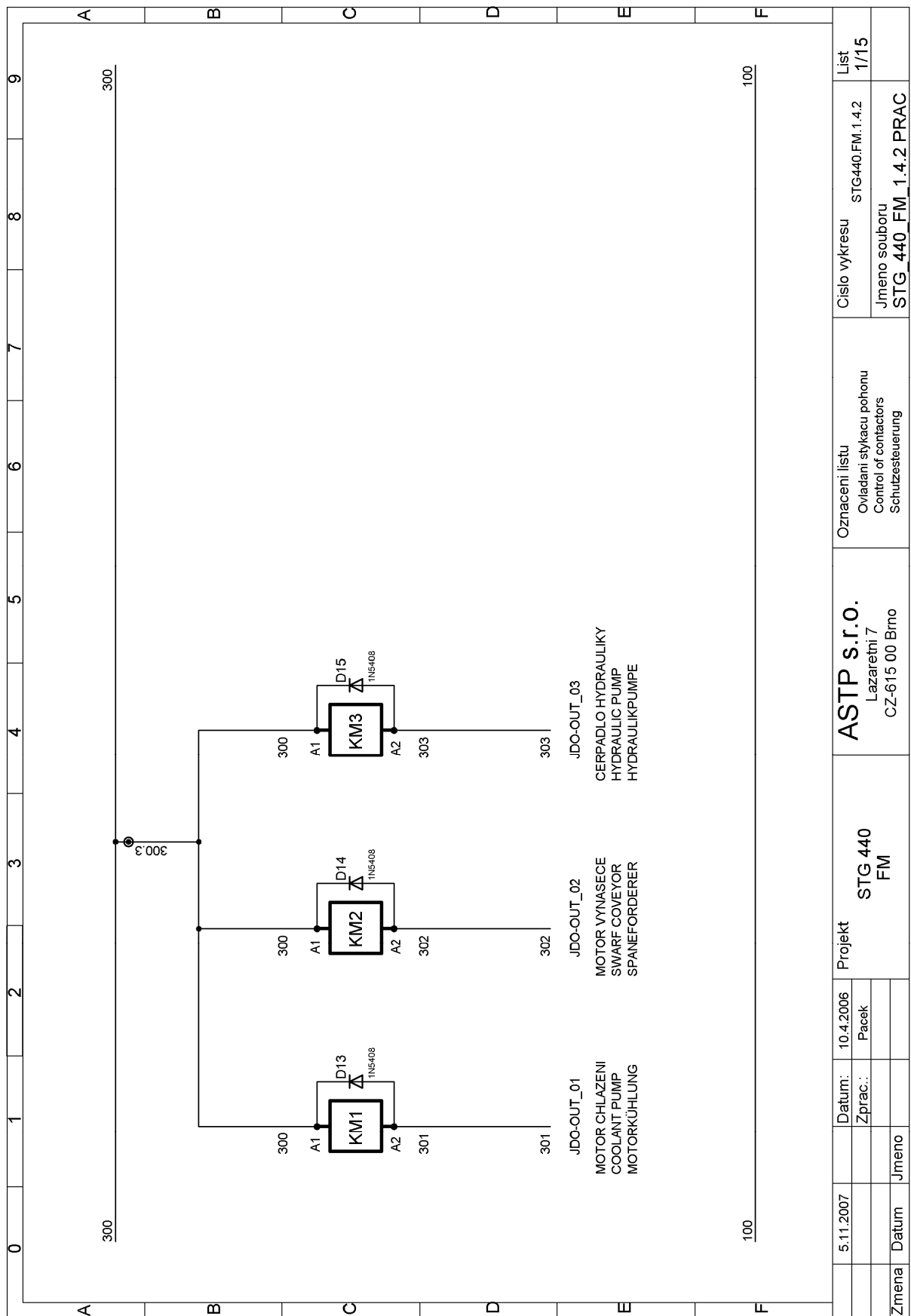
Problem	Possible causes	Repair
1. Machine is not possible start.	- In socket is not voltage	Line voltage must be checked.
	- Transfer relay is closed (thermal protector)	Each FA relay must be checked.
	- Limit switch of saw band stretching, cover of frame or cover of saw band is not started.	Check of saw band stretching and covers closing.
2. When cut is finished, the frame is not raising.	- Bottom limit switch is adjusted wrong.	Bottom limit switch must be adjusted according to chapter ADJUSTING.
	- In hydraulic (pneumatic) ring is error. HYTOS (BOSCH) is not acting to frame uplift.	Function of magnetic valve must be checked, valve must be closed, voltage of clamps and inductor must be checked.
3. Electric motor and pump are without voltage. Between contactor and thermal protector is not voltage.	- Wrong contactor.	Replace contactor of engine.
4. The indicator of speed saw band is not functional.	- Sensor of speed is not adjusted.	Sensor of speed must be adjusted.
	- Defective display	The display must be changed.
	- Wrong sensor – diode of indicator speed is not light.	Sensor must be changed and adjusted.
5. Protector is switched off from engine hydraulic aggregate MA3 sometimes.	- Into hydraulic system is high working pressure.	Service engineer must reduce the pressure in hydraulic system.
6. The hydraulic aggregate cannot be started	Auxiliary contact on thermo-relay FA1 is defective.	Replace the defective contact on motor starter FA1.
7. Hydraulic aggregate is switched on but the saw arm or the main vice is not functional	- Wrong connection of electrical supply. The electrical phases are connected conversely.	The phases must be switched. Only service engineer can do this.
8. Cooling is not active	Lack of cooling agent.	Fill the tank with cooling agent.
	- Thermal relay is defective	Change the thermal relay
	- Input hosepipe is broken or obstructed.	Check the cooling circuit and perhaps cleanse cooling system.
	- Cooling pump protection is defective	Check the protection of cooling pump if need change it.
	- Cooling pump is defective.	Replace the cooling pump.

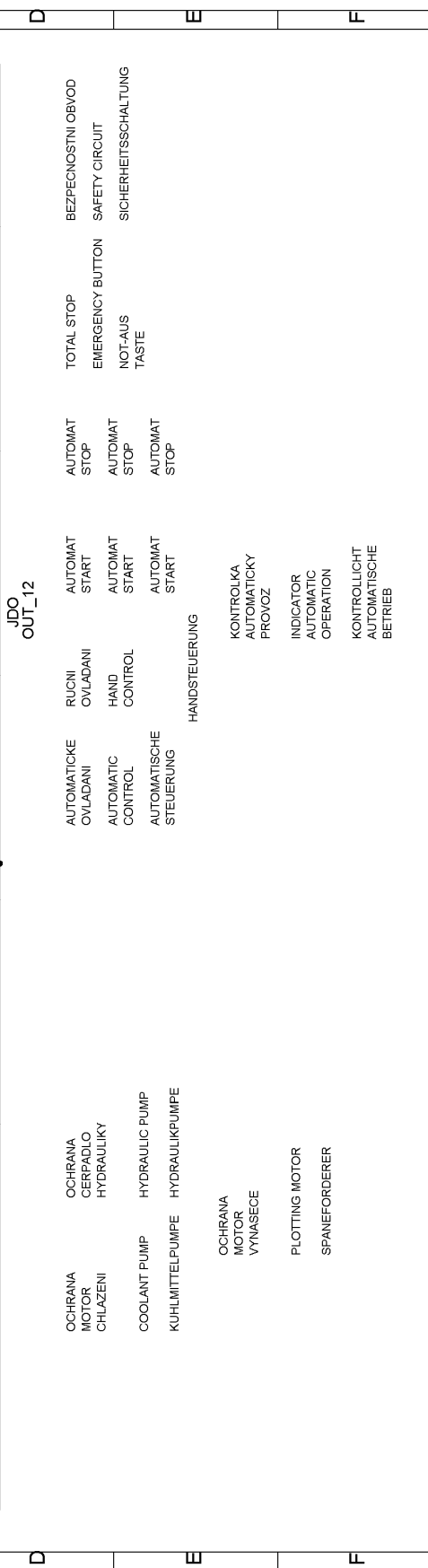
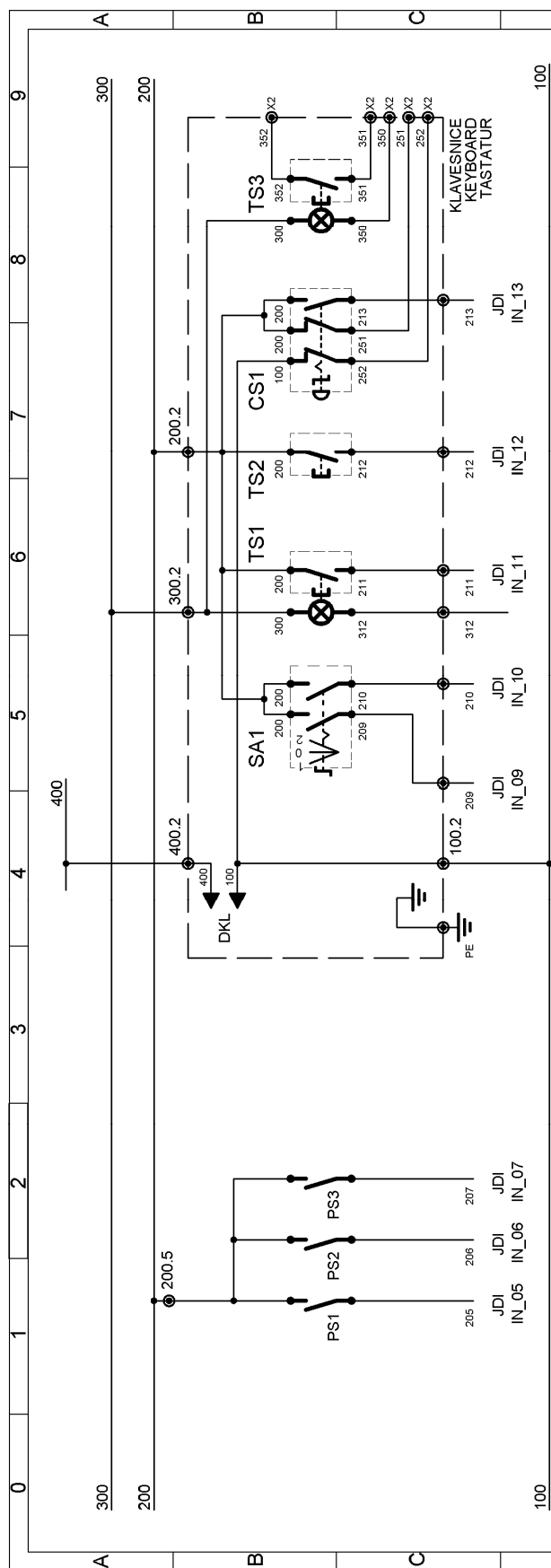
5.3. Hydraulic problems

Problem	Possible causes	Repair
1. Hydrogenerator not supplying oil	• reverse rotation	Check the connections of each phase. Reconnect properly connection of the electrical phases.
	• shortage of oil in the tank	Add hydraulic oil
	• Oil viscosity does not correspond prescribed viscosity value	Change hydraulic oil.
	• Hydrogenerator malfunction	Call service
	• Wrong power supply connection.	Check the connections of each phase. Reconnect properly connection of the electrical phases.
2. Hydraulic oil contains bubbles	• Hydraulic circuit is not adequately deaerated	Make deaeration of hydraulic circuit.
	• Low oil level	Add hydraulic oil
	• the pump shaft seals damaged	Call service
3. Increased mechanical noise	• damaged joint drive	Call service
	• damaged or destroyed motor bearings	Call service
	• air intake	Check for leaks.
4. Low pressure, pump supplies oil	• problem in the safety valve	Wrong settings. Check the settings and adjust the safety valve.
	• pump wear	Call service
	• external or internal leakage	Call service
5. Hydrogenerator is seized	• damage by solid particles in oil	Make oil filtration, or call the service.
	• non-prescribed oil	Change hydraulic oil.
	• wrong type of oil	Change hydraulic oil.
	• exceeding the life of the pump	Call service
6. Overheating oil	• cooler malfunction	Check the cooler function or call service.
	• wear the pump, the energy is converted into heat	Call service
7. Hydraulic valve can not be readjusted	• electromagnet has no signal (voltage) - interrupted supply lines	Check again.
	• Electromagnet coil burnt	Replace coil – Call service.
	• spool valve sticking	Replace valve – Call service

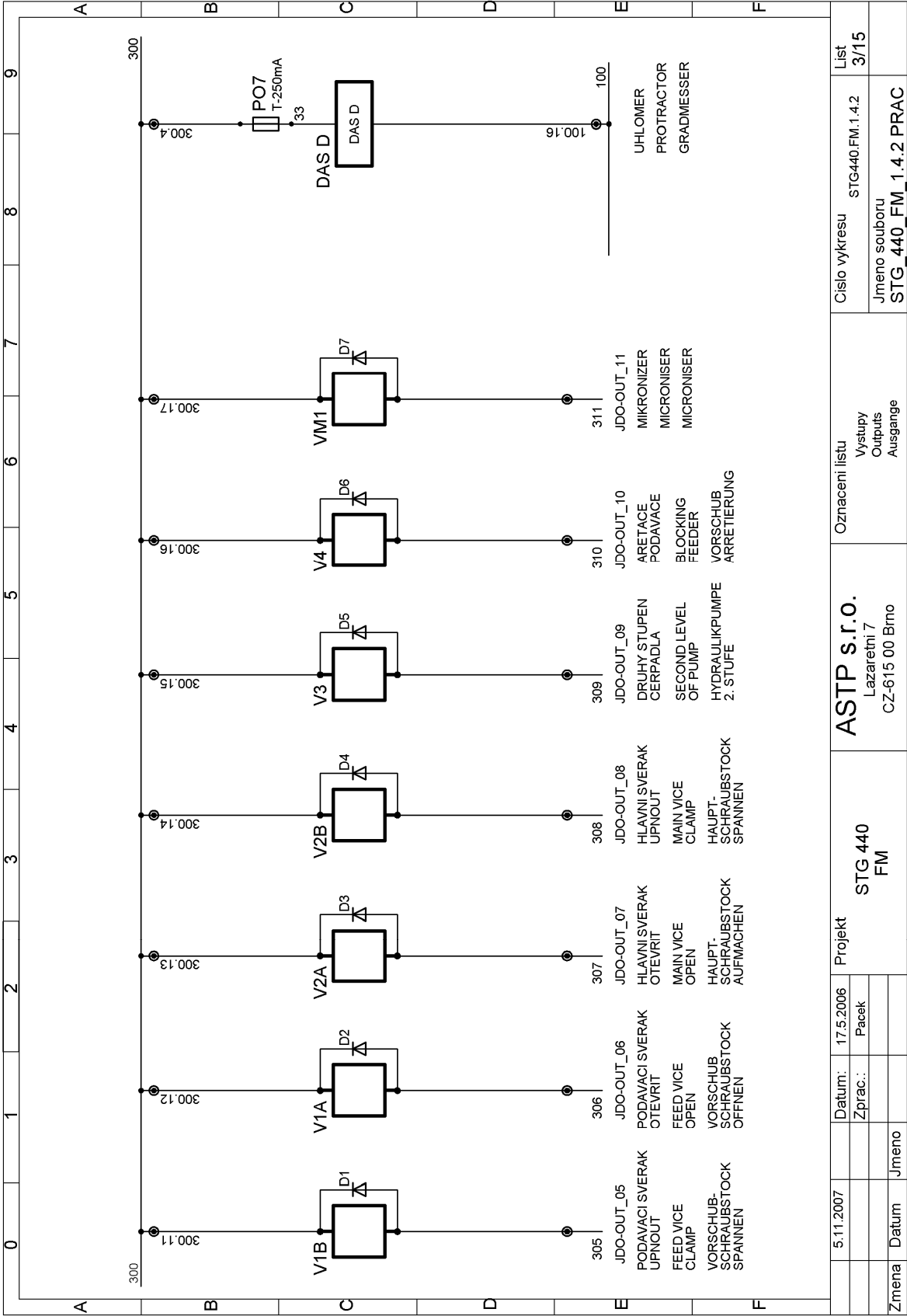
6. **Schémata / Schemas / Schematics**

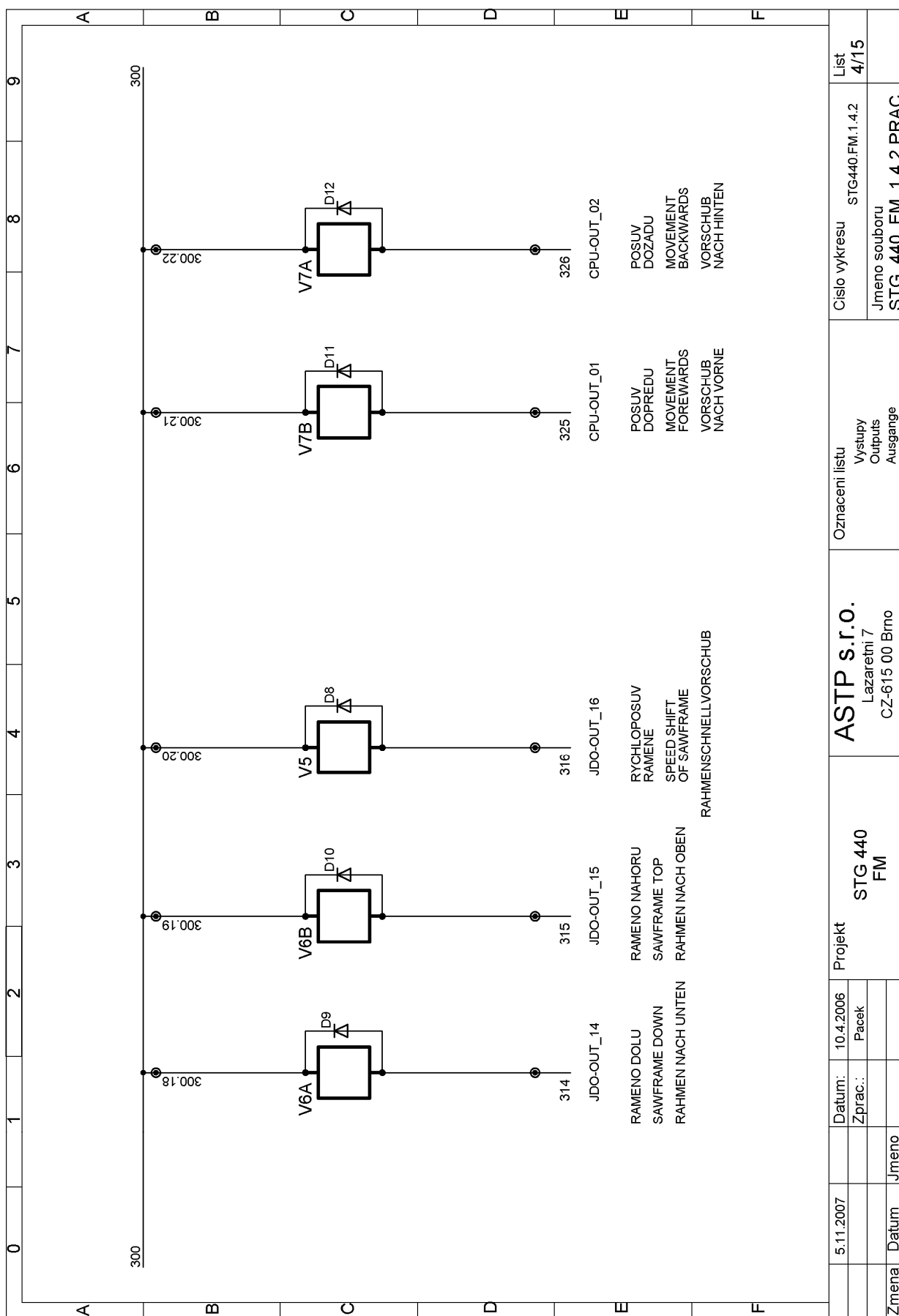
6.1. Elektrické schema 3x400V, 50Hz, TN-C-S /
Elektroschema 3x400V, 50Hz, TN-C-S /
Wiring diagrams 3x400V, 50Hz, TN-C-S

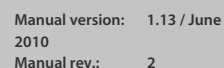


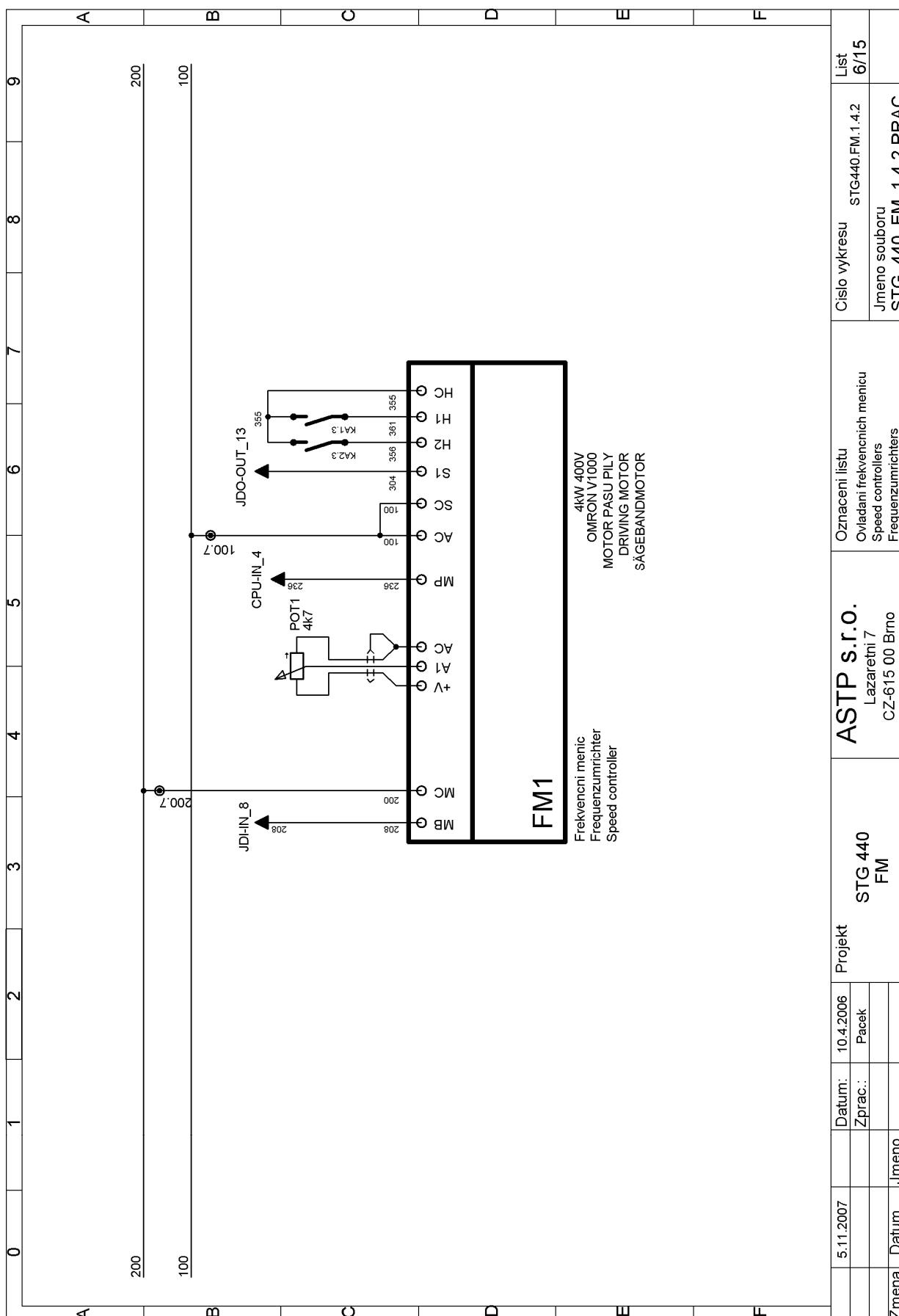


5.11.2007	Datum:	10.4.2006	Projekt	STG 440 FM	ASTP s.r.o. Lazaretní 7 CZ-615 00 Brno	Oznaceni listu Signaly spousteu, klavesnice Signals of shields, keyboard Schaltersignal, Tastatursignal	Cislo vykresu STG440.FM.1.4.2	List 2/15
Zmena	Datum	Jmeno	Zprac.: Pacek			Jmeno souboru STG_440_FM_1.4.2 PRAC		

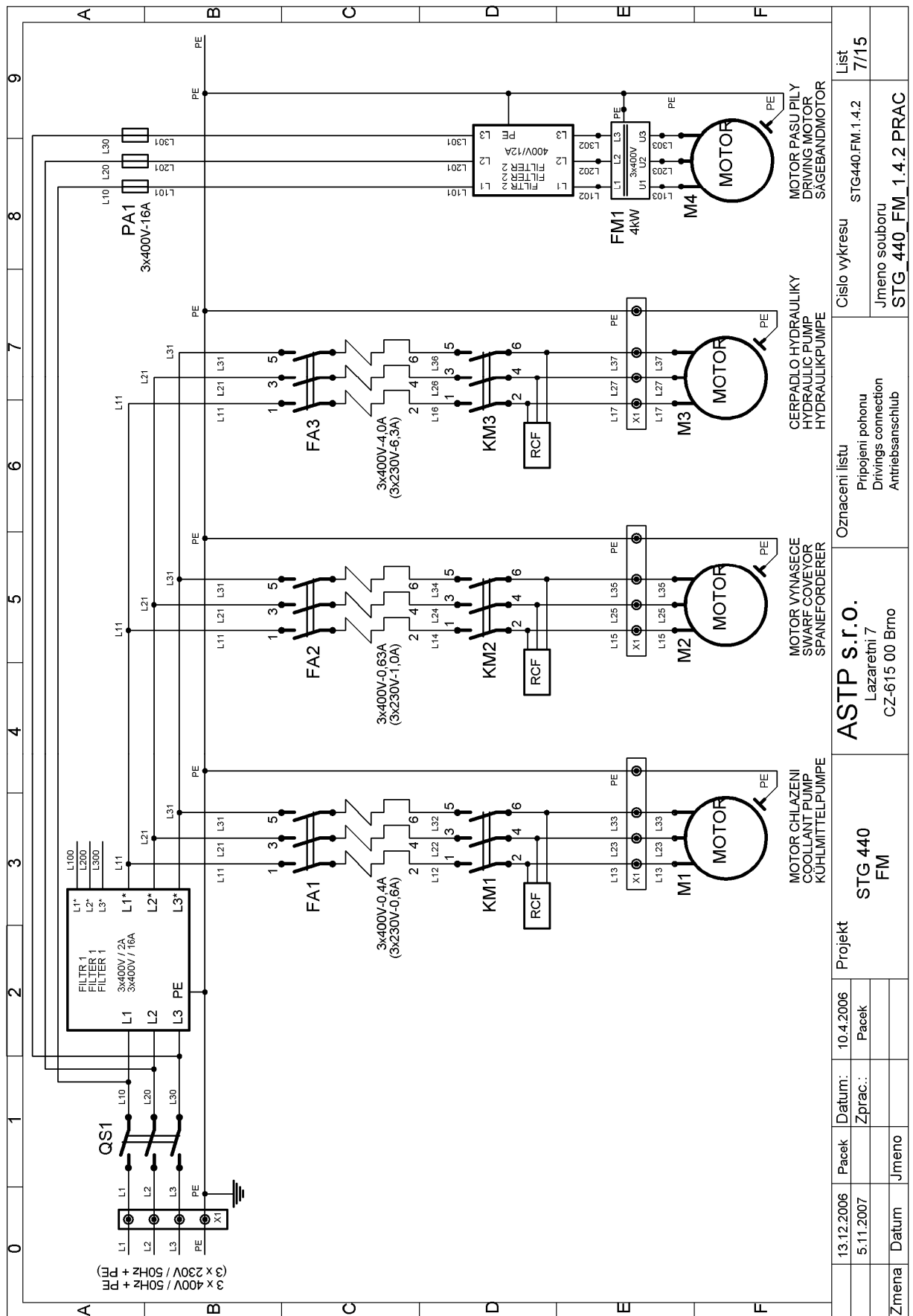








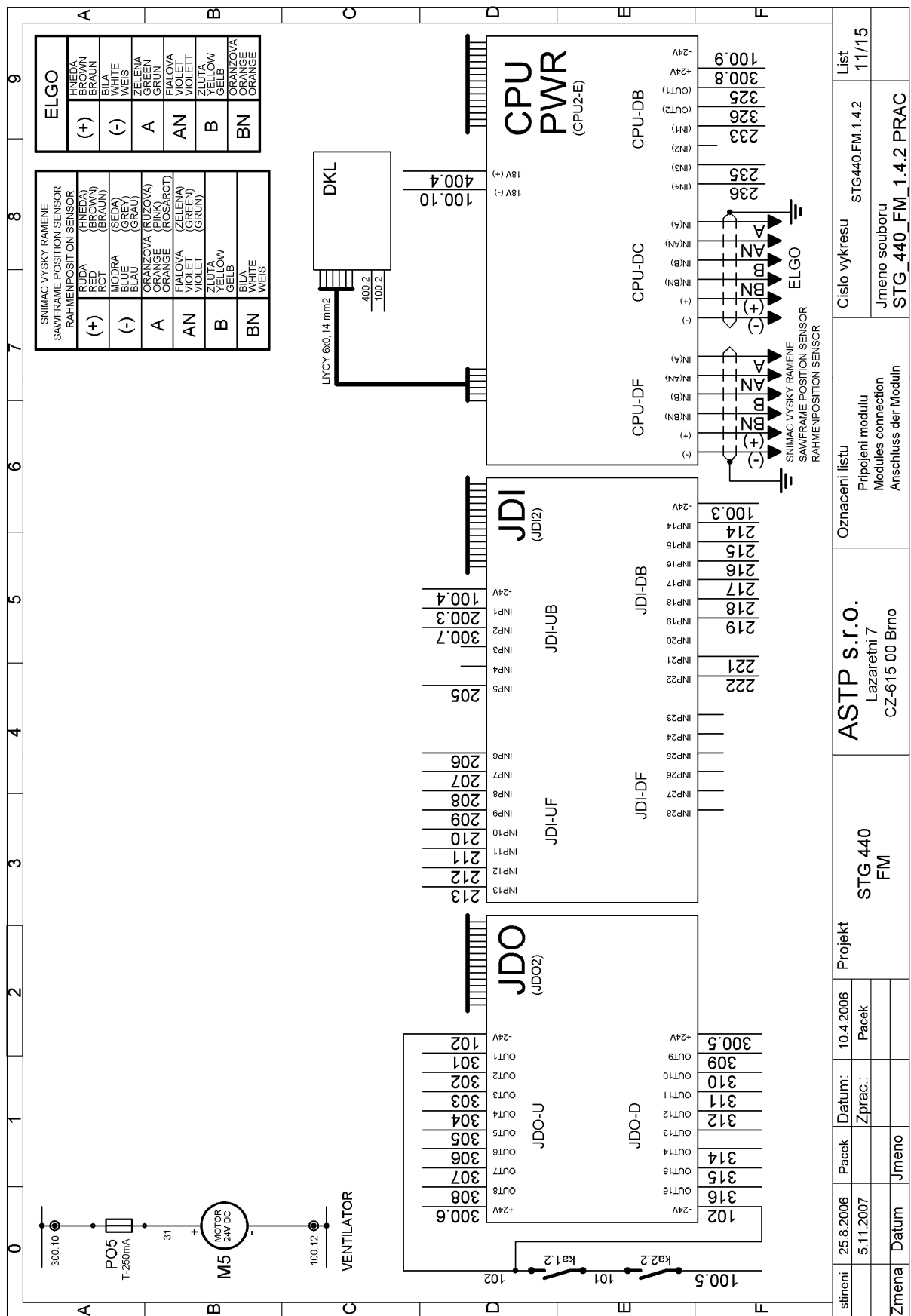
5.11.2007	Datum:	10.4.2006	Projekt	STG 440 FM	ASTP s.r.o. Lazaretni 7 CZ-615 00 Brno	Oznaceni listu Ovladani frekvencnich menicu Speed controllers Frequenzumrichters	Cislo vykresu STG440.FM.1.4.2	List 6/15
Zmena	Datum	Jmeno					Jmeno souboru STG_440_FM_1.4.2.PRAC	

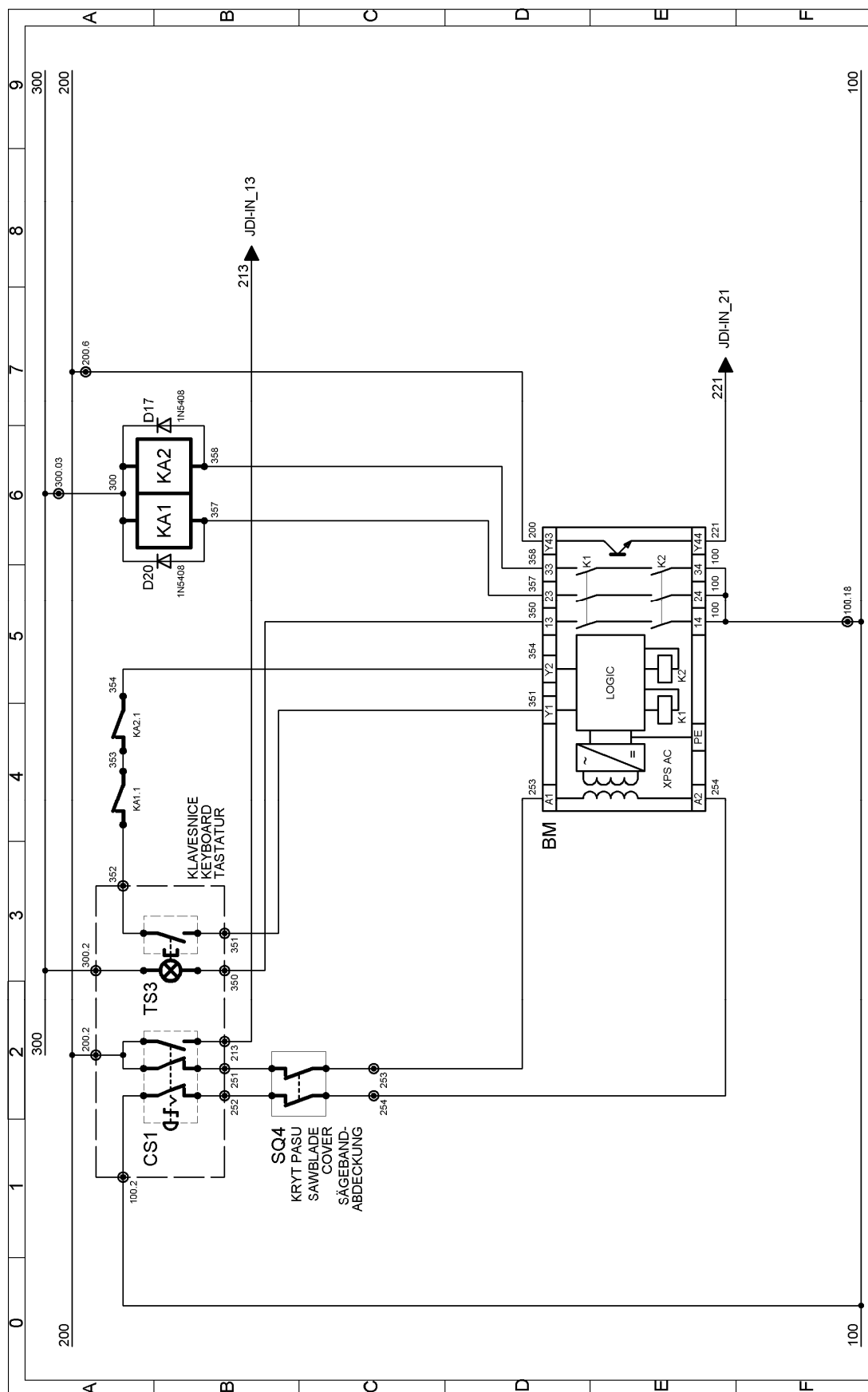








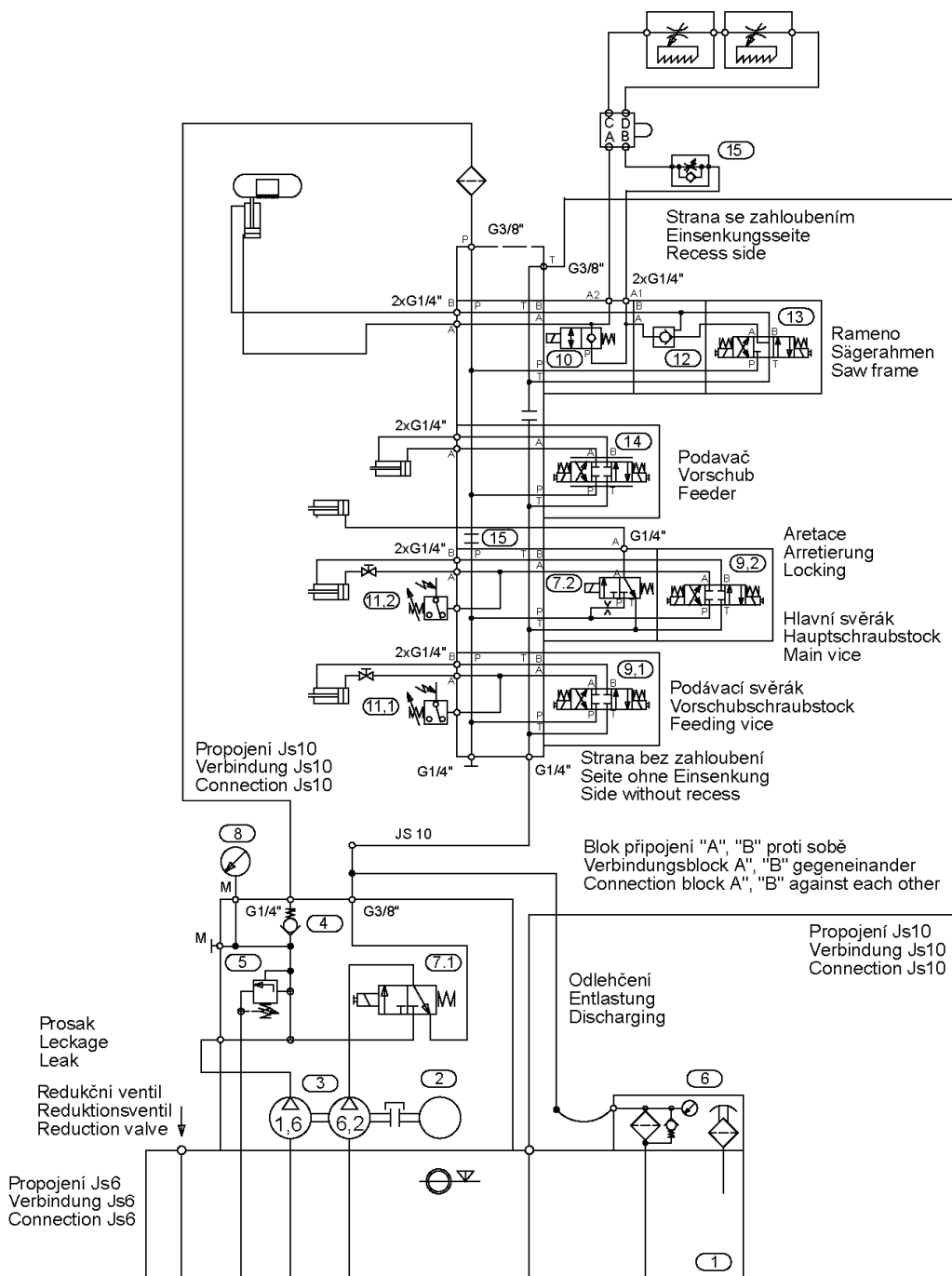




Zmena	Datum	Jmeno	Projekt	ASTP s.r.o. Lazaretni 7 CZ-615 00 Brno	Oznaceni listu Bezpečnostní obvod Safety circuit Sicherheitsschaltung	Cislo vykresu STG440.FM.1.4.2	List 12/15

Manual version: 1.13 / June 2010
Manual rev.: 2

6.2. Hydraulické schéma / Hydraulikschema / Hydraulic diagram



Základní technické parametry :
Technische Spezifikation:
Technical specification:

Q	8 + 2,1	dm ³ ·min ⁻¹	ot.	1410	min ⁻¹
p _{max}	4	MPa	P	1,1	kW

Hydraulické schéma:
Hydraulikschema:
Hydraulic diagram:

870-1184

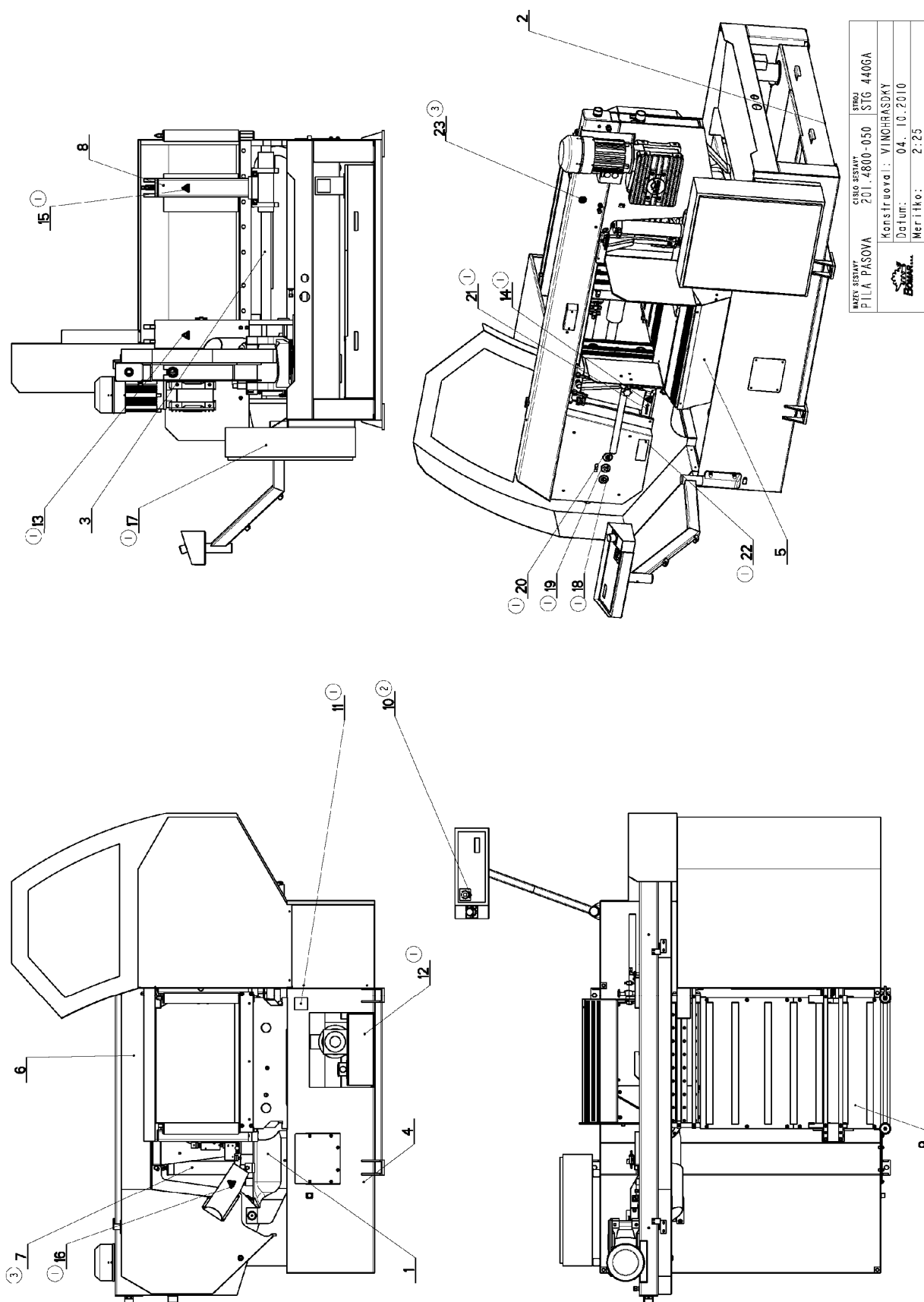
Schéma / Schema / Diagram: 8701184AU-B.DWG
Datum / Datum / Date: 22. 10. 2002

Poz.	Název položky		ks
Pos.	Bezeichnung		Menge
Pos.	Item		Pcs.
1	Nádrž / Behälter / Tank	N20 - Bomar	1
2	Elektromotor / Elektromotor / Electromotor	1LA7090-4AA	1
3	Hydrogenerátor / Hydraulikaggregat / Hydrogenerator	P2-6,2/1,6L66313	1
4	Jednosměrný ventil / Einwegventil / One-way valve	VJ01-06/SG-1	1
5	Přepouštěcí ventil / Bypassventil / By pass valve	VPP2-04/S-6S	1
6	Zpětný filtr / Filter / Filter	FR 043 - 166/0 + DG200-06	1
	Vložka filtru / Filtereinsatz / Filter inset 92.153.101	V3.0510-56	1
7	Rozváděč / Verteilungsventil / Distributor	ROX1-042D21/02400E1K5	2
8	Manometr / Manometer / Manometer	0-10 MPa	1
9	Rozváděč / Verteilungsventil / Distributor	RPE 3-043Z11/02400E1K5	2
10	Blok rychloposuvu / Eilgangsblok / Speed shift block	729-0084	1
11	Tlakový spínač / Druckschalter / Pressure switch 92.201,001	SUCO 0166 411 031 043 s krytkou / mit Deckel / with cover	2
12	Hydraulický zámek / Hydraulisches Schloß / Hydraulic lock	VJR1-04/MA	1
13	Rozváděč / Verteilung / Distributor	RPE 3-043Y11/02400E1K5	1
14	Proportionální rozváděč / Wege-Proportionalventil / Proportional distributor	PRM 2-043Z11/04-24 MIKRO	1
15	Škrticí ventil / Drosselventil / Throttle valve	VSO1-04/R2,5-O	1

7. Výkresy sestav pro objednání náhradních dílů / Zeichnungen für Bestellung der Ersatzteile / Drawing assemblies for spare parts order

- Při objednávání náhradních dílů vždy uvádějte: typ stroje (např. practix Transverse 610.440 GANC) , výrobní číslo (např. 125) a rok výroby (např. 1999).
- In die Bestellung der Ersatzteile führen Sie immer an: Maschinentyp (z. B. Transverse 610.440 GANC), Serien Nr. (z. B. 125) und Baujahr (z. B. 1999).
- For spare parts order, you must always to allege: type of machine (for example Transverse 610.440 GANC), serial number (for example 125, see cover page) and year of construction (for example 1999).

7.1. Transverse 610.440 GANC

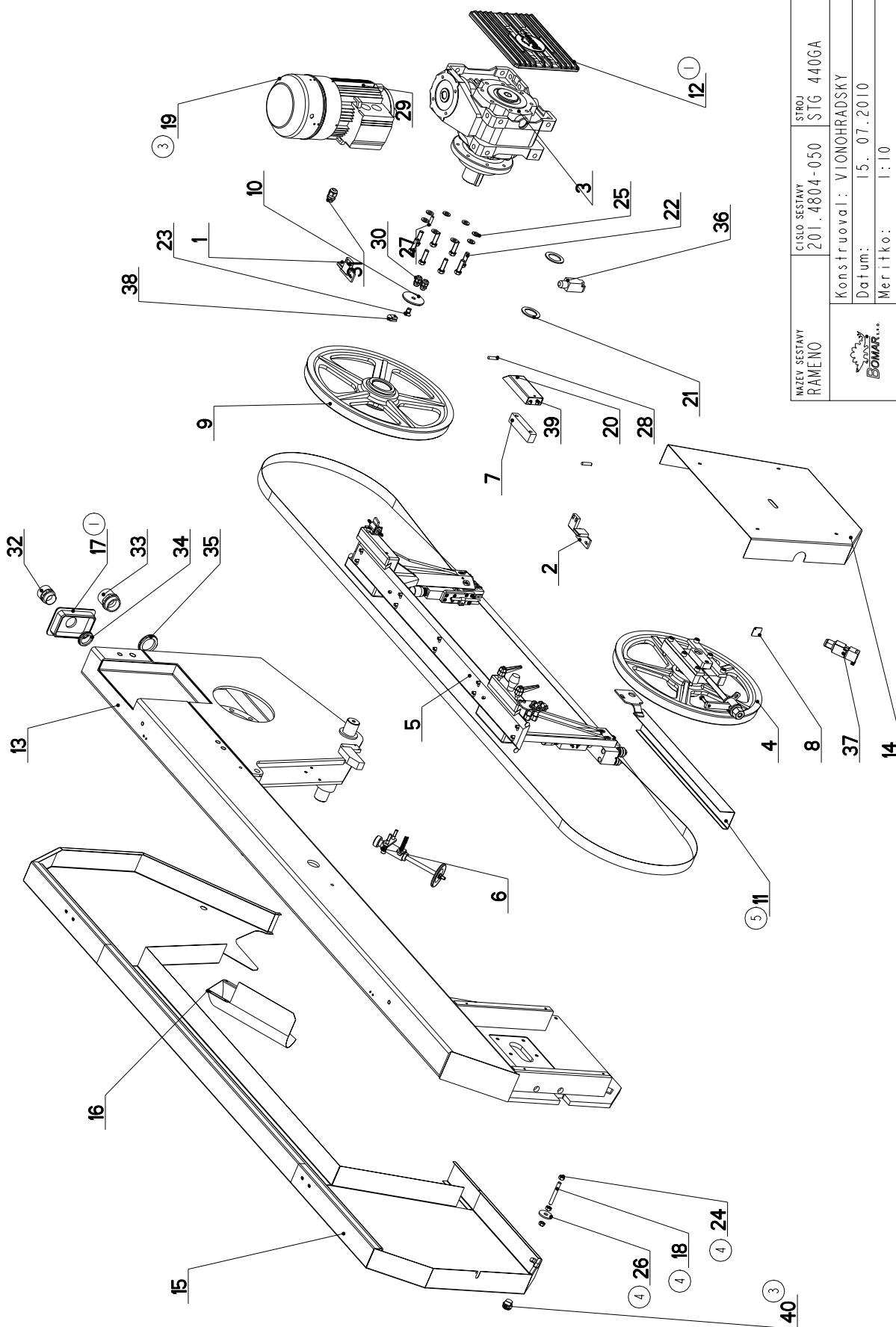


1. DOPLNENY BEZPEČNOSTNÍ ZNACKY - 1x99.900.039, 1x99.900.040, 1x99.900.041, 1x99.900.043, 1x99.900.046, 1x99.900.047, 1x99.900.048, 1x99.900.049, 1x99.900.053, 1x99.900.055, 1xTYPOVÝ STÍTEK 31.4099-001, VÝMENA AGREGATU ŽRUS. SOUC. 90.001.010 A NAHRÁZENA 92.001.015. 324,388/ZM387 17.10.2007 SLEZACKOVA

2. PRIDAN STÍTEK RYCHLOSTI PASU 30.0599-008. 367/ZM011 17.1.2007 SLEZACKOVA

3. PRID.CERTIFIKACNÍ ZNACKA 99.901.032,ZRUS.VALEC 201.4807-100 A NAHR.201.4807-200. 071/ZM265 4.10.2010 SLEZACKOVA

7.3. Rameno / Sägerahmen / Sw arm - 1

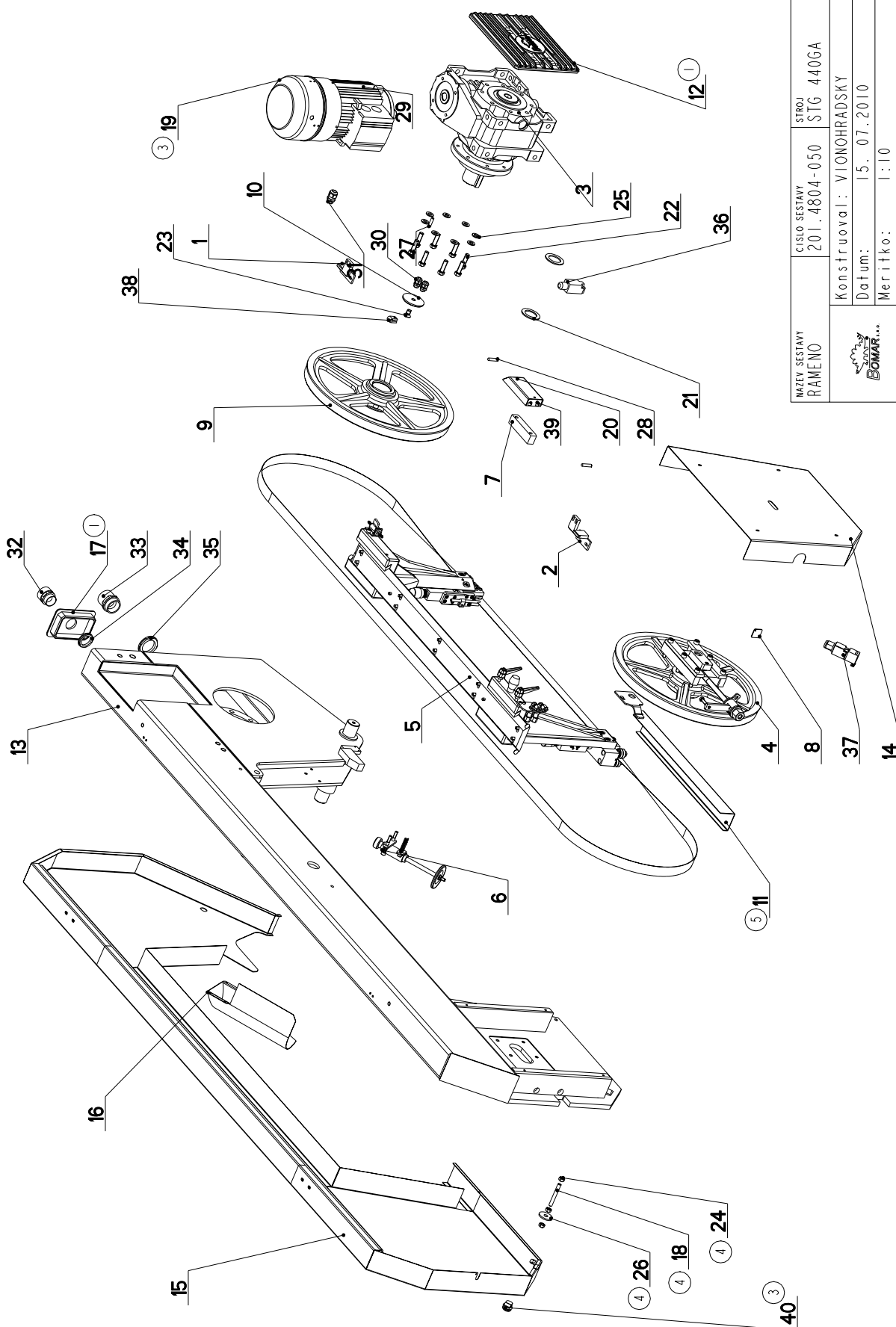


NÁZEV SESTAVY RAMENO	CÍSLO SESTAVY 201.4804-050	STROJ STG 440GA
Konstruoval: VÍONOHRADESKÝ		
Datum: 15. 07. 2010		
Měřítko: 1:10		

7.4. Kusovník / Stückliste / Piece list – Rameno / Sägerahmen / Saw arm - 1

Císlo Sestavy 201.4804-050		Ver. 5	Název sestavy RAMENO/SHOULDER/SÄGERAHMEN		
Poz.	Objednáci číslo	Ver.	Název položky	Rozměr	Ks
1	201.1714-300	0	PANT / HINGE / TÜRBAND		1
2	201.1714-400	0	PANT / HINGE / TÜRBAND		1
3	201.4805-050	0	PREVODOVKA / TRANSMISSION / GETRIEBE		1
4	201.4808-000	3	NAPINANI / TENSIONING / SPANNUNG		1
5	201.4810-000	3	VEDENÍ PASU / BELT GUIDE / SÄGEBANDFÜHRUNG		1
6	201.4814-400	0	KARTAC / BRUSH / BÜRSTE		1
7	30.0814-014	0	KLUZAK / GLIDER / GLEITER	HR 25x 30	1
8	30.0814-113	0	PLECH / PLATE / BLECH	P2-30	1
9	30.1804-002	2	KOLO HNACÍ / DRIVE WHEEL / ANTRIEBSRAD	ODLITEK	1
10	30.1804-010	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	d 70	1
11	30.1814-108 (5)	0	KRYT PASU / BELT COVER / BANDABDECKUNG		1
12	30.2904-059 (1)	0	VÍKO / COVER / DECKEL	250x20	1
13	30.4804-051	3	RAMENO / SHOULDER / SÄGERAHMEN		1
14	30.4814-102	3	KRYT NAPINANI / TENSIONING COVER / BANDSPANNUNGSABDECKUNG	P 1.5 - 556	1
15	30.4814-303	1	KRYT PASU / BELT COVER / BANDABDECKUNG		1
16	30.4814-309	0	KRYT KARTACKU / BRUSH COVER / BÜRSTENABDECKUNG		1
17	30.8404-055 (1)	0	ZATKA / PLUG / STOPFEN	150x100x5-8	1
18	30.8404-056 (4)	0	TYC ZAVITOVÁ / THREADED POLE / GEWINDESTANGE	M10	2
19	30.8504-060 (3)	0	VENTILATOR / VENTILATOR / VENTILATOR		1
20	30.8914-211	0	KRYT / COVER / ABDECKUNG	P 1.5 - 104	1
21	81.0804-005	0	KROUZEK / RING / RING	P 3-60	2
22	90.005-55.034	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M12X40	8
23	90.011-27.009	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M12X20	1
24	90.100-55.006 (4)	0	MATICE / NUT / MUTTER	MATICE _ M10	6
25	90.150-50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 13	8
26	90.151-50.002 (4)	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 12	2
27	90.300-07.010	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 8X32	1
28	90.302-07.003	0	KOLÍK KUZELOVÝ / TAPER PIN / KEGELBOLZEN	KOLÍK 8X36	2
29	91.001-053	0	ELEKTROMOTOR / ELECTRIC MOTOR / ELEKTROMOTOR	MDERA 100-32pro	1
30	91.070-011	0	VÝVODKA / BUSHING / TÜLLE	M16x1.5	2
31	91.070-012	0	VÝVODKA / BUSHING / TÜLLE	M20x1.5	1
32	91.071-004	0	VÝVODKA / BUSHING / TÜLLE	VÝVODKA	1
33	91.071-005	0	PRŮCHODKA / LEADTHROUGH / DURCHFÜHRUNG		1
34	91.072-007	0	MATICE / NUT / MUTTER	MATICE	1
35	91.072-008	0	MATICE / NUT / MUTTER		1
36	91.173-007	0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER		1

7.5. Rameno / Sägerahmen / Sw arm - 2



NÁZEV SESTAVY RAMENO	CÍSLO SESTAVY 201.4804-050	STROJ STG 440GA
Konstruoval: VÍONOHRADESKÝ		
Datum: 15. 07. 2010		
Meritko: 1:10		

7.6. Kusovník / Stückliste / Piece list – Rameno / Sägerahmen / Saw arm - 2

Císlo Sestavy 201.4804-050		Ver. 5	Název sestavy RAMENO/SHOULDER/SÄGERAHMEN	
Poz.	Objednací číslo	Ver.	Název položky	Ks
37	91.173.012	0	SPINAC KONCOVÝ / END SWITCH / ENDSCHALTER	1
38	94.204.002	0	DRŽÁK / HOLDER / HALTER	1
39	94.204.005	0	DRŽÁK / HOLDER / HALTER	1
40	99.104.002 (3)	0	ZÁMĚK / LOCK / SCHLOSS	2

1. ZRUS. KRYT 30.4804-052 A NAHR. ZÁTKOU 30.8404-055, PRIDANO VÍKO PŘEVODOVKY 30.2904-059. 351/ZM365 9.10.2007 SLEZACKOVA

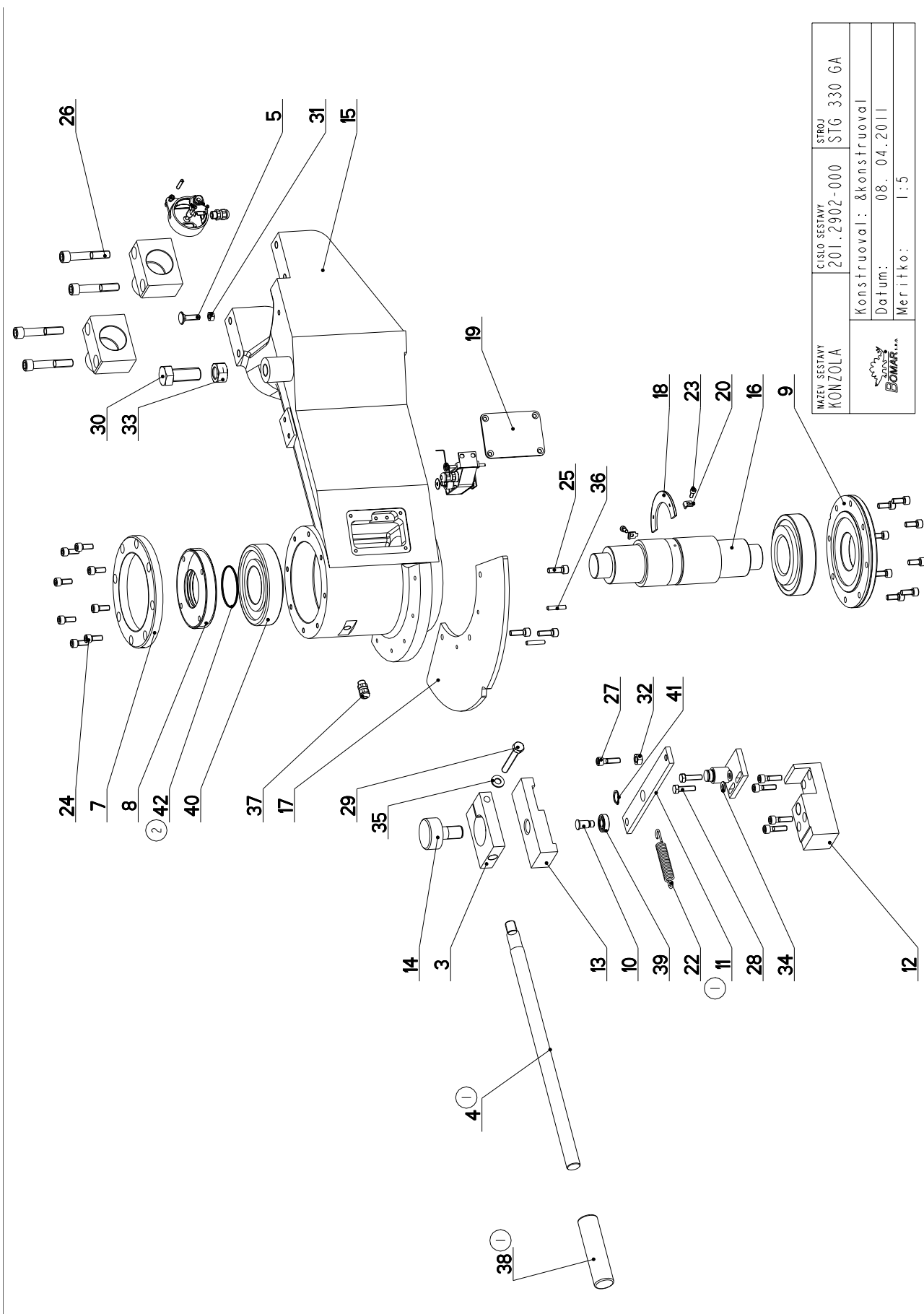
2. ZRUS. KRYT PASU 30.4014-108 A NAHR. 30.1814-104. 439/ZM442 27.11.2007 SLEZACKOVA

3. PRIDAN VENTILATOR 30.8504-060., PRIDAN ZÁMĚK 99.104.002, DRŽÁKY 30.4807-092, 30.4807-091.008/ZM008 23.1.2008 SLEZACKOVA

4. ZRUS. DRŽÁK 30.4807-092, 30.4807-091, PRID. 2xTYC ZAVÍTOVA 30.8404-056, 2xPODLOŽKA 12 (90.151.50.002), 6xMATICE M10 (90.100.55.006). 077/ZM100 17.4.2009 SLEZACKOVA

5. ZRUSEN KRYT PASU 30.1814-104 A NAHRAZEN 30.1814-108. 207/ZM220 15.7.2010 SLEZACKOVA

7.7. Konzola / Konsole / Console - 1

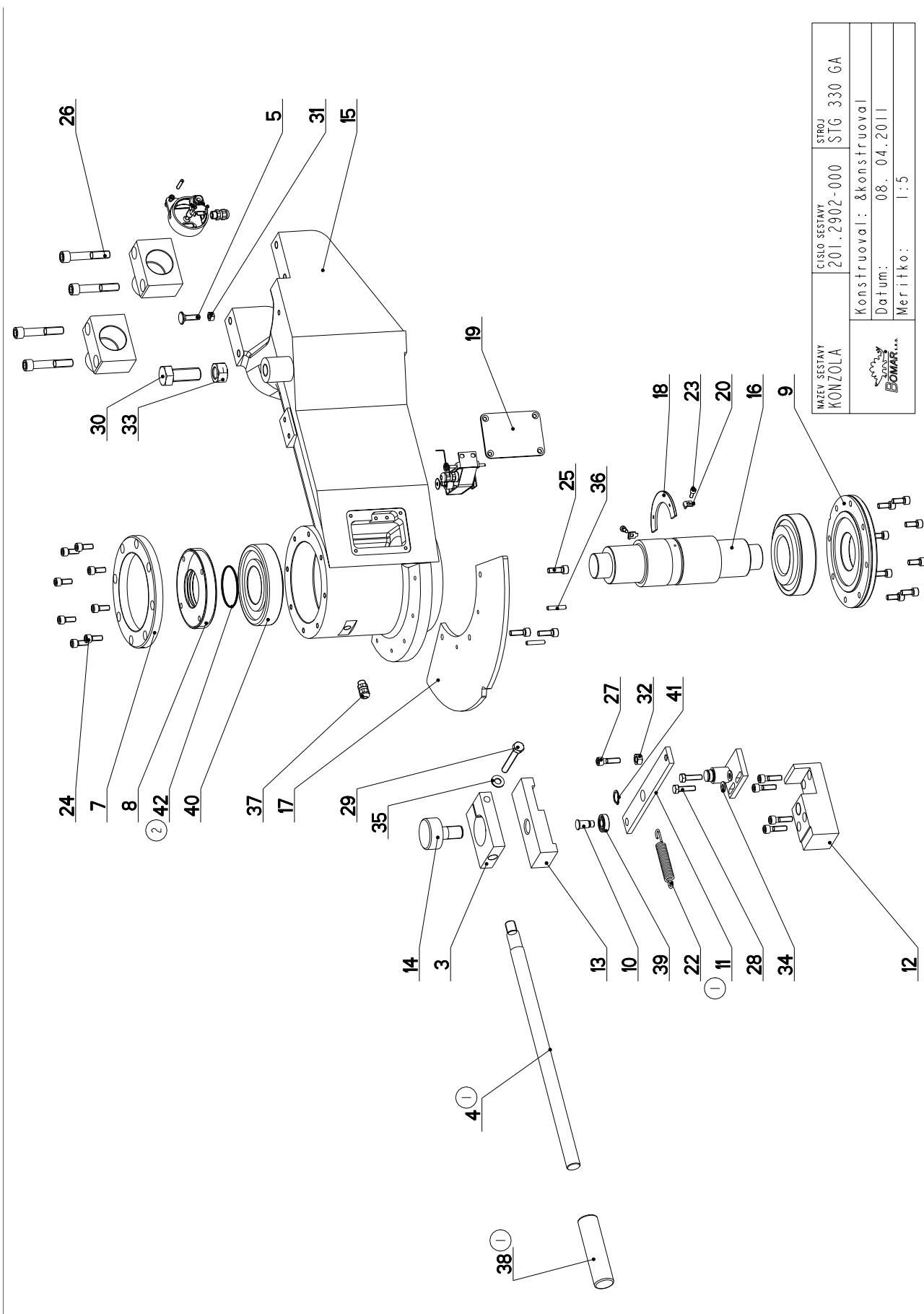


NAZEV SESTAVY KONZOLA	CÍSLO SESTAVY 201.2902-000	STROJ STG 330 GA
Konstruoval: &konstruoval		
Datum: 08. 04. 2011		
Meritko: 1:5		

7.8. Kusovník / Stückliste / Piece list – Konzola / Konsole / Console - 1

Císlo Sestavy 201.2902-000		Ver. 2	Název sestavy KONZOLA/CONSOLE/KONSOLE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.0614-200	0	ODMEROVANI / MEASURING / GEHRUNGSMESSUNG		1
2	201.2902-200	0	SNIMAC / SENSOR / SENSOR		1
3	30.0702-004	0	DRŽAK / HOLDER / HALTER	HR 70x 20	1
4	30.0702-007 (1)	1	TYC / LEVER / HEBEL	d22	1
5	30.0702-013	0	SROUB / BOLT / SCHRAUBE	M8	1
6	30.0802-002	1	LOŽISKO / BEARING / LAGER		2
7	30.0802-004	1	VIKO / COVER / DECKEL	VÝPALEK	1
8	30.0802-005	0	MATICE / NUT / MUTTER	--	1
9	30.0802-006	1	VIKO / COVER / DECKEL	d 180	1
10	30.0802-011	0	CEP / LUG / BOLZEN	d16	1
11	30.0802-013 (1)	0	PAKA / LEVER / HEBEL	HR 30 x 8	1
12	30.0809-007	0	KOSTKA / CUBE / WÜRFEL	HR 50 x 50	1
13	30.0809-008	0	UPÍNKA / FASTENER / SPANNEISEN	HR 50 x 30	1
14	30.0809-009	0	SROUB / BOLT / SCHRAUBE	d 50	1
15	30.2902-001	2	KONZOLA OTOCNA / TURNABLE CONSOL / DREHKONSOLE	ODLITEK	1
16	30.2902-003	0	CEP / LUG / BOLZEN	d 75	1
17	30.2902-007	0	KOTOUC ODMEROVANI / MEASURING DISC / MESSSCHEIBE	P8 - 190	1
18	30.2902-010	0	SEGMENT / SEGMENT / SEGMENT	P 3 - 110	1
19	30.2902-111	0	KRYT / COVER / ABDECKUNG	P 3 - 74	1
20	30.2902-112	0	DRŽAK / HOLDER / HALTER	P2 - 10	2
21	30.3509-013	2	CEP / LUG / BOLZEN		1
22	31.0206-005	0	PRUŽINA / SPRING / FEDER	2.50x16x90x27	1
23	90.001.25.008	0	SROUB IMBUS CERNENY / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x12	2
24	90.001.25.032	0	SROUB IMBUS CERNENY / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x20	16
25	90.001.25.033	0	SROUB IMBUS CERNENY / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x25	3
26	90.001.25.064	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M12x70	4
27	90.001.55.083	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x30	5
28	90.005.55.017	0	SROUB 6HRANNY / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x30	2
29	90.005.55.042	0	SROUB 6HRANNY / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M10x70	1
30	90.005.55.050	0	SROUB 6HRANNY / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M20x50	1
31	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1
32	90.100.55.006	0	MATICE / NUT / MUTTER	MATICE _ M10	1
33	90.100.55.009	0	MATICE / NUT / MUTTER	MATICE _ M20	1
34	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 8,4	2
35	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHIEBE	PODLOŽKA 10,5	1
36	90.300.07.006	0	KOLÍK VALC. KAL. / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 6x32	2

7.9. Konzola / Konsole / Console - 2



NAZEV SESTAVY KONZOLA	CÍSLO SESTAVY 201.2902-000	STROJ STG 330 GA
Konstruoval: &konstruoval		
Datum: 08. 04. 2011		
Meritko: 1:5		

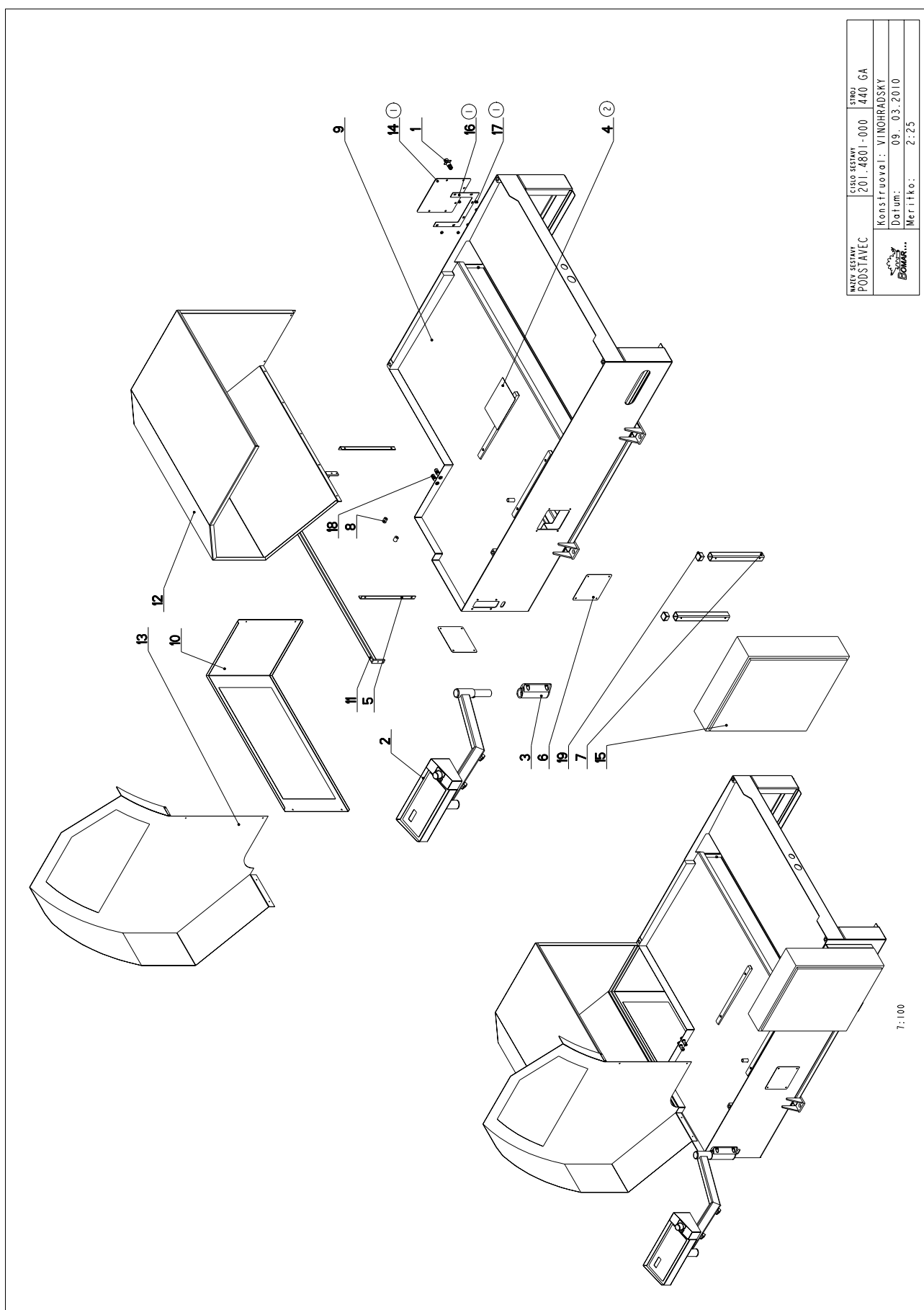
7.10. Kusovník / Stückliste / Piece list – Konzola / Konsole / Console - 2

37	91.070.010	0	PRUCHODKA / LEADTHROUGH / DURCHFÜHRUNG	M12x1,5 ČERNA	1
38	94.004.502 (1)	0	RUKOJET / HANDLE / GRIFF	D22	1
39	95.001.005	0	LOŽISKO / BEARING / LAGER	6001 2RS	1
40	95.300.001	0	LOŽISKO KUZELÍK / BEARING / LAGER	30312A	2
41	95.800.008	0	KROUZEK POJIST. VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNY KROUZEK 18	1
42	96.001.017 (2)	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	60X3	1

1. ZRUS.SOUCAST 30.0802-009 A NAHR. 30.0802-013, ZRUS.SOUC. 30.0702-005 A NAHR. 30.0702-007,
ZRUS.SOUC. 94.002.001 A NAHR. 94.004.502. 187/ZMI69 4.6.2010 SLEZACKOVA

2. PRIDAN KROUZEK 96.001.017. 013/ZM064 8.4.2011 SLEZACKOVA

7.11. Podstavec / Untersatz / Base



7.12. Kusovník / Stückliste / Piece list – Podstavec / Untersatz / Base

Císlo Sestavy 201.4801-000		Ver. 3	Název sestavy PODSTAVEC / BASE / UNTERSATZ		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	262.007	0	KONEKTOR / CONNECTOR / STECKVERBINDER		1
2	201.2914-900	0	PANEL / PANEL / PANEL		1
3	30.2814-307	0	LOŽISKO / BEARING / LAGER	ODLITEK	1
4	30.2901-041 (2)	0	SÍTO / SIEVE / GITTERWERK	P 1 x 176	1
5	30.2914-106	0	KONZOLA / CONSOLE / KONSOLE	L 25x25x3	2
6	30.2914-115	0	VÍKO / COVER / DECKEL	P2 - 175	2
7	30.2914-119	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	J 40x40x3	2
8	30.2914-121	0	DISTANČ / DISTANCE / DISTANZ	TR 20x 5	2
9	30.4801-001	1	PODSTAVEC / BASE / UNTERSATZ		1
10	30.4814-104	1	KRYT HYDRAULIKY / HYDRAULIC COVER / HYDRAULIKABDECKUNG		1
11	30.4814-105	0	DRŽÁK / HOLDER / HALTER		1
12	30.4814-111	0	KRYT PODAVACE / FEEDER COVER / VORSCHUBABDECKUNG		1
13	30.4814-112	0	KRYT RAMENE / SHOULDER COVER / RAHMENABDECKUNG		1
14	30.7201-103 (1)	1	KRYT / COVER / ABDECKUNG	P 4x235x270	1
15	31.4930-001	0	ROZVADEC / DISTRIBUTOR / VERTEILER		1
16	31.7217-032 (1)	0	TESNĚNÍ / SEALING / DICHTUNG	TL4	1
17	90.100.55.005 (1)	0	MATICE / NUT / MUTTER	MATICE - M8	6
18	92.008.101	0	SROUBENÍ / BOLTING / VERSCHRAUBUNG	G 1/4"	2
19	94.101.005	0	ZATKA / PLUG / STOPFEN	40x40x3	2

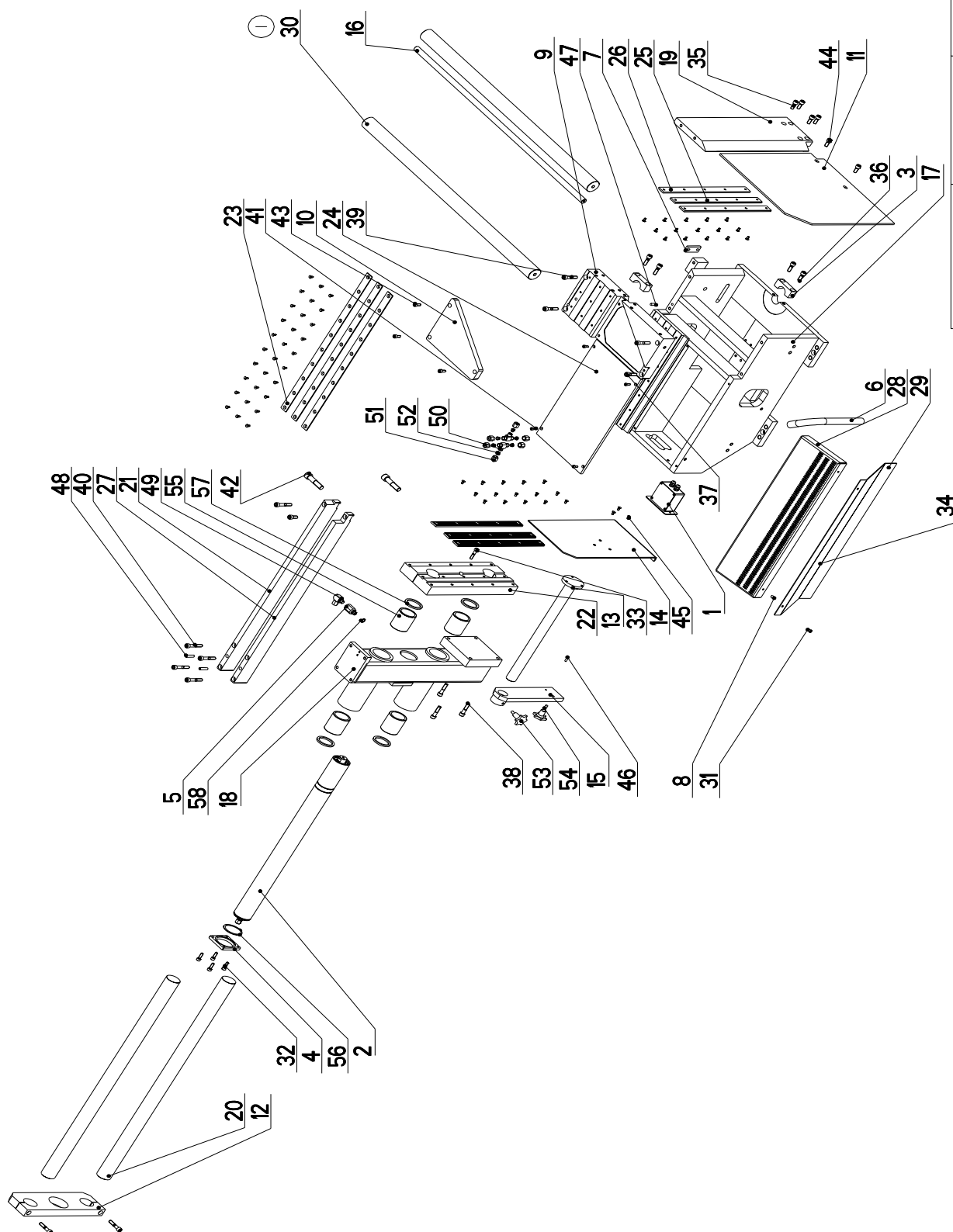
1. PRIDANO TESNĚNÍ 31.7217-032, KRYT 30.7201-103, MATICE M8 90.100.55.005. 176/ZM189 9.5.2007 SLEZACKOVA

2. PRIDANO SÍTO 30.2901-041. 187/ZM216 1.6.2007 SLEZACKOVA

3. ZRUŠEN DRŽÁK 30.2914-120. 295/ZM284 5.9.2008 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.13. Svěrák / Schraubstock / Vice – 1



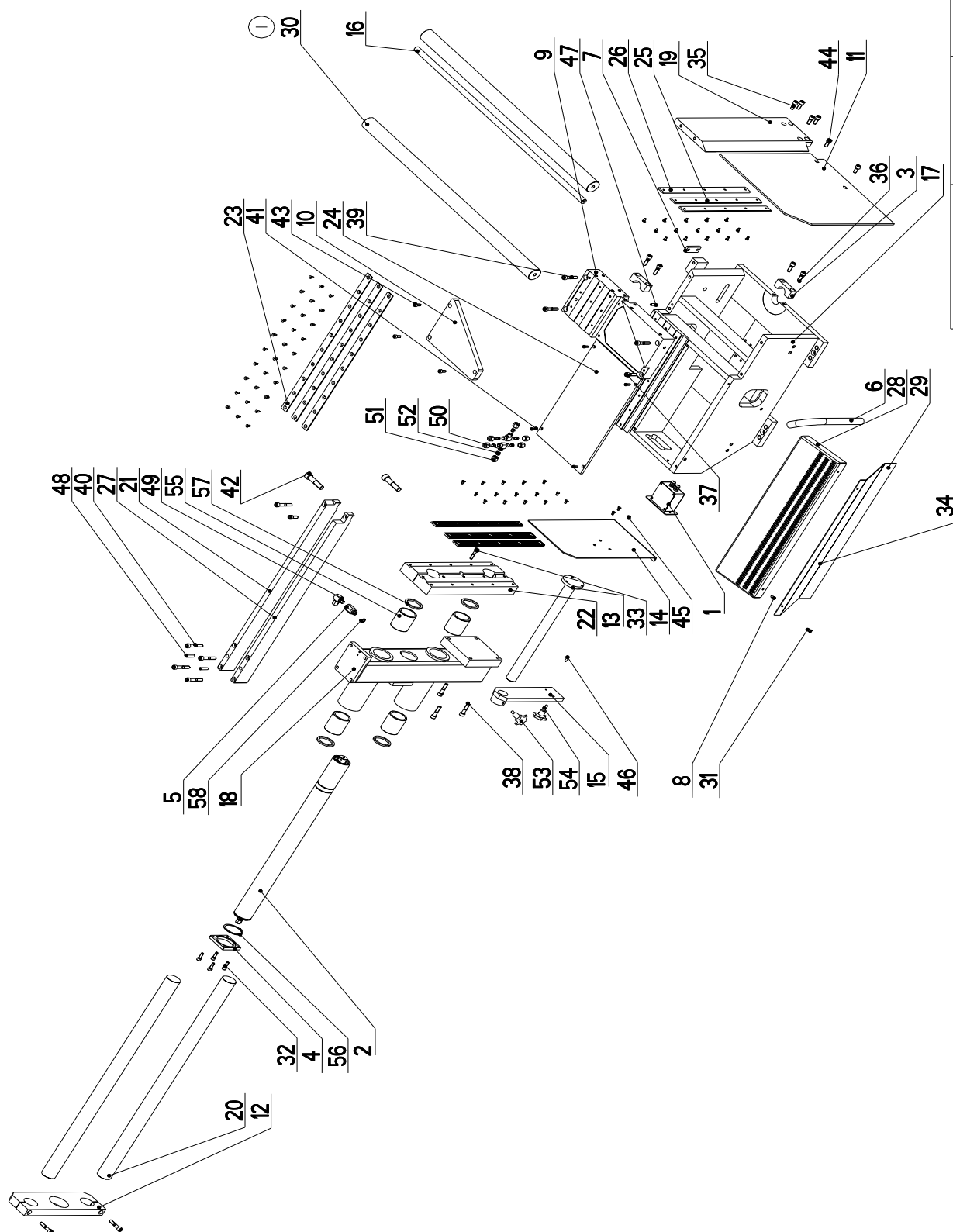
NÁZEV SESTAVY SVĚRÁK	ČÍSLO SESTAVY	STŘOJ
	201.4803-000	STG 440GA
	Konstruoval: &konstruoval	
	Datum: 09. 03. 2010	
	Meritko: 2:25	

7.14. Kusovník / Stückliste / Piece list – Svěrák / Schraubstock / Vice – 1

Císlo Sestavy 201.4803-000		Ver. I	Název sestavy SVERAK/VICE/SCHRAUBSTOCK		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.2903-100	0	DISPLAY / DISPLAY / DISPLAY		1
2	201.4807-000	0	VALEC / ROLLER / ZYLINDER		1
3	30.0809-010	1	PRÍLOŽKA / STRAP / LASCHE	HR 30 x 25	2
4	30.2011-010	0	PRÍLOŽKA / STRAP / LASCHE	HR 80x10	1
5	30.2011-011	1	SROUBENÍ / BOLTING / VERSCHRAUBUNG	SW24	1
6	30.2903-008	0	TRUBKA / TUBE / ROHR	TR 25x2	1
7	30.2903-013	0	DORAZ / STOP PIECE / ANSCHLAG	HR 25x8	1
8	30.3509-015	1	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	TR 8x1	2
9	30.3709-002	0	DESKA / BOARD / PLATTE		1
10	30.3709-003	0	DESKA / BOARD / PLATTE		1
11	30.4009-010	0	CELIST / JAW / BACKE		1
12	30.4009-011	0	DRŽAK / HOLDER / HALTER	HR 110 x 30	1
13	30.4014-401	0	VEDENÍ / GUIDE / BACKENFÜHRUNG		1
14	30.4014-402	0	CELIST / JAW / BACKE	P4-240	1
15	30.4014-403	1	KONZOLA / CONSOLE / KONSOLE		1
16	30.4303-021	1	JEDNOTKA ODMEROVÁNÍ / MEASURING UNIT / MESSEINHEIT	ø 20	1
17	30.4803-001	0	PODSTAVEC SVERAKU / VICE BASE / SCHRAUBSTOCKUNTERSATZ		1
18	30.4803-002	2	SLOUP / POLE / SÄULE		1
19	30.4803-003	0	CELIST / JAW / BACKE	HR 190x25	1
20	30.4803-004	0	TYC / POLE / STANGE	ø 50 h6	2
21	30.4803-005	1	LISTA / TRIM / LEISTE	TYC 60x20	1
22	30.4803-006	1	CELIST / JAW / BACKE	HR 160 x 45	1
23	30.4803-008	0	DESKA / BOARD / PLATTE	P3-28	3
24	30.4803-009	0	KRYT SVERAKU / VICE COVER / SCHRAUBSTOCKABDECKUNG	P10-260	1
25	30.4803-010	2	LISTA CELISTI / JAW TRIM / BACKENLEISTE	HR 30x10	4
26	30.4803-011	1	LISTA SVERAKU / VICE TRIM / SCHRAUBSTOCKLEISTE	HR 30x10	2
27	30.4803-013	0	LISTA / TRIM / LEISTE	HR 60x 20	1
28	30.4803-014	1	ROST / GRILL / GITTER	P3 - 240	1
29	30.4803-015	0	SKLÚZ / SLIDE / RUTSCH	P2 - 279	1
30	30.4803-016	0	TYC VODÍČI / LEAD POLE / FÜHRUNGSSTANGE	ø 50 h6	2
31	90.001.25.015 (1)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x10	2
32	90.001.25.033	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x25	4
33	90.001.25.036	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x40	1
34	90.001.25.046	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x20	2
35	90.001.25.047	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x25	5
36	90.001.25.048	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x30	2

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.15. Svěrák / Schraubstock / Vice - 2



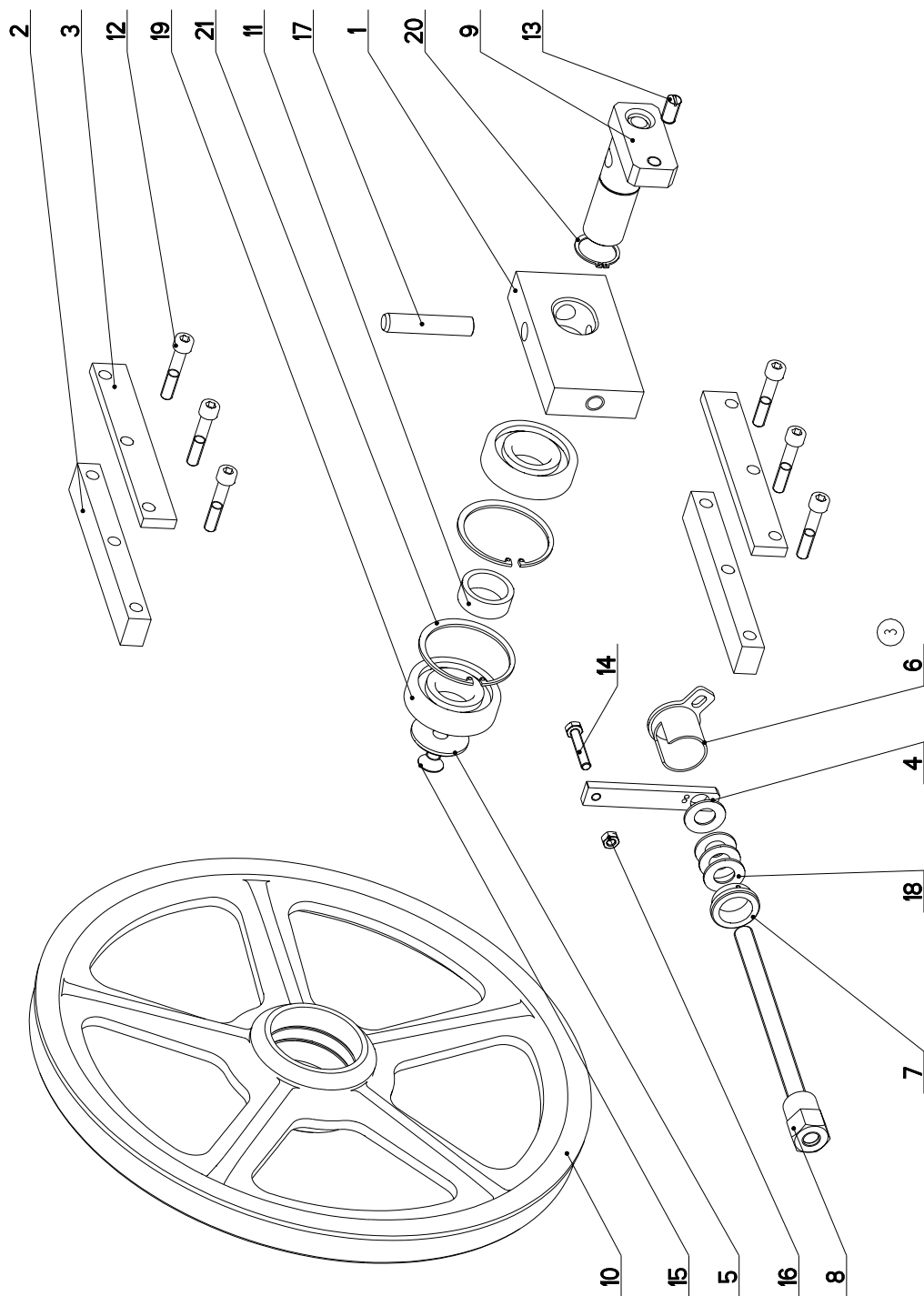
NAZEV SESTAVY	CÍSLO SESTAVY	STROJ
SVĚRÁK	201.4803-000	STG 4406A
Konstruoval: &konstruoval		
Datum: 09. 03. 2010		
Meritko: 2:25		

7.16. Kusovník / Stückliste / Piece list – Svěrák / Schraubstock / Vice - 2

Císlo Sestavy 201.4803-000		Ver. I	Název sestavy SVĚRÁK/VÍCE/SCHRAUBSTOCK		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
37	90.001.25.049	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x35	3
38	90.001.25.051	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x45	4
39	90.001.25.052	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x50	5
40	90.001.25.054	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x60	5
41	90.001.25.092	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x14	4
42	90.001.25.093	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16x70	2
43	90.001.25.105	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x18	3
44	90.001.25.106	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x22	2
45	90.011.27.005	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M6x12	63
46	90.300.02.005	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 6x20	1
47	90.300.02.XXX	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 8x22	1
48	90.302.02.003	0	KOLÍK KUŽELOVÝ / TAPER PIN / KEGELBOLZEN	KOLÍK 8x36	2
49	92.003.001	0	SROUBENÍ UHLÍKOVÉ / ANGLE BOLTING / WINKELVERSCHRAUBUNG	RWS-08LR	1
50	92.006.001	0	PROPOJKA T / CONNECTION T / VERBINDUNGSSTÜCK T	37892	2
51	92.013.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		6
52	92.014.001	0	KROUZEK TESNICÍ / SEAL RING / DICHTUNGSRING	372405	6
53	94.006.001	0	SROUB / BOLT / SCHRAUBE	M8x17	1
54	94.006.002	0	SROUB / BOLT / SCHRAUBE	M8x25	1
55	95.710.002	0	POUZDRO / SLEEVE / BÜCHSE	50x70	4
56	95.800.021	0	KROUZEK POJIST.VNEJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTINÝ KROUZEK 62	1
57	96.040.004	0	KROUZEK STÍRAČÍ / SCRAPER RING / ABSTREIFRING	50x62x5	4
58	96.082.002	0	TESNĚNÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	1

I VODICI TYCE 30.4303-018 MAHAZENÝ TYCEMI 30.4803-016 I.4.2003 ROZKOSNY

7.17. Napínání / Spannung / Tensioning



NAZEV SESTAVY NAPÍNÁNÍ	ČÍSLO SESTAVY 201.4808-000	STROJ STG-440GA, DGH
	Konstruoval: &konstruoval	
	Datum: 18. 02. 2010	
	Meritko: 3:10	
	 BOMAR s.r.o.	

7.18. Kusovník / Stückliste / Piece list – Napínání / Spannung / Tensioning

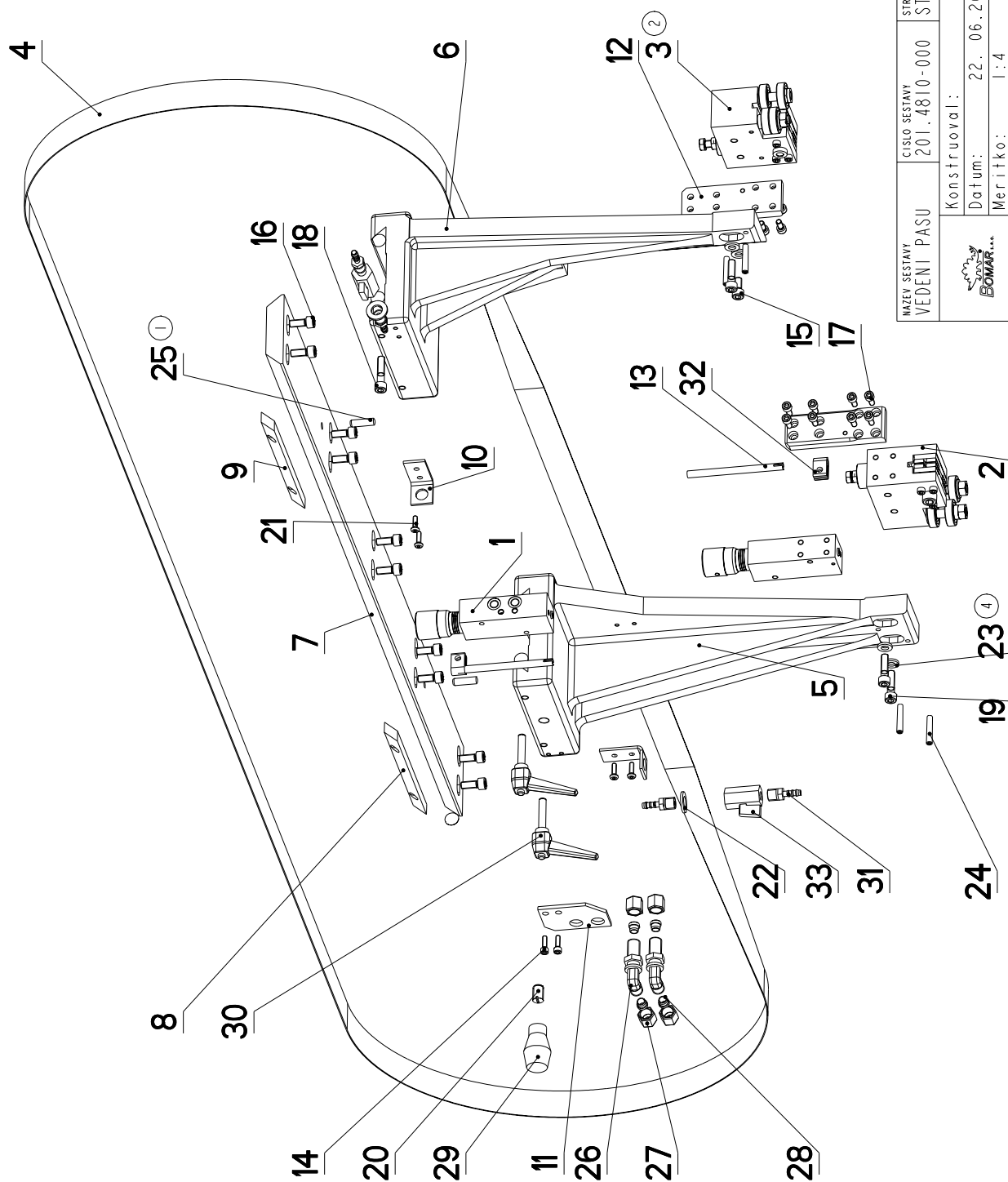
Číslo Sestavy 201.4808-000		Ver. 3	Název sestavy NAPÍNÁNÍ / TENSIONING / SPANNUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0808-001	1	KOSTKA NAPÍNÁNÍ / TENSIONING CUBE / BANDSPANNUNGSWÜRFEL	80x30	1
2	30.0808-002	1	LISTA VODICÍ / LEAD TRIM / FÜHRUNGSLISTE	30x20	2
3	30.0808-006	1	LISTA / TRIM / LEISTE	HR 30x10	2
4	30.1708-004	4	DRŽÁK / HOLDER / HALTER	HR 20x8	1
5	30.2908-001 (2)	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	d 50	1
6	30.2908-102 (3)	1	DRŽÁK / HOLDER / HALTER		1
7	30.3508-004	0	KROUZEK / RING / RING	d42	1
8	30.4008-001	1	SROUB / BOLT / SCHRAUBE		1
9	30.4808-101 (1)	3	ČEP NAPÍNÁNÍ / TENSIONING LUG / SPANNUNGSBOLZEN		1
10	30.4808-102 (1)	1	KOLO NAPÍNÁNÍ / TENSIONING WHEEL / UMLENKRAD	ODLITEK	1
11	30.4808-103 (1)	1	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	d 45	1
12	90.001.25.053	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x55	6
13	90.002.20.013	0	SROUB STAVEČÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M12x25	1
14	90.005.55.020	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x45	1
15	90.011.27.009	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M12x20	1
16	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1
17	90.300.07.003	0	KOLÍK VALC. KAL. / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 16x80	1
18	90.350.07.002	0	TALÍROVA PRUŽINA / DISC SPRING / TELLERFEDER	35.5x18.3x2.0x2.8	4
19	95.001.026	0	LOŽISKO / BEARING / LAGER	6307 2RS	2
20	95.800.014	0	SEGR HRÍDEL. / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 35	1
21	95.801.013 (1)	0	KROUZEK POJIST.VNITR. / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNÝ KROUZEK 80	2

(1) ZMENA 30.1808-004 NA 30.4808-103, 1808-001 NA 4808-102, 1808-003 NA 4808-101, PRIDANA 1x 95801.013 14.5.2004 URICAR

2. DOPLNENA PODLOŽKA 30.2908-001, 3.12.04 STASTNY

3. ZRUSEN KALISEK 30.3508-002 A NAHRAZEN KALISKEM 30.2908-102. 076/ZM140 30.4.2008 SLEZACKOVA

7.19. Vedení pásu / Sägebandführung / Belt guide



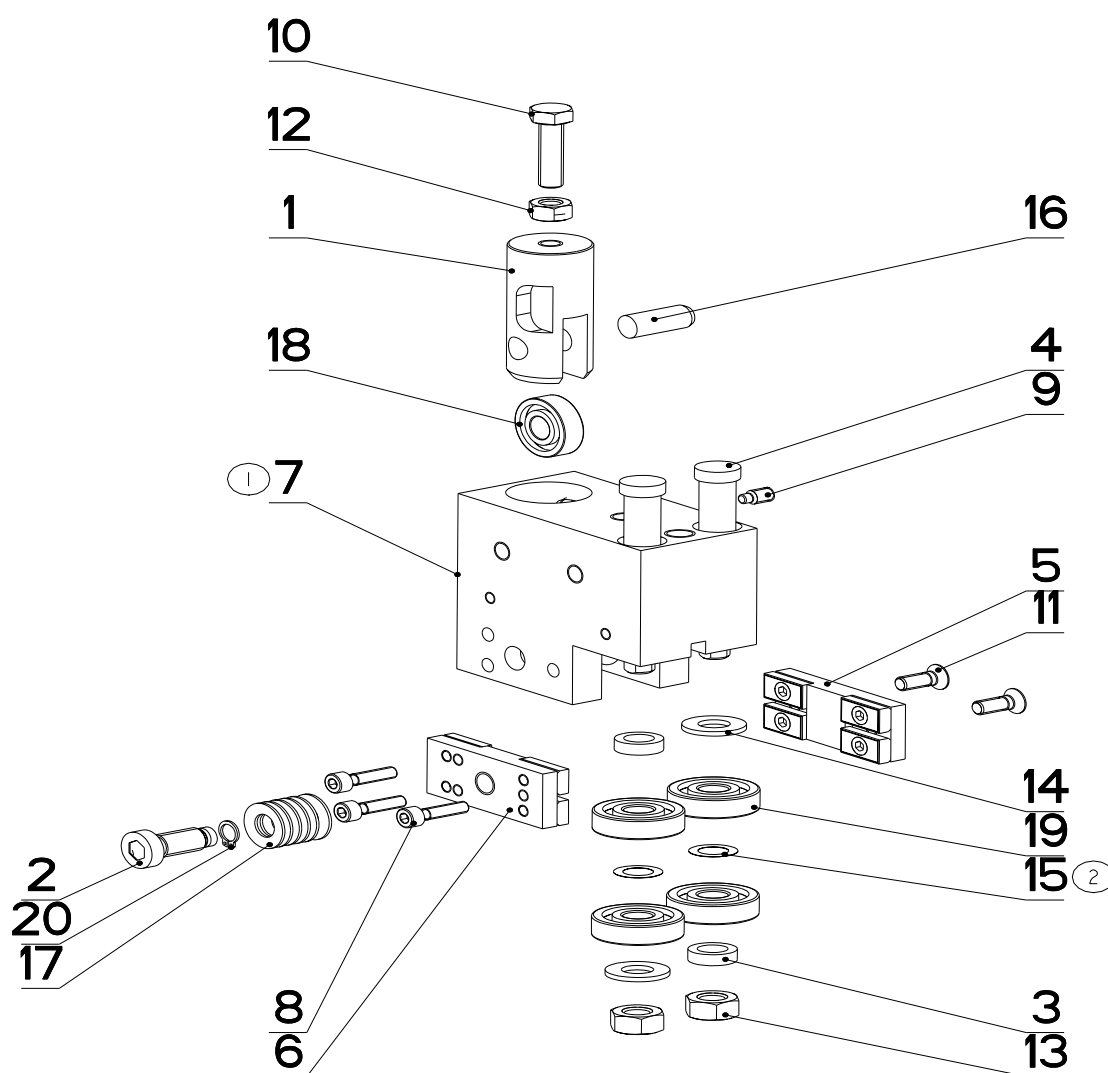
	NAZEV SESTAVY	CÍSLO SESTAVY	STROJ
	VEDENÍ PÁSU	201.4810-000	STG-440DGH
	Konstruoval:	Datum:	
		22. 06. 2011	
		Meritko:	1:4

7.20. Kusovník / Stückliste / Piece list – Vedení pásu / Sägebandführung / Belt guide

Číslo sestavy 201.4810-000		Ver. 4	Název sestavy VEDENÍ PASU/BELT GUIDE / SÄGEBANDFÜHRUNG			
Poz.	Objednávací číslo	Ver.	Název položky	Rozměr	Ks	
1	251.077	0	REGULACE PRÍTLAKU / PRESSURE REGULATION / SCHNITTDRUCKREGULATION		2	
2	201.4810-200	2	KOSTKA VODICI / LEAD CUBE / FÜHRUNGSKLOTZ		1	
3	201.6910-110 (2)	2	KOSTKA VODICI / LEAD CUBE / FÜHRUNGSKLOTZ		1	
4	30.1804-901	0	PAS PÍLOVÝ 440 / SAW BELT / SÄGEBAND	34x1.1	1	
5	30.1810-001	1	DRŽÁK / HOLDER / HALTER		1	
6	30.1810-002	1	DRŽÁK / HOLDER / HALTER		1	
7	30.1810-003	1	LISTA / TRIM / LEISTE	HR 90x20	1	
8	30.1810-004	2	LISTA / TRIM / LEISTE	HR 30x10	1	
9	30.1810-005	2	LISTA / TRIM / LEISTE	HR 30x10	1	
10	30.1814-011	0	DRŽÁK / HOLDER / HALTER	P 3- 76	2	
11	30.1816-210	0	DRŽÁK / HOLDER / HALTER	P 4x50	1	
12	30.2016-006	0	DESKA / BOARD / PLATTE	HR 40x12	2	
13	30.3510-004	0	TRUBKA / TUBE / ROHR	TR 8x 1	2	
14	90.001.25.009	0	SROUB IMBUS ČERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x16	2	
15	90.001.25.031	0	SROUB IMBUS ČERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	1	
16	90.001.25.032	0	SROUB IMBUS ČERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x20	10	
17	90.001.25.092	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6x14	16	
18	90.001.55.035	0	SROUB IMBUS ČERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x35	1	
19	90.001.55.083	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x30	3	
20	90.002.20.018	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M12x20	1	
21	90.013.27.005	0	SROUB PULKULATÝ / HALF ROUND BOLT / HALBRUNDSCHRAUBE	M5x16	4	
22	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	PODLOŽKA 13	2	
23	90.163.00.001 (4)	0	PODLOŽKA / WASHER / UNTERLEGSCHLEIBE	M8	4	
24	90.302.07.001	0	KUZEL. KOLÍK S ZAV. / TAPER PIN + THREAD / KEGELBOLZEN + GEWINDE	KOLÍK 6x36	4	
25	90.303.07.021 (1)	0	KOLÍK / PIN / BOLZEN	KOLÍK 8x28	2	
26	92.009.001	0	PRUCHODKA / LEADTHROUGH / DURCHFÜHRUNG	24146	2	
27	92.013.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		4	
28	92.014.001	0	KROUZEK TESNICÍ / SEAL RING / DICHTUNGSRING		4	
29	94.002.001	0	RUKOJET / HANDLE / GRIFF		1	
30	94.008.003	0	PAKA UPÍNACÍ / ATTACHMENT LEVER / SPANNHEBEL	M8x40	2	
31	94.202.002	0	REDUKCE / REDUCTION / ADAPTOR / REDUKTION	REDUKCE 6/R1/4"	4	
32	94.204.001	0	DRŽÁK / HOLDER / HALTER		2	
33	99.260.003	0	VENTIL / VALVE / VENTIL	1/4"	2	

1. DOPLNEN 2xKOLÍK PRUZNÝ 8x28 90.303.07.021 , 344/ZM362 24.9.2007 SLEZACKOVA
2. ZRUS.KOSTKA 201.4810-100 A NAHR.KOSTKOU 201.6910-110. 142/ZM172 11.11.2009 SLEZACKOVA
4. PRIDANA 4x PODLOŽKA NORD LOCK 8 (90.163.00.001). 145/ZM161 22.6.2011 SLEZACKOVA

7.21. Vodící kostka / Führungsklotz / Guiding cube – 1



NAZEV SESTAVY KOSTKA VODICI		CISLO SESTAVY 201.6910-110	STROJ IND330GANC
	Konstruoval: VINOHRADSKY		
	Datum: 03. 11.2010		
	Meritko: 1:2		

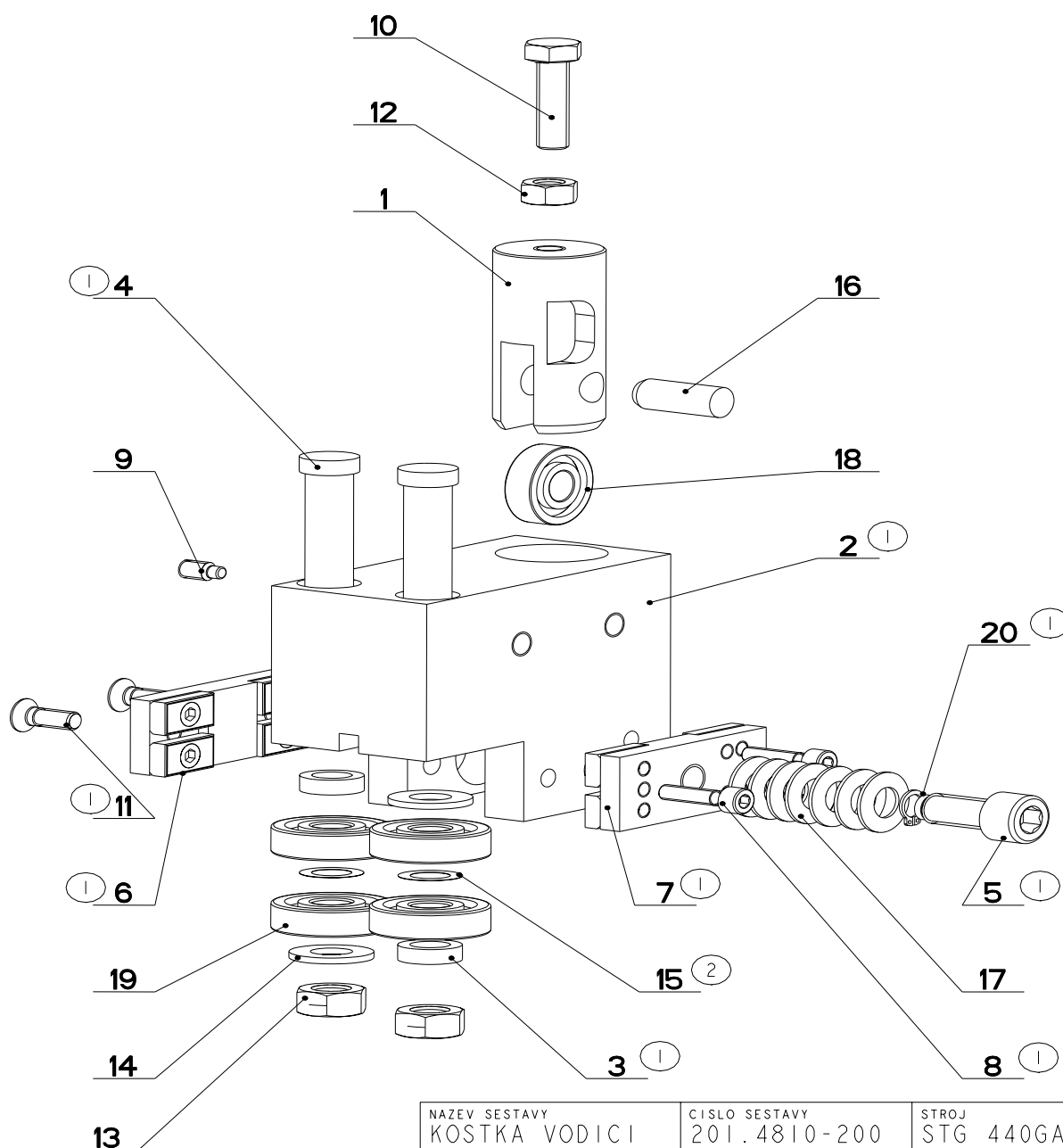
7.22. Kusovník / Stückliste / Piece list – Vodící kostka / Führungsklotz / Guiding cube - 1

Číslo Sestavy 201.6910-110		Ver. 2	Název sestavy KOSTKA VODICÍ/LEAD CUBE / FÜHRUNGSKLOTZ		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1810-102	3	DRŽÁK / HOLDER / HALTER	TYC 28	1
2	30.6910-412	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x25	1
3	30.C210-403	1	DÍSTANČ / DISTANCE / DISTANZ	TR 16x3	2
4	30.Y310-212	0	EXCENTR / CAM / EXCENTER	d 15	2
5	30.Y310-310	0	DRŽÁK TVRDOKOVU / POA HOLDER / HM-HALTER		1
6	30.Y310-320	0	DRŽÁK TVRDOKOVU / POA HOLDER / HM-HALTER		1
7	30.Y310-401 (1)	3	KOSTKA VODICÍ / LEAD CUBE / FÜHRUNGSKLOTZ	HR 80x50	1
8	90.001.25.010	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x20	3
9	90.004.20.002	0	SROUB STAVEČI / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6x12	1
10	90.005.55.017	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x30	1
11	90.011.27.017	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M6x16	2
12	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1
13	90.100.55.006	0	MATICE / NUT / MUTTER	MATICE _ M10	2
14	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	PODLOŽKA 10,5	2
15	90.154.50.001 (2)	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	10x16x0.1	2
16	90.301.02.009	0	KOLÍK VALCOVÝ / CYLINDRICAL PIN SOFT / ZYLINDERSTIFT WEICH	KOLÍK 10x26	1
17	90.350.02.005	0	PRŮŽINA TALÍŘOVÁ / DISC SPRING / TELLERFEDER	20x10.2x1	6
18	95.001.004	0	LOŽISKO / BEARING / LAGER	6000 2RS	1
19	95.001.014	0	LOŽISKO / BEARING / LAGER	6200 2RS	4
20	95.800.002	0	KROUZEK POJIST. VNEJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUFEN	POJISTNÝ KROUZEK 8	1

1. ZRUS. KOSTKA 30.1810-121 A NAHR. KOSTKOU 30.Y310-401. 142/ZM172 11.11.2009 SLEZACKOVA

2. PRIDANA PODLOŽKA 90.154.50.001 . 277/ZM294 2.11.2010 SLEZACKOVA

7.23. Vodící kostka / Führungsklotz / Guiding cube – 2



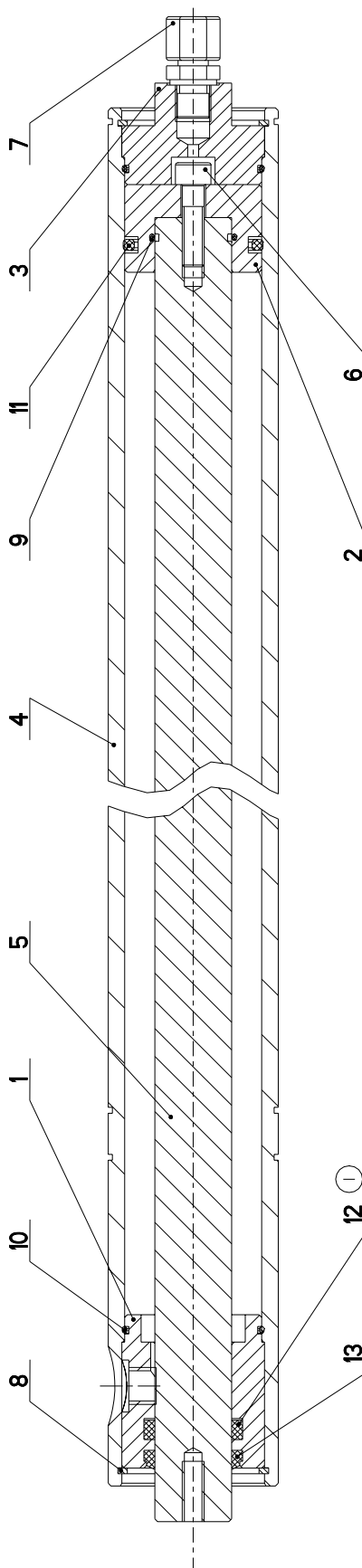
NAZEV SESTAVY KOSTKA VODICI	CISLO SESTAVY 201.4810-200	STROJ STG 440GA
	Konstruoval: VINOHRADSKY	
	Datum: 01. 11. 2010	
	Meritko: 7:10	

7.24. Kusovník / Stückliste / Piece list – Vodící kostka / Führungsklotz / Guiding cube - 2

Číslo Sešitův 201.4810-200		Ver. 2	Název sešitův KOSTKA VODÍČÍ/LEAD CUBE/ FÜHRUNGSKLOTZ		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1810-202	3	DRŽÁK / HOLDER / HALTER	TYC 28	1
2	30.1810-203 (1)	0	KOSTKA VODÍČÍ / LEAD CUBE / FÜHRUNGSKLOTZ	TYC 80x50	1
3	30.C210-403 (1)	1	DISTANC / DISTANCE / DISTANZ	TR 16x3	2
4	30.Y310-212 (1)	0	EXCENTR / CAM / EXZENTER	d 15	2
5	30.Y310-306 (1)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x25	1
6	30.Y310-310 (1)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HM-HALTER		1
7	30.Y310-320 (1)	0	DRŽÁK TVRDOKOVU / POA HOLDER / HM-HALTER		1
8	90.001.25.010 (1)	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M5x20	3
9	90.004.20.002	0	SROUB STAVEČÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6x12	1
10	90.005.55.017	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M8x30	1
11	90.011.27.017 (1)	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SEMŠCHRAUBE	SROUB M6x16	2
12	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1
13	90.100.55.006	0	MATICE / NUT / MUTTER	MATICE _ M10	2
14	90.150.50.006	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA 10,5	2
15	90.154.50.001 (2)	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	10x16x0.1	2
16	90.301.02.009	0	KOLÍK VALCOVÝ / CYLINDRICAL PIN SOFT / ZYLINDERSTIFT WEICH	KOLÍK 10x26	1
17	90.350.02.005	0	PRUŽINA TALÍŘOVÁ / DISC SPRING / TELLERFEDER	20x10.2x1	7
18	95.001.004	0	LOŽISKO / BEARING / LAGER	6000 2RS	1
19	95.001.014	0	LOŽISKO / BEARING / LAGER	6200 2RS	4
20	95.800.002 (1)	0	KROUZEK POJIST.VNEJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 8	1

1. ZRUS.DRŽÁK TVRDOKOVU 30.0810-005 A NAHR. 30.Y310-310, 30.Y310-320, ZRUS.EXCENTR 30.0810-009, 30.0810-010
A NAHR. 30.Y310-212, ZRUS.KOSTKA 30.1810-201 A NAHR. 30.1810-203, ZRUS.SOUC. 30.0810-007, 30.0810-103, 30.0810-104,
90.001.55.082, 90.011.27.022, PRID.SOUCASTI 30.C210-403, 30.Y310-306, 90.011.27.017, 90.001.25.010, 95.800.002.
ZMIT2 27.1.2010 SLEZACKOVA
2. PRIDANA 2xPODLOŽKA 10x16x0,1 (90.154.50.001). 277/ZM294 1.11.2010 SLEZACKOVA

7.25. Válec / Zylinder / Cylinder - 1



NÁZEV SESTAVY VÁLEC	ČÍSLO SESTAVY 201.4807-000	STROJ STG 440GA
	Konstruoval: ZEŽULA	
	Datum: 08. 03. 2010	
	Meritko: 7:10	
	 BOMAR.com	

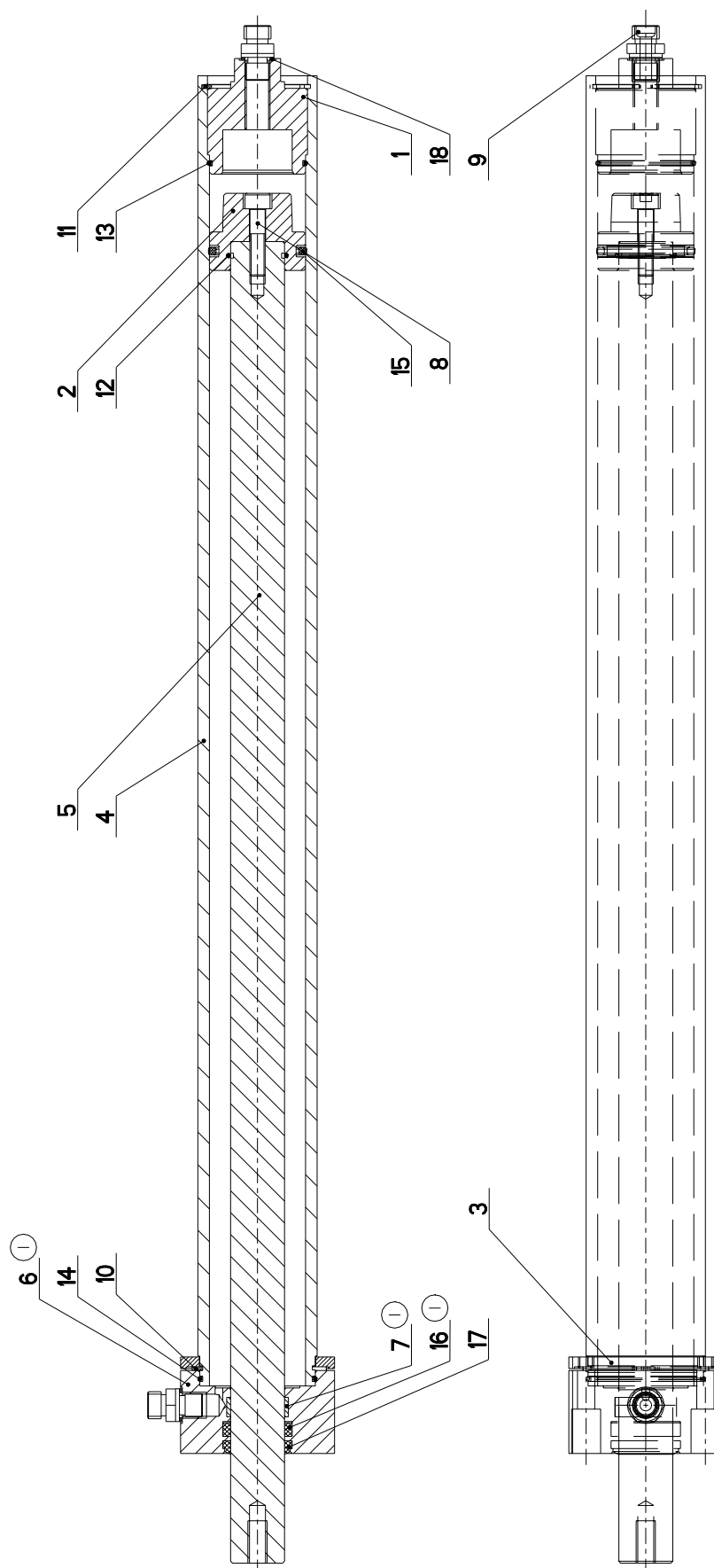
7.26. Kusovník / Stückliste / Piece list – Válec / Zylinder / Cylinder - 1

Císlo Sestavy 201.4807-000		Ver. 1	Název sestavy VALEC/ROLLER/ZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1807-104	2	VIKO / COVER / DECKEL	TYC 55	1
2	30.2007-302	0	PIST / PISTON / KOLBEN	d 55	1
3	30.2007-304	0	VIKO / COVER / DECKEL	d 55	1
4	30.4807-001	2	VALEC SVERAKU / VICE CYLINDER / SCHRAUBSTOCKZYLINDER	TR 62/50H8	1
5	30.4807-002	1	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28 f7	1
6	90.001.25.034	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8X30	1
7	92.002.101	0	SROUBENI PRIME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		1
8	95.801.009	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 52	2
9	96.001.007	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	25X2	1
10	96.001.013	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	45X2	2
11	96.020.005	0	KROUZEK TESNICI / SEAL RING / DICHTUNGSRING	39.2X5.33	1
12	96.041.003	0	TESNENI / SEALING / DICHTUNG	601-28x36x7.1	1
13	96.060.003	0	KROUZEK STIRACI / SCRAPER RING / ABSTREIFRING	KROUZEK STIRACI 28	1

1 0-KROUZEK 96.002.014 NAHRAZUJE MANZETA 96.041.003 24.4.2003 ROZKOSNY

Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.27. Válec / Zylinder / Cylinder - 2



 BOMAR	NAZEV SESTAVY	CÍSLO SESTAVY	STROJ
	VALEC	201.3507-100	
	Konstruoval: &konstruoval		
	Datum: 03. 03.2010		
Meritko: 1:2			

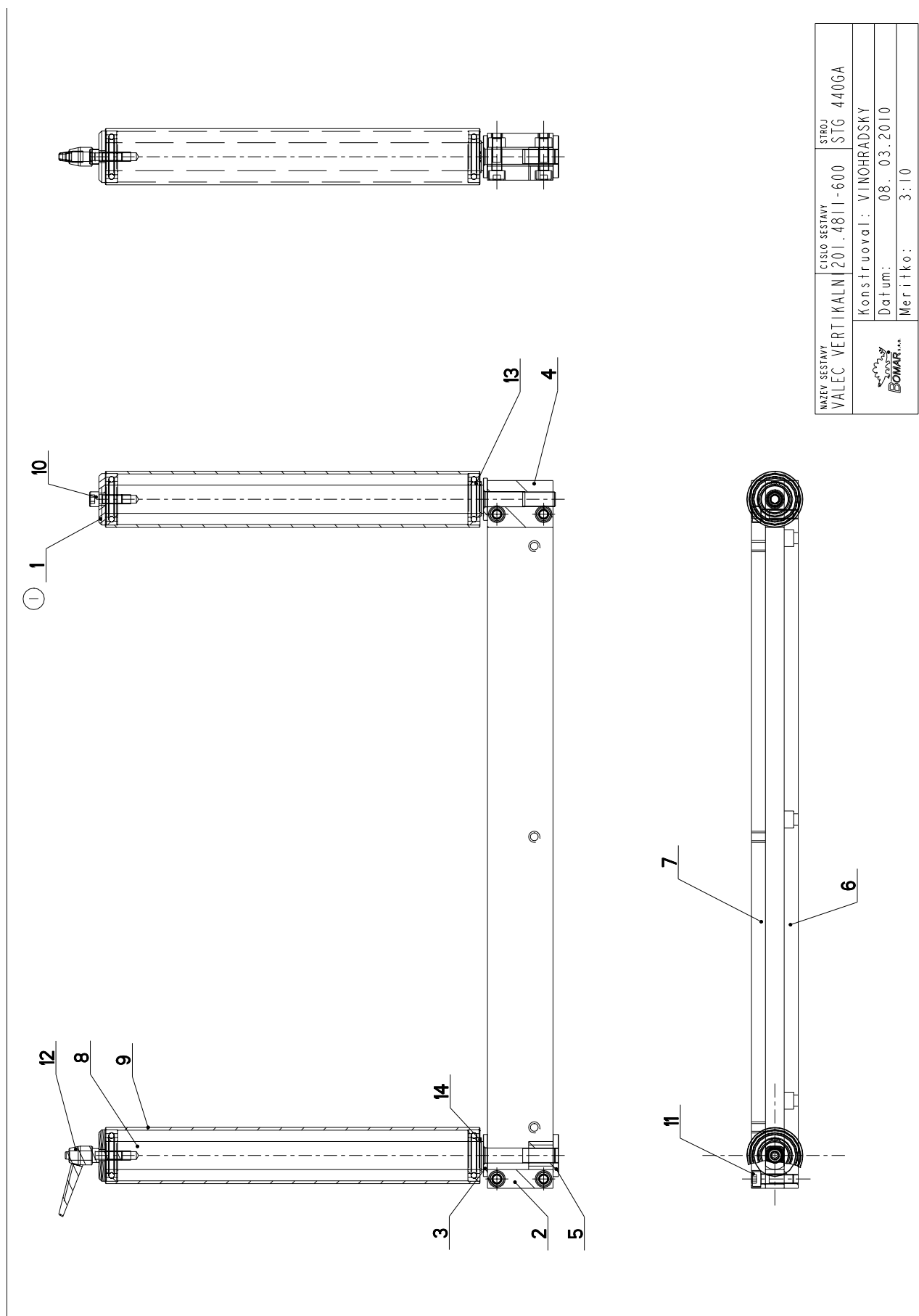
7.28. Kusovník / Stückliste / Piece list – Válec / Zylinder / Cylinder - 2

Císlo Sestavy 201.3507-100		Ver. I	Název sestavy VALEC/ROLLER/ZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1807-103	0	VIKO / COVER / DECKEL	d 55	1
2	30.1807-105	2	PIST / PISTON / KOLBEN	d 55	1
3	30.2007-103	0	PRÍLOŽKA / STRAP / LASCHE	HR 80x 6	1
4	30.3507-101	0	VALEC / ROLLER / ZYLINDER	TR 62/52H8	1
5	30.3507-102	1	PISTNICE / PISTON ROD / KOLBENSTANGE	d 28	1
6	30.3507-103 (1)	1	VIKO / COVER / DECKEL	TYC 80x80	1
7	30.3507-104 (1)	0	KROUZEK VODICI / LEAD RING / FÜHRUNGSRING	10x2-F87	1
8	90.001.55.035	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x35	1
9	92.002.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	G 1/4"	2
10	95.800.020	0	KROUZEK POJIST.VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNY KROUZEK 60	1
11	95.801.029	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNY KROUZEK 55	1
12	96.001.007	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	25x2	1
13	96.001.013	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	45x2	1
14	96.001.014	0	KROUZEK O STATICKY / STATIC O RING / O-RING STATISCH	55x2	1
15	96.020.005	0	KROUZEK TESNICI / SEAL RING / DICHTUNGSRING	39.2X5.33	1
16	96.041.003 (1)	0	TESNENÍ / SEALING / DICHTUNG	601-28x36x7.1	1
17	96.060.003	0	KROUZEK STIRACI / SCRAPER RING / ABSTREIFRING	KROUZEK STIRACI 28	1
18	96.082.002	0	TESNENÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	2

(1) VÍKO PODÁVACE 30.2007-101 NAHRAZENO VÍKEM 30.3507-103, O-KROUZEK 96.002.014 NAHRAZEN MANŽETOU 96.041.003 A KU-POUŽDRO 95.700.005 NAHRAZENO DÍLEM 30.3507-104 28.4.2003 ROZKOSNÝ

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Versión; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.29. Válec vertikální / Vertikalzylinder / Vertical cylinder



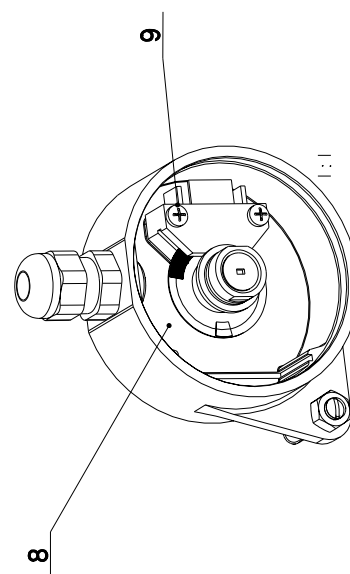
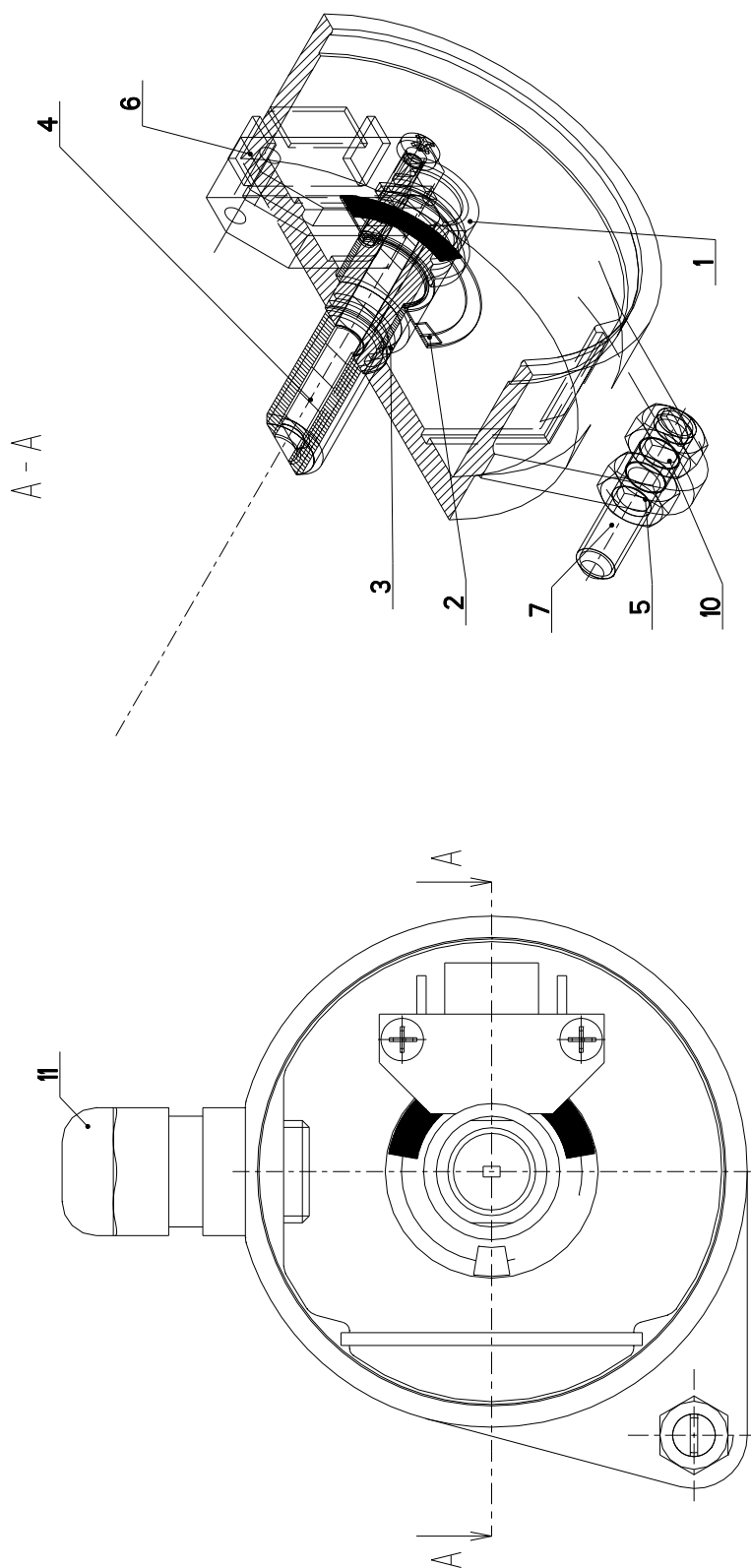
7.30. Kusovník / Stückliste / Piece list – Válec vertikální / Vertikalzylinder / Vertical cylinder

Císlo Sestavy 201.4811-600		Ver. 1	Název sestavy VALEC VERTIKÁLNÍ/VERTICAL CYLINDER/VERTIKALZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1804-006	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	d 55	2
2	30.2014-406	1	KOSTKA / CUBE / WÜRFEL	HR 20 x 20	1
3	30.2911-606	1	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	d 45	2
4	30.2911-608	0	KOSTKA / CUBE / WÜRFEL	HR 50x20	1
5	30.4311-605	0	MATICE / NUT / MUTTER	d 45	1
6	30.4811-601	0	LISTA / TRIM / LEISTE	HR 70x15	1
7	30.4811-602	0	LISTA / TRIM / LEISTE	HR 70x15	1
8	30.4811-603	0	OSA / AXLE / ACHSE	d 30	2
9	30.4811-604	0	VALEC / ROLLER / ZYLINDER	TR 60x3	2
10	90.001.25.047	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X25	1
11	90.001.25.049	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X35	4
12	94.008.005	0	KLICKA / HANDLE / KURBEL	M10	1
13	95.001.009	0	LOŽISKO / BEARING / LAGER	6006 2RS	4
14	95.800.013	0	KROUZEK POJIST.VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUBEN	POJISTNÝ KROUZEK 30	2

I.ZRUS.PODLOŽKA 90.151.50.001 A NAHR. ZAJISTENI KOLA 30.1804-006. 183/ZMI95 14.5.2007 SLEZACKOVA

Císlo sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.31. Odměrování / Gehrungsmessung / Measuring



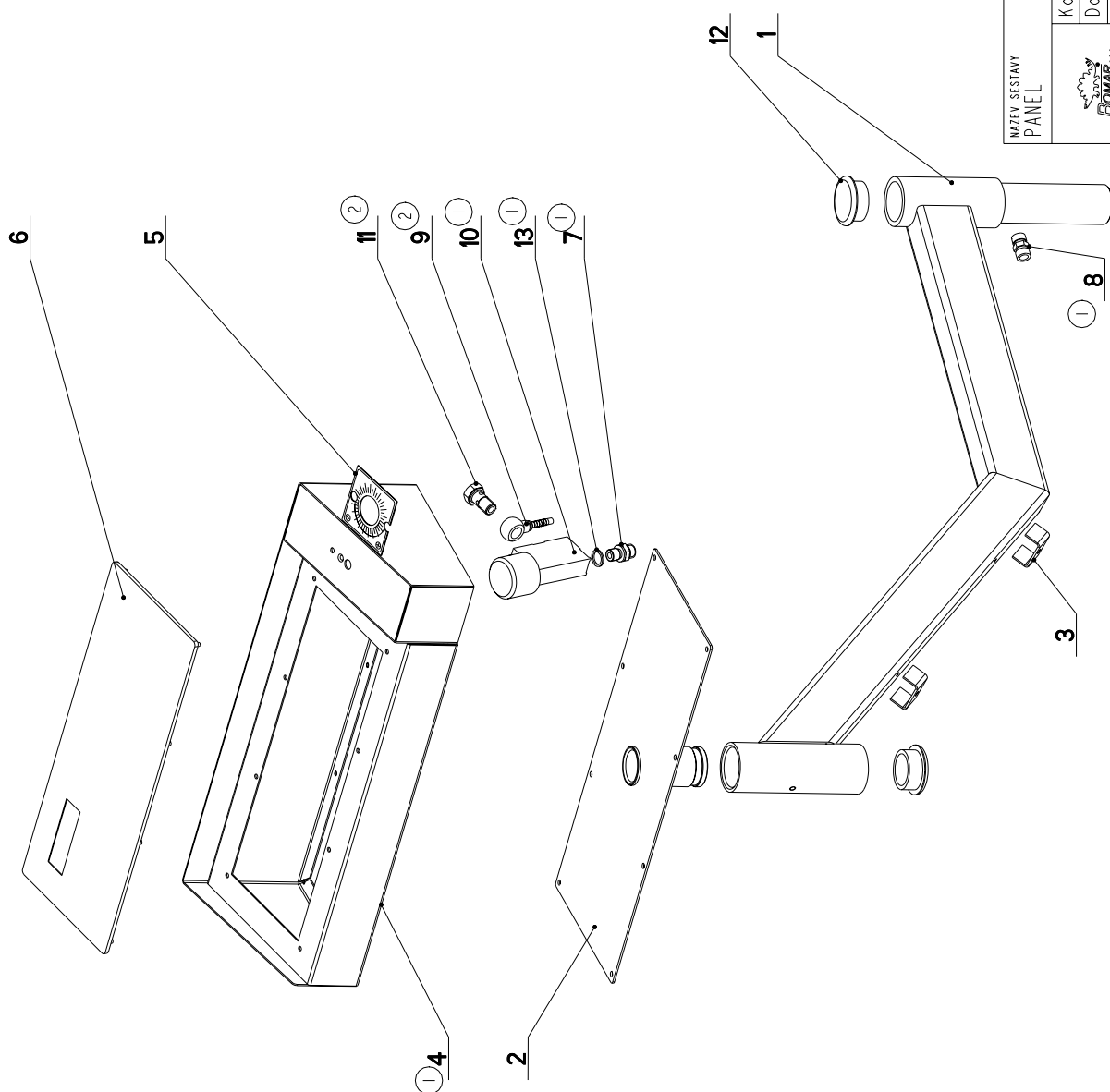
NAZEV, SESTAVY ODMEROVANI	CISLO SESTAVY 201.0614-200	STROJ
Konstruoval: &konstruoval	Datum: 19. 02. 2010	Meritko: 2:1
BOMAR		

7.32. Kusovník / Stückliste / Piece list – Odměřování / Gehrungsmessung / Measuring

Císlo Sestavy 201.0614-200		Ver. 0	Název sestavy ODMĚROVANÍ / MEASURING / GEHRUNGSMESSUNG		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0614-201	0	CEP / LUG / BOLZEN	d 16	1
2	30.0614-203	0	CLONA / CURTAIN / SCHÜRZE	FOLIE 0.3	1
3	30.0614-204	0	POUZDRO / SLEEVE / BÜCHSE	TR 13x1	1
4	30.0614-208	0	SROUB / BOLT / SCHRAUBE	TYC M10	1
5	31.0614-202	0	KRABICE / BOX / DOSE	VYLISEK-PLAST	1
6	31.0631-201	0	SNIMAC / SENSOR / SENSOR		1
7	90.002.20.027	0	SROUB STAVECÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M5x25	1
8	90.011.27.019	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKWSCHRAUBE	SROUB M5x40	1
9	90.014.50.004	0	SROUB / BOLT / SCHRAUBE	M2.5x14	2
10	90.100.55.003	0	MATICE / NUT / MUTTER	MATICE _ M5	2
11	91.070.010	0	PRŮCHODKA / LEADTHROUGH / DURCHFÜHRUNG	M12x1.5 ČERNA	1

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.33. Panel / Panel / Panel



NÁZEV SESTAVY PANEL	ČÍSLO SESTAVY 201.2914-900	STROJ STG 330GA
	Konstruoval:	
	Datum: 08. 02. 2011	
	Meritko: 1:4	
		

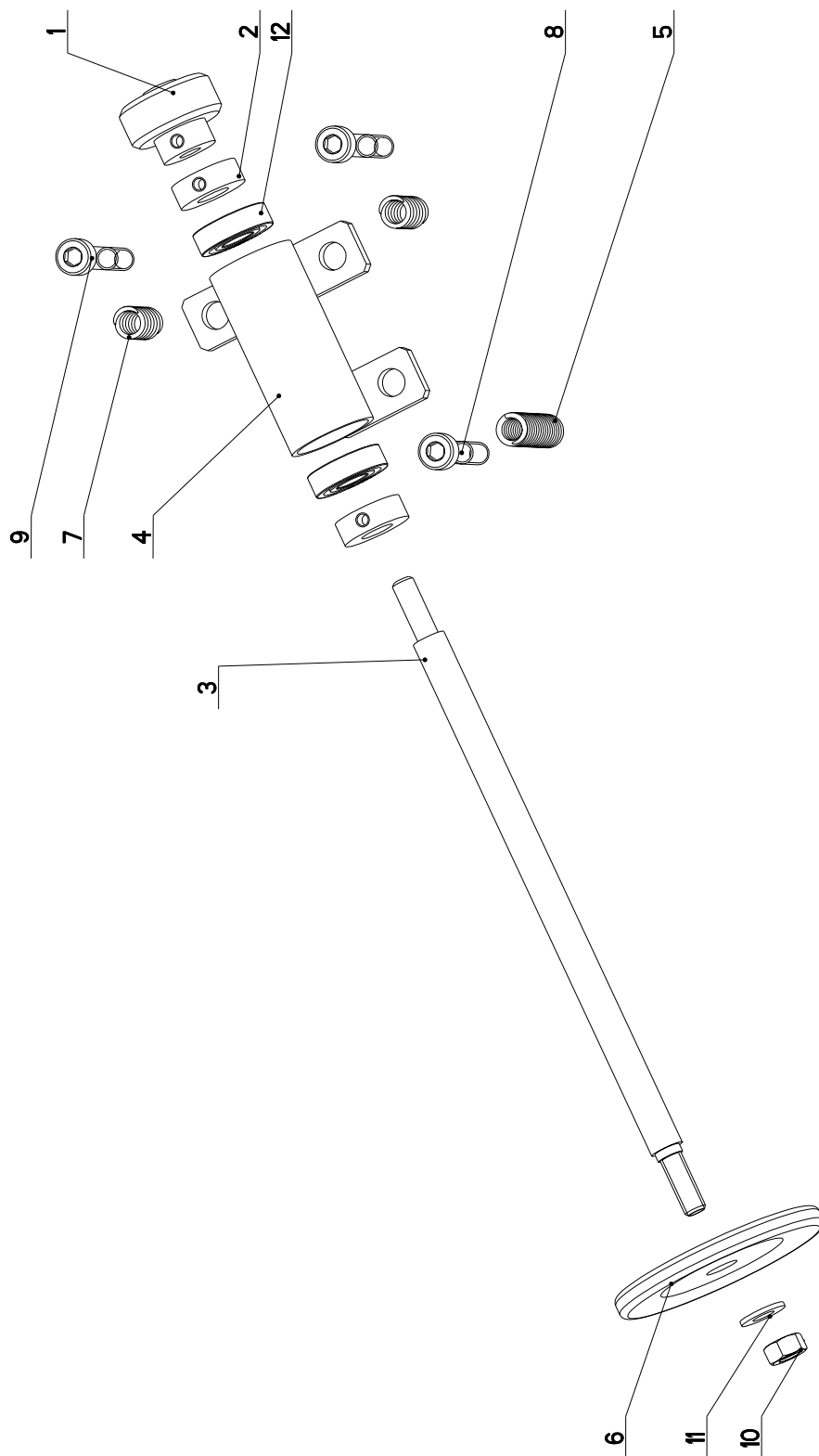
7.34. Kusovník / Stückliste / Piece list – Panel / Panel / Panel

Císlo Sestavy 201.2914-900		Ver. 2	Název sestavy PANEL/PANEL / PANEL		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.2914-901	1	DRŽAK / HOLDER / HALTER		1
2	30.2914-902	0	ZAKLADNA / BASE / GRUNDLAGE		1
3	30.2914-914	0	DRŽAK / HOLDER / HALTER	JACKL 40x40x2	2
4	30.2914-916 (1)	1	KRABICE / BOX / DOSE		1
5	31.0699-003	0	STÍTEK / LABEL / SCHILD	P 1-66	1
6	31.2131-103	0	PANEL / PANEL / PANEL		1
7	92.002.001 (1)	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	G 1/4"	1
8	92.007.101 (1)	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		1
9	92.054.001 (2)	0	KONCOVKA / END / ENDSTÜCK	KONCOVKA OKO	1
10	92.152.001 (1)	0	VENTIL SKRTICI / CHOKE VALVE / DROSSELVENTIL	VS01-04/R 2.5-0	1
11	93.010.002 (2)	0	SROUB / BOLT / SCHRAUBE	G 1/4"	1
12	94.102.005	0	ZATKA / PLUG / STOPFEN	50x5	2
13	96.082.002 (1)	0	TESNENÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	1

1. DIL 30.2914-916 NAHRAZUJE DIL 30.2914-906, NOVE SROUBENÍ, TESNÍCÍ KROUZEK A SKRTICÍ VENTIL. 22.10.2002 ROZKOSNY
2. ZRUS. SROUBENÍ 92.003.001 A NAHR. SROUBEM 93.010.002 A KONCOVKOU 92.054.001. 026/ZM022 8.2.2011 SLEZACKOVA

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.35. Kartáč / Bürste / Brush

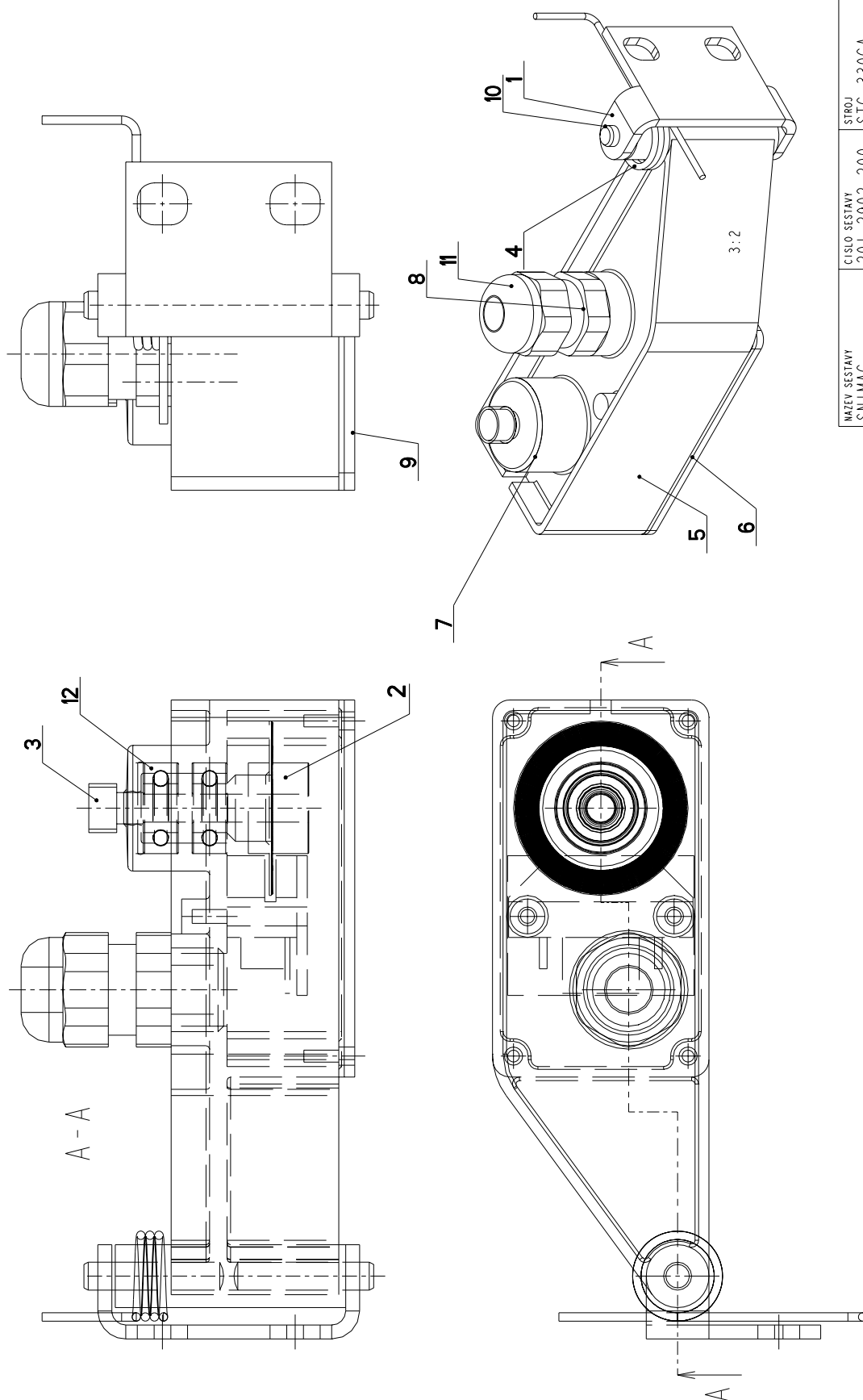


NAZEV SESTAVY KARTAC	CISLO SESTAVY 201.4814-400	STROJ STG 440DGH ecodemic
Konstruoval: VINOHRADSKY		
Datum: 17. 02. 2010		
Meritko: 7:10		

7.36. Kusovník / Stückliste / Piece list – Kartáč / Bürste / Brush

Číslo Sestavy 201.4814-400		Ver. 0	Název sestavy KARTAC/BRUSH/BÜRSTE			
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	30.0814-204	0	KOLECKO / WHEEL / ROLLE	SESTAVA	1	
2	30.0814-207	0	KROUZEK / RING / RING	d 25	2	
3	30.4814-402	1	HRIDEL / SHAFT / WELLE	D 12	1	
4	30.9214-301	1	DRZAK / HOLDER / HALTER		1	
5	31.0305-211	0	PRUŽINA / SPRING / FEDER	2x12x50x15,5	1	
6	31.0814-208	0	KARTAC / BRUSH / BÜRSTE		1	
7	31.1506-115	0	PRUŽINA / SPRING / FEDER	1.6x12x25x7.5	2	
8	90.001.25.038	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x50	1	
9	90.001.25.040	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8x60	2	
10	90.100.55.005	0	MATICE / NUT / MUTTER	MATICE _ M8	1	
11	90.150.50.005	0	PODLOŽKA / WASHER / UNTERLEGSCHNUR	PODLOŽKA 8,4	1	
12	95.001.005	0	LOŽISKO / BEARING / LAGER	6001 2RS	2	

7.37. Snímač / Sensor / Sensor



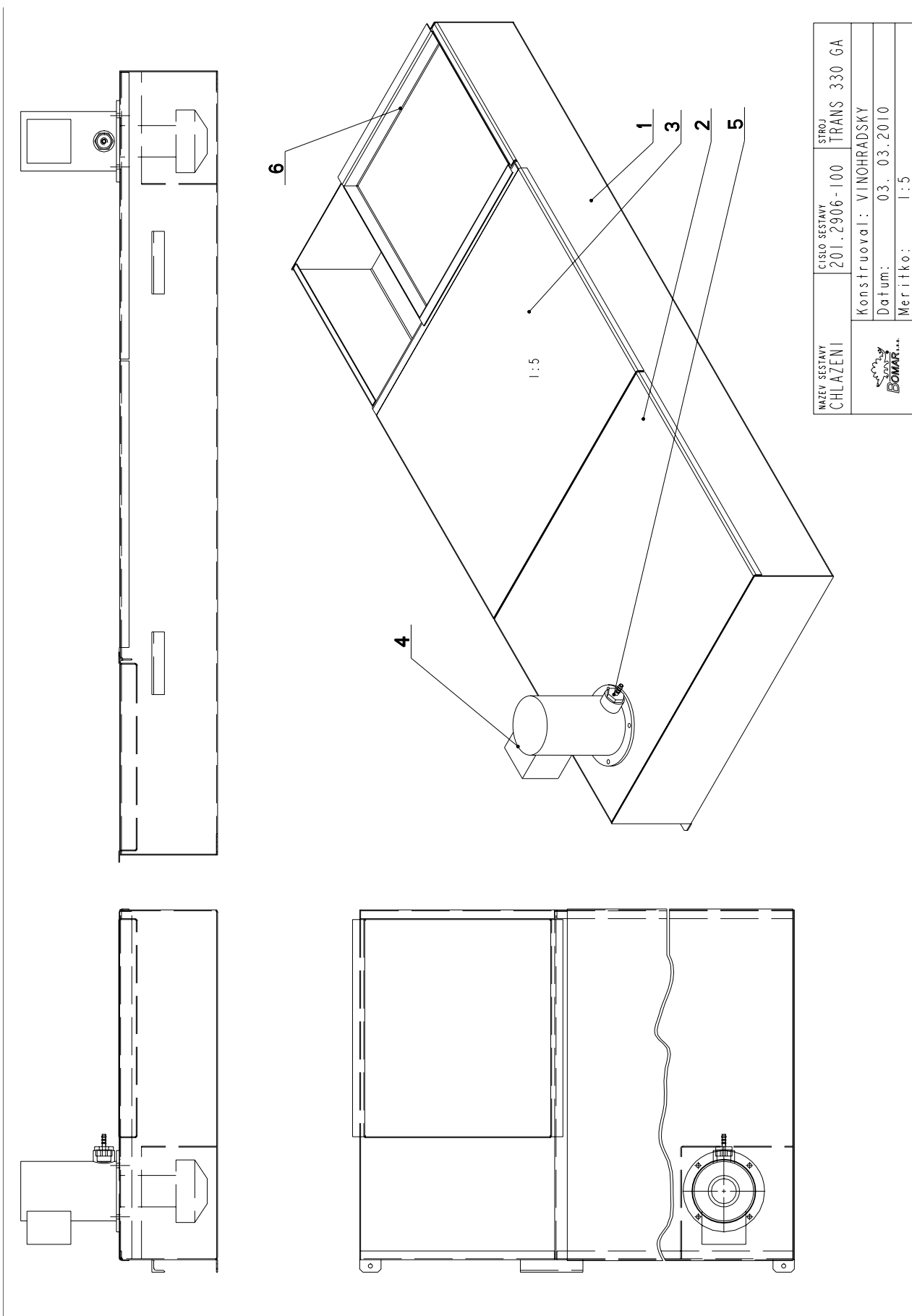
NÁZEV SESTAVY SNÍMAČ	ČÍSLO SESTAVY 201.2902-200	STROJ STG 330GA
	Konstruoval: ZEŽULA	
	Datum: 16. 02. 2010	
	Meritko: 2:1	
	 BOMAR [®]	

7.38. Kusovník / Stückliste / Piece list – Snímač / Sensor / Sensor

Císlo Sestavy 201.2902-200		Ver. 0	Název sestavy SNIMAC/SENSOR/SENSOR		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.2902-205	1	KONZOLA / CONSOLE / KONSOLE	P2 - 25.5	1
2	30.2902-209	0	CLONA / CURTAIN / SCHÜRZE		1
3	30.2902-212	0	PASTOREK / PINION / RITZEL	d 7	1
4	31.2902-113	0	PRUŽINA / SPRING / FEDER	d 1.2	1
5	31.2902-201	0	RAMENO / SHOULDER / SÄGERAHMEN	VYLISEK-PLAST	1
6	31.2902-204	0	TESNĚNÍ / SEALING / DICHTUNG	TL.1 - 32.3	1
7	31.2902-207	0	VÍKO / COVER / DECKEL	VYLISEK- PLAST	1
8	31.2930-001	0	SNIMAC / SENSOR / SENSOR		1
9	81.2902-203	0	KRYT / COVER / ABDECKUNG	P 1.5 - 31.8	1
10	90.300.0Z.XXX	0	KOLÍK VALCOVÝ KALENÝ / CYLINDRICAL PIN TEMPERED / ZYLINDERSTIFT GEHÄRTET	KOLÍK 4X20	2
11	91.070.010	0	PRUCHODKA / LEADTHROUGH / DURCHFÜHRUNG	M12x1.5 ČERNA	1
12	95.001.002	0	LOŽISKO / BEARING / LAGER	624 2RS	2

Císlo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.39. Chlazení / Kühlung / Cooling

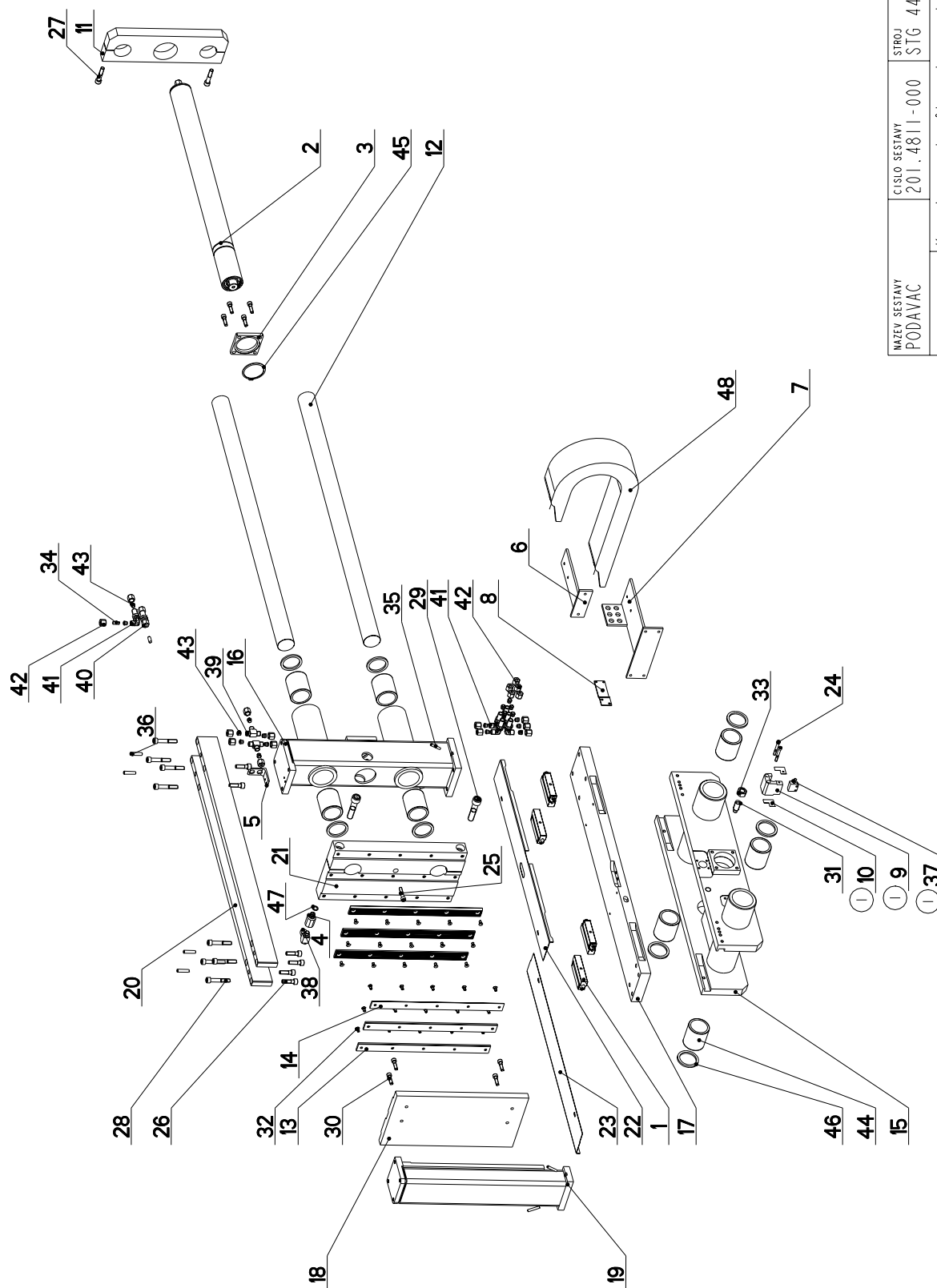


7.40. Kusovník / Stückliste / Piece list – Chlazení / Kühlung / Cooling

Cislo Sestavy 201.2906-100		Ver. 0	Nazev sestavy CHLAZENÍ / COOLING / KÜHLUNG	
Poz.	Objednací číslo	Ver.	Nazev položky	Ks
1	30.2906-101	1	VANA / TANK / WANNE	1
2	30.2906-102	0	PLECH / PLATE / BLECH	1
3	30.2906-103	0	PLECH / PLATE / BLECH	1
4	91.020.016	0	CERPADLO / PUMP / PUMPE	1
5	94.202.005	0	REDUKCE / REDUCTION / REDUKTION	1
6	30.2906-104	0	SÍTO / SIEVE / GITTERWERK	1

Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.41. Podavač / Vorschub / Feeder - 1

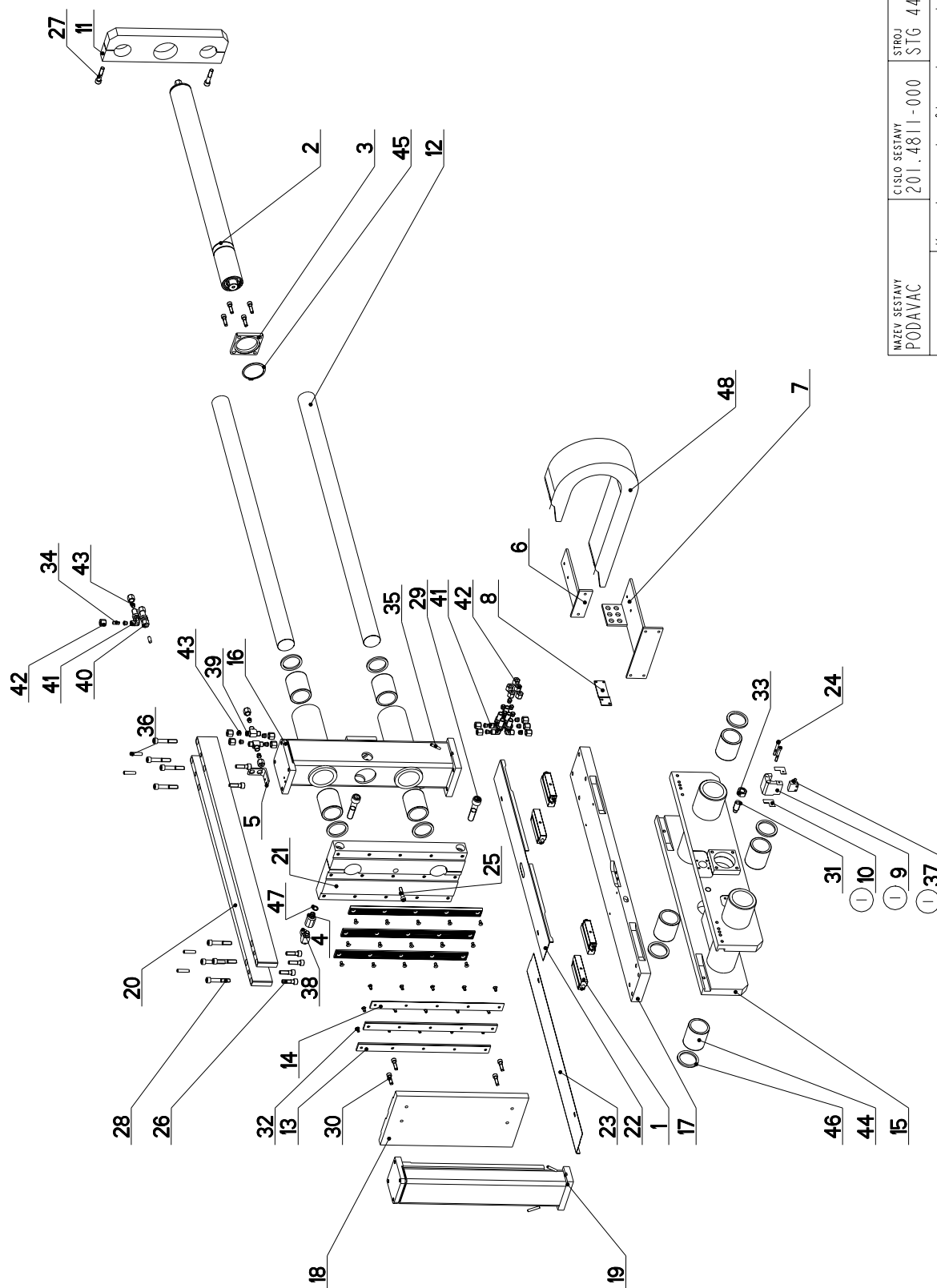


NAZEV SESTAVY PODAVAC	CISLO SESTAVY 201.4811-000	STROJ STG 440GA
Konstruoval: &konstruoval		
Datum: 20. 07. 2010		
Meritko: 1:10		

7.42. Kusovník / Stückliste / Piece list – Podavač / Vorschub / Feeder - 1

Číslo Sestavy 201.4811-000		Ver. 2	Název sestavy PODAVAC/FEEDER/VORSCHUB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	201.2911-200	0	VEDENÍ LINEÁRNÍ / LINEAR GUIDE / LINEARE FÜHRUNG		4
2	201.4807-000	0	VALEC / ROLLER / ZYLINDER		1
3	30.2011-010	0	PŘÍLOŽKA / STRAP / LASCHE	HR 80x10	1
4	30.2011-011	1	ŠROUBENÍ / BOLTING / VERSCHRAUBUNG	SW24	1
5	30.2014-011	0	DRŽÁK / HOLDER / HALTER	L 50x50x4	1
6	30.2911-026	0	KONZOLA / CONSOLE / KONSOLE		1
7	30.2911-027	0	KONZOLA / CONSOLE / KONSOLE		1
8	30.2911-028	0	DRŽÁK / HOLDER / HALTER	P3 - 31	1
9	30.2911-029	1	DRŽÁK / HOLDER / HALTER	HR 50x50	1
10	30.2911-030	0	STERAC / WIPER / ABSTREIFER	P 0.2-26.5	2
11	30.4009-011	0	DRŽÁK / HOLDER / HALTER	HR 110 x 30	1
12	30.4803-004	0	TYC / POLE / STANGE	ø 50 h6	2
13	30.4803-010	3	LISTA CELISTI / JAW TRIM / BACKENLEISTE	HR 30x10	4
14	30.4803-011	2	LISTA SVERAKU / VICE TRIM / SCHRAUBSTOCKLEISTE	HR 30x10	2
15	30.4811-001	0	ZAKLADNA / BASE / GRUNDLAGE		1
16	30.4811-002	1	SLOUP PODAVACE / FEEDER POLE / VORSCHUBSÄULE		1
17	30.4811-003	1	ZAKLADNA / BASE / GRUNDLAGE	HR 120x30	1
18	30.4811-004	1	CELIST / JAW / BACKE	HR 210x 25	1
19	30.4811-007	1	SLOUP / POLE / SÄULE		1
20	30.4811-010	0	LISTA / /	HR 60x 20	2
21	30.4811-022	2	CELIST / JAW / BACKE	HR 210x45	1
22	30.4811-023	1	KRYT / COVER / ABDECKUNG	P1 - 90	1
23	30.4811-024	1	KRYT / COVER / ABDECKUNG	P1 - 90	1
24	90.001.25.023	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M6X50	2
25	90.001.25.036	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8X40	1
26	90.001.25.049	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X35	8
27	90.001.25.052	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X50	2
28	90.001.25.054	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10X60	8
29	90.001.25.093	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M16X70	2
30	90.001.55.083	0	ŠROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M8X30	8
31	90.004.20.019	0	ŠROUB STAVECI / ADJUSTMENT BOLT / STELLSCHRAUBE	ŠROUB M16X40	1
32	90.011.27.005	0	ŠROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	ŠROUB M6X12	30
33	90.100.55.008	0	MATICE / NUT / MUTTER	MATICE _ M16	1
34	90.301.07.008	0	KOLÍK VALCOVÝ / CYLINDRICAL PIN SOFT / ZYLINDERSTIFT WEICH	KOLÍK 8X20	2
35	90.302.07.001	0	KOLÍK KUŽELOVÝ / TAPER PIN / KEGELBOLZEN	KOLÍK 6X36	4

7.43. Podavač / Vorschub / Feeder - 2



NAZEV SESTAVY PODAVAC	CISLO SESTAVY 201.4811-000	STROJ STG 440GA
	Konstruoval: &Konstruoval	
	Datum: 20. 07. 2010	
	Meritko: 1:10	
		

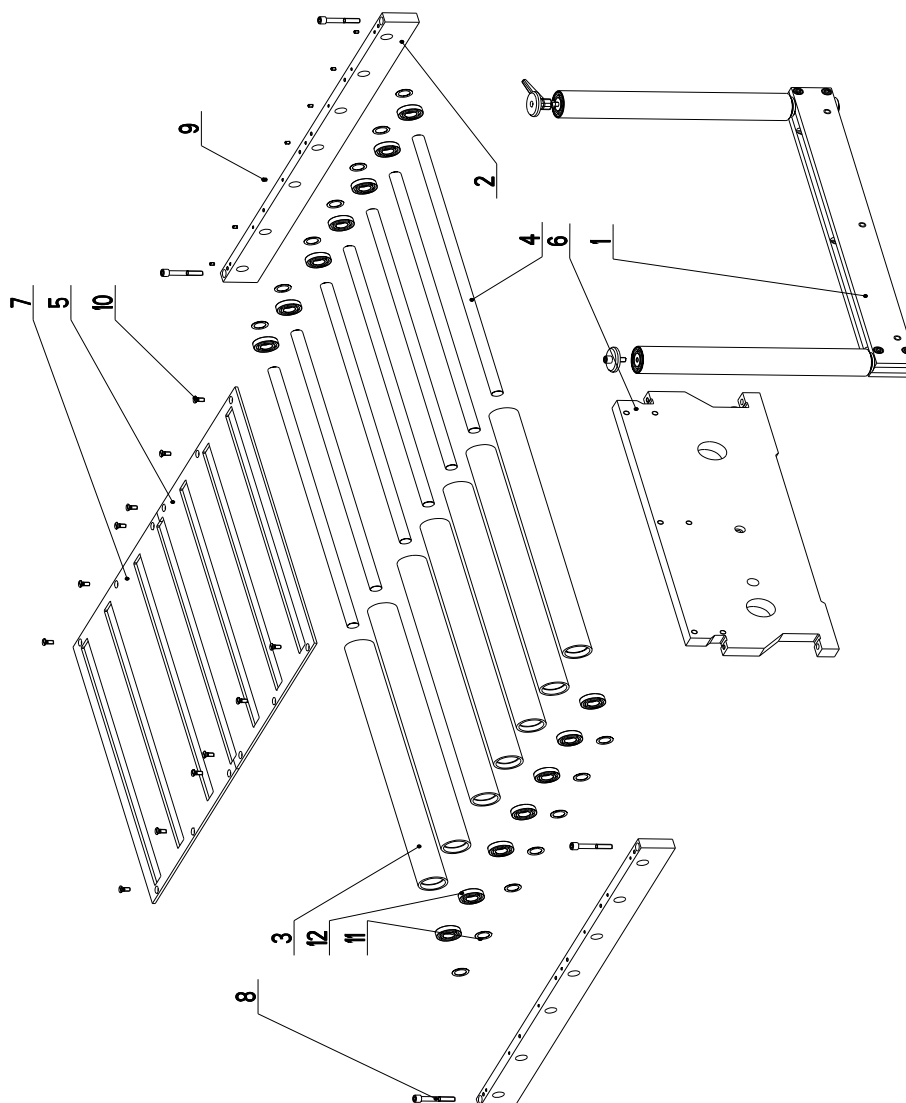
7.44. Kusovník / Stückliste / Piece list – Podavač / Vorschub / Feeder - 1

Císlo Sestavy 201.4811-000		Ver. 2	Název sestavy PODAVAC/FEEDER/VORSCHUB		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
36	90.302.02.003	0	KOLÍK KUŽELOVÝ / TAPER PIN / KEGELBOLZEN	KOLÍK 8X36	4
37	91.270.006 (1)	0	SNÍMAČ MAGNET. / MAGNETIC SENSOR / MAGNETSENSOR		1
38	92.003.001	0	SROUBENÍ UHLÍKOVÉ / ANGLE BOLTING / WINKELVERSCHRAUBUNG	RSMS-08LR	1
39	92.006.001	0	PROPOJKA T / CONNECTION T / VERBINDUNGSSTÜCK T	37892	2
40	92.008.101	0	SROUBENÍ / BOLTING / VERSCHRAUBUNG	G 1/4"	1
41	92.009.001	0	PRŮCHODKA / LEADTHROUGH / DURCHFÜHRUNG	24146	6
42	92.013.001	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG		18
43	92.014.001	0	KROUZEK TĚSNÍCÍ / SEAL RING / DICHTUNGSRING	372405	18
44	95.710.002	0	POUZDRO / SLEEVE / BÜCHSE	50x70	8
45	95.800.021	0	KROUZEK POJIST. VNĚJŠÍ / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTINÝ KROUZEK 62	1
46	96.040.004	0	KROUZEK STÍRAČÍ / SCRAPER RING / ABSTREIFRING	50x62x5	8
47	96.082.002	0	TESNĚNÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	1
48	99.170.001	0	RETEZ ENERGII / ENERGY BELT / ENERGIEKETTE	EFK0555.030.075.10	1

(1) DRŽÁK SÍKA 30.2014-023 NAHRAZEN DÍLEM 30.2911-029, STERAC 30.3511-013 DÍLEM 30.2911-030 A SNIMAC 91.270.004 SHIMACEM 91.270.006 16.4.2003 ROZMOSNÝ

2.ZRUSEN VALEC 201.4307-500,2xSROUB M8x16 (90.001.25.031,4xSROUB M5x45 (90.001.25.108),1xSROUBENÍ (92.003.104). 194/7M222 20.7.2010 SLEZACKOVA

7.45. Trať / Bahn / Track

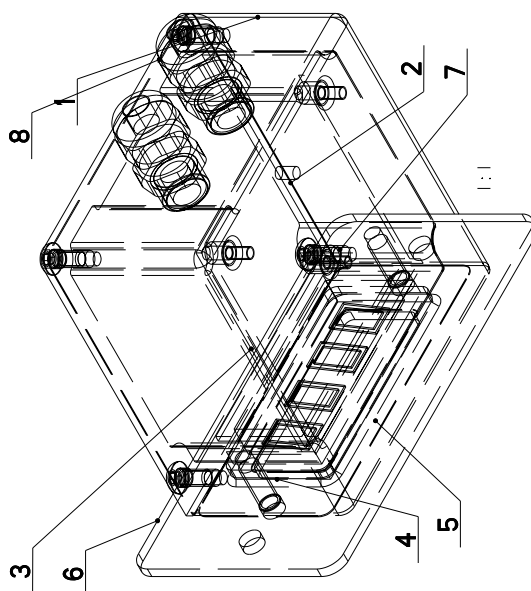
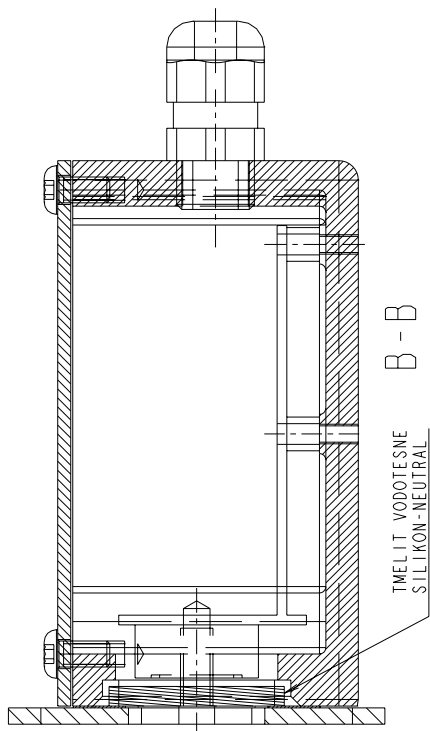
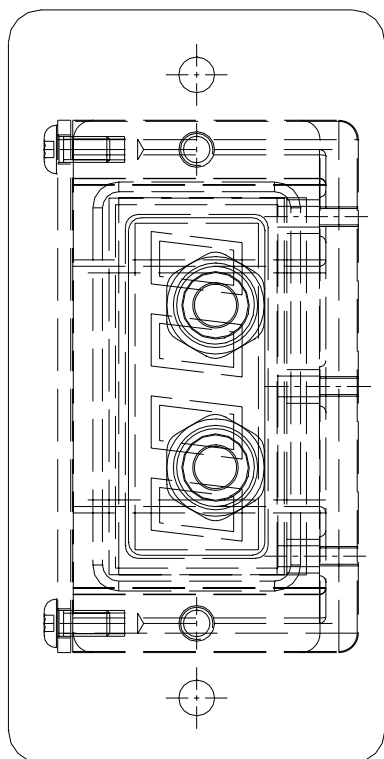


NAZEV SOUSTAVY TRAT	ČÍSLO SOUSTAVY 201.4811-300	STROJ STG 440GA
Konstruoval: &konstruoval		
Datum: 08. 03.2010		
Meritko: 7:50		

7.46. Kusovník / Stückliste / Piece list – Trať / Bahn / Track

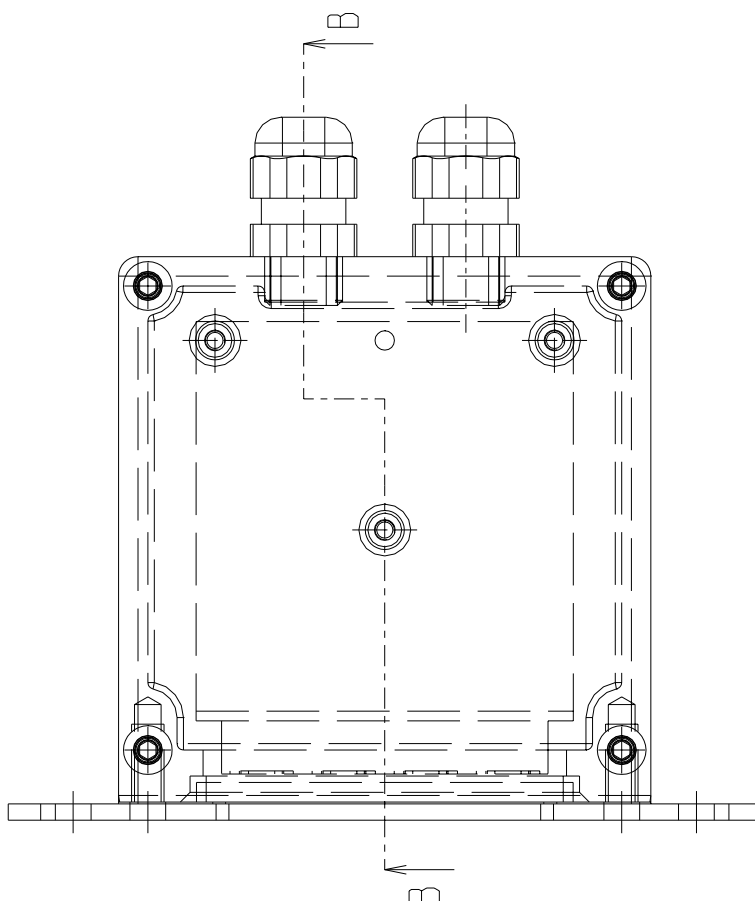
Císlo Sestavy 201.4811-300	Ver. 0	Název sestavy TRAT/TRACK/BAHN				
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks	
1	201.4811-600	1	VALEC VERTIKÁLNÍ / VERTICAL CYLINDER / VERTIKALZYLINDER		1	
2	30.2911-301	0	LISTA / TRIM / LEISTE	HR 60x25	2	
3	30.4811-102	0	VALEC / ROLLER / ZYLINDER	TR 51x6.3	7	
4	30.4811-103	0	TYC / POLE / STANGE	d 20	7	
5	30.4811-105	0	ROST / GRILL / GITTER	P5 - 466	1	
6	30.4811-110	0	CELO / HEAD / STIRN	P 30 - 253	1	
7	30.4811-308	0	ROST / GRILL / GITTER	P 5 - 500	1	
8	90.001.25.054	0	SROUB IMBUS / ALLEN HEAD BOLT / IMBUSSCHRAUBE	M10x60	4	
9	90.002.20.029	0	SROUB STAVECÍ / ADJUSTMENT BOLT / STELLSCHRAUBE	SROUB M6x8	7	
10	90.008.50.XXX	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M8x16	12	
11	90.154.50.011	0	PODLOŽKA / WASHER / UNTERLEGSCHIBE	20x28x1	14	
12	95.001.007	0	LOŽISKO / BEARING / LAGER	6004 2RSA	14	

7.47. Displej / Display / Display



SKLO MONTOVANO NASTRIKEM DOVNITR

NÁZEV SESTAVY DISPLEJ	ČÍSLO SESTAVY	STROJ
	201.2903-100	STG 330GA
	Konstruoval: &konstruoval	
	Datum: 15. 02. 2010	
	Meritko: 3:2	

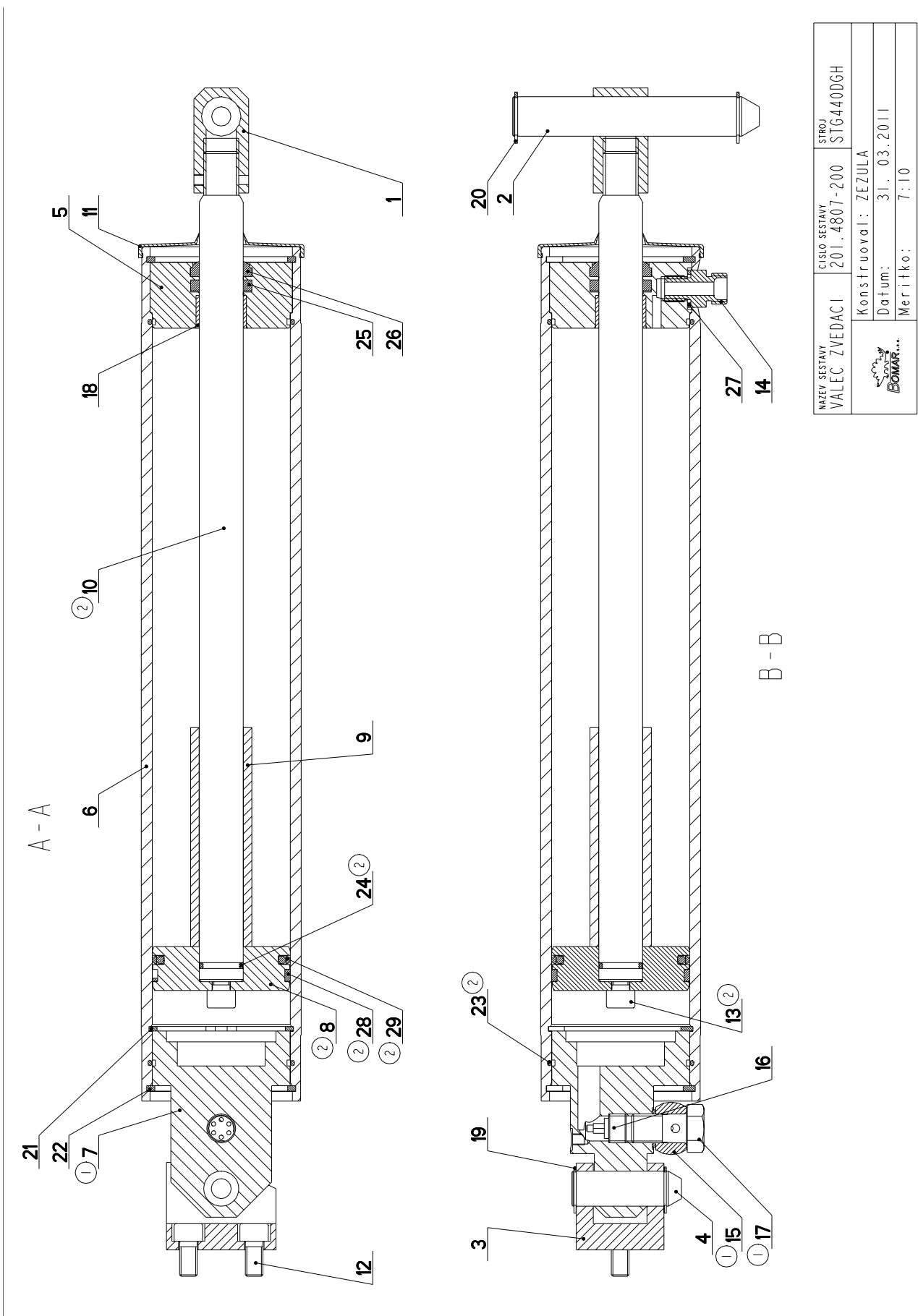


7.48. Kusovník / Stückliste / Piece list – Displej / Display / Display

Cislo Sestavy 201.2903-100		Ver. 0	Nazev sestavy DISPLEJ/DISPLAY/DISPLAY	
Poz.	Objednací číslo	Ver.	Nazev položky	Ks
1	30.2903-101	0	KRABICE / BOX / DOSE	1
2	30.2903-103	0	VÍKO / COVER / DECKEL	1
3	31.0631-212	0	DISPLEJ / DISPLAY / DISPLAY	1
4	31.2903-102	0	SKLO ORGANICKE / PLEXIGLAS	1
5	31.2903-106	0	TESNENÍ / SEALING / DICHTUNG	1
6	81.2903-104	0	CELO / HEAD / STIRN	1
7	90.013.27.001	0	SROUB / BOLT / SCHRAUBE	4
8	91.070.010	0	PRŮCHODKA / LEADTHROUGH / DURCHFÜHRUNG	2

Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.49. Valec zvedací / Hebezyylinder / Lifting cylinder



7.50. Kusovník / Stückliste / Piece list – Valec zvedací / Hebezyylinder / Lifting cylinder

Císlo Sestavy 201.4807-200		Ver. 2	Název sestavy VALEC ZVEDACÍ/LIFTING CYLINDER/HEBEZYLINDER		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.0807-006	1	DRŽAK / HOLDER / HALTER	TYC 25x25	1
2	30.0807-007	1	CEP / LUG / BOLZEN	d 18h9	1
3	30.0807-008	1	DRŽAK / HOLDER / HALTER	HR 40x40	1
4	30.0807-009	1	CEP / LUG / BOLZEN	d 16h9	1
5	30.1807-001	1	VIKO / COVER / DECKEL	TYC 70	1
6	30.1807-002	5	VALEC / ROLLER / ZYLINDER	TRUBKA 73/63	1
7	30.1807-008 (1)	0	VIKO / COVER / DECKEL	d 65	1
8	30.2907-003 (2)	0	PIST / PISTON / KOLBEN	D65	1
9	30.4807-010	0	TRUBKA / TUBE / ROHR	TR28x4	1
10	30.8307-203 (2)	2	PISTNICE / PISTON ROD / KOLBENSTANGE	d20	1
11	31.1807-006	0	VIKO / COVER / DECKEL		1
12	90.001.25.031	0	SROUB IMBUS CERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x16	2
13	90.001.25.032 (2)	0	SROUB IMBUS CERNÝ / ALLEN HEAD BOLT / IMBUSSCHRAUBE	8x20	1
14	92.002.001 (1)	0	SROUBENÍ PRÍME / DIRECT BOLTING / GERADE VERSCHRAUBUNG	G 1/4"	1
15	92.054.001 (1)	0	KONCOVKA / END / ENDSTÜCK	KONCOVKA OKO	1
16	92.151.001	0	VENTIL POJISTNÝ / SAFETY VALVE / SICHERUNGSVENTIL	VPN-H 1/4"	1
17	93.010.002 (1)	0	SROUB / BOLT / SCHRAUBE	G1/4"	1
18	95.700.003	0	POUZDRO / SLEEVE / BÜCHSE	20x15	1
19	95.800.007	0	KROUZEK POJIST.VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 16	2
20	95.800.008	0	KROUZEK POJIST.VNEJS / OUTSIDE SAFETY RING / SICHERUNGSRING AUßEN	POJISTNÝ KROUZEK 18	2
21	95.801.011	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNÝ KROUZEK 63	1
22	95.801.012	0	KROUZEK POJIST.VNITR / INSIDE SAFETY RING / SICHERUNGSRING INNEN	POJISTNÝ KROUZEK 65	2
23	96.001.016 (2)	0	KROUZEK O STATICKÝ / STATIC O RING / O-RING STATISCH	60x2	2
24	96.002.007 (2)	0	KROUZEK O DYNAMICKÝ / DYNAMIC O RING / O-RING DYNAMISCH	16x2	1
25	96.041.002	0	TESNENÍ / SEALING / DICHTUNG	601-20x28x5	1
26	96.060.002	0	KROUZEK STIRACÍ / SCRAPER RING / ABSTREIFRING	KROUZEK STIRACÍ 20	1
27	96.082.002	0	TESNENÍ / SEALING / DICHTUNG	KROUZEK CU 13/17	2
28	96.084.002 (2)	0	KROUZEK VODICÍ / LEAD RING / FÜHRUNGSRING	GP6500630-Z61	1
29	96.900.016 (2)	0	TESNENÍ KOMBINOVANÉ / COMBINATION SEALING / KOMBIDICHTUNG	PT0200630	1

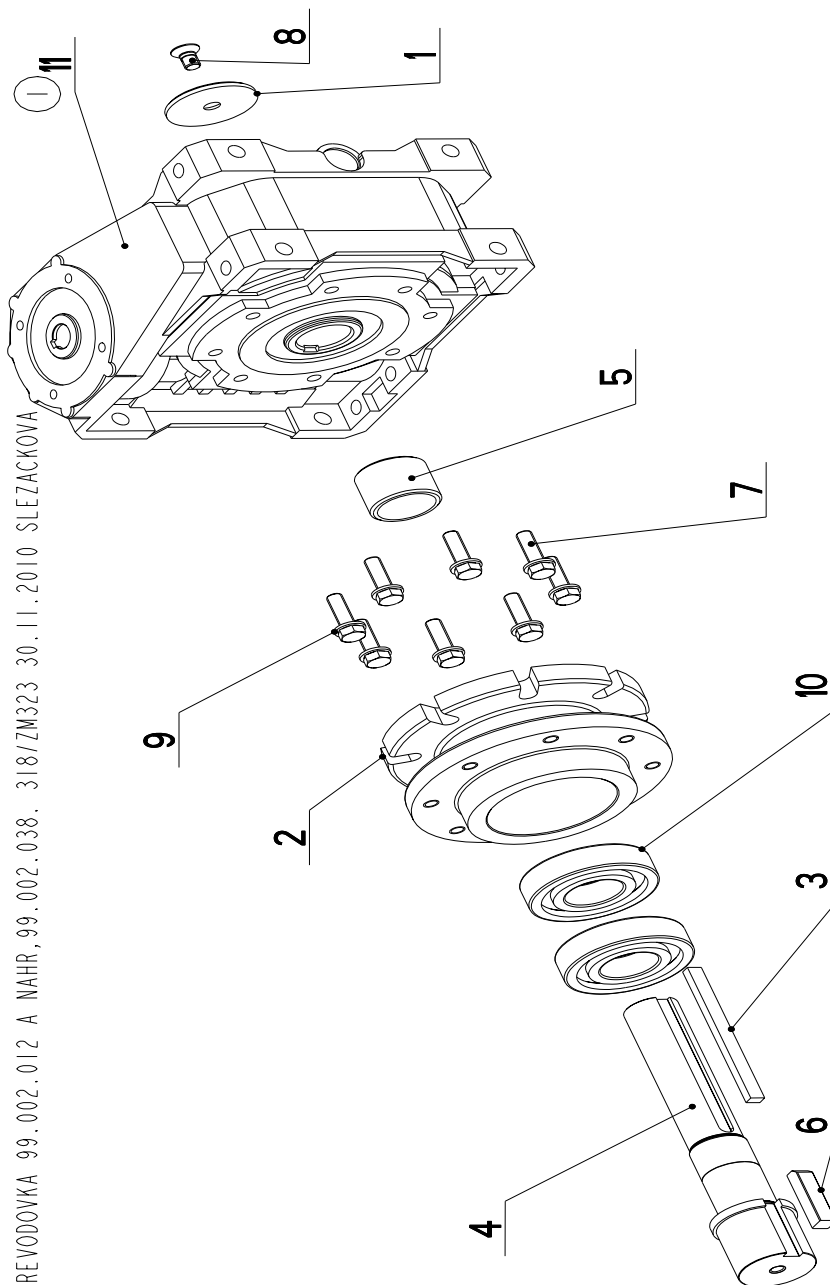
1. ZRUS.VIKO 30.1807-007 A NAHR.30.1807-008,ZRUS.SOUCASTI REDUKCE 9107-509,SROUBENÍ 92.003.001,30.1807-005,
PRIDANY SOUCASTI KONCOVKA 92.054.001,SROUB 93.010.002,SROUBENÍ 92.002.001. 026/ZM020 9.2.2011 SLEZACKOVA

2. ZRUS.PIST30.0807-004 A NAHR.30.2907-003,ZRUS.PISTNICE 30.1807-003 A NAHR.30.8307-203,ZRUS.SOUCASTI
90.100.55.006,90.101.55.003,96.002.020,96.001.004,PRID.SROUB M8x20 90.001.25.032,TESNENÍ 96.900.016,KROUZEK 96.084.002,
ZRUS.KROUZEK 96.001.015 A NAHR.KROUZKEM 60x2 96.001.016. 026/ZM034 31.3.2011 SLEZACKOVA

7.51. Prevodovka / Getriebe / Transmission

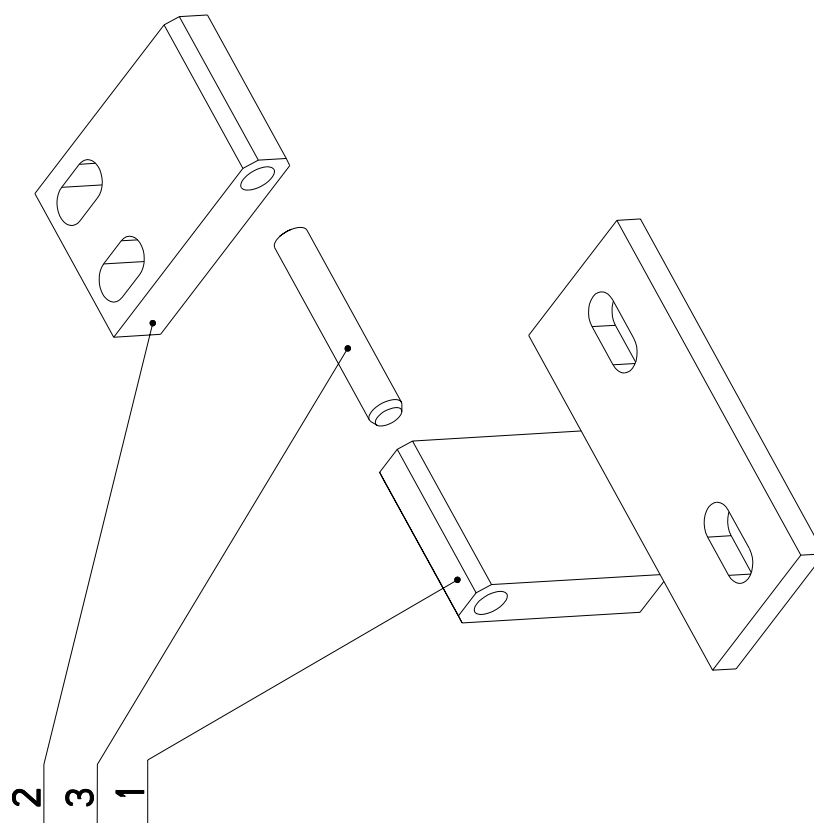
Císlo Sestavy 201.4805-050		Ver. I	Název sestavy PREVODOVKA/TRANSMISSION /GETRIEBE		
Poz.	Objednací číslo	Ver.	Název položky	Rozměr	Ks
1	30.1804-010	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	ø 70	1
2	30.2904-002	0	PŘÍRUBA / FLANGE / FLANSCH	ODLITEK	1
3	30.2904-008	0	PERO / SPRING / FEDER	HR 12x8	1
4	30.4804-004	2	HRDEL / SHAFT / WELLE	ø 65	1
5	30.4804-005	0	KROUZEK DISTANČNÍ / DISTANCE RING / DISTANZRING	TR 55x8	1
6	30.4804-006	0	PERO / SPRING / FEDER	HR 14x14	1
7	90.005.55.034	0	SROUB 6HRANNÝ / 6 SIDED BOLT / SECHSKANTSCHRAUBE	SROUB M12X40	8
8	90.011.27.009	0	SROUB ZAPUSTNÝ / COUNTERSINK BOLT / SENKSCHRAUBE	SROUB M12X20	1
9	90.150.50.007	0	PODLOŽKA / WASHER / UNTERLEGSCHEIBE	PODLOŽKA 13	8
10	95.001.027	0	LOŽISKO / BEARING / LAGER	6309 2RS	2
11	99.002.038	0	PREVODOVKA SNEKOVÁ / WORM GEAR TRANSMISSION / SCHNECKENGETRIEBE	W110 U P100 B14	1

I. ZRUS. PREVODOVKA 99.002.012 A NAHR, 99.002.038. 318/ZM323 30.11.2010 SLEZACKOVA



7.52. Pant / Türband / Hinge - 1

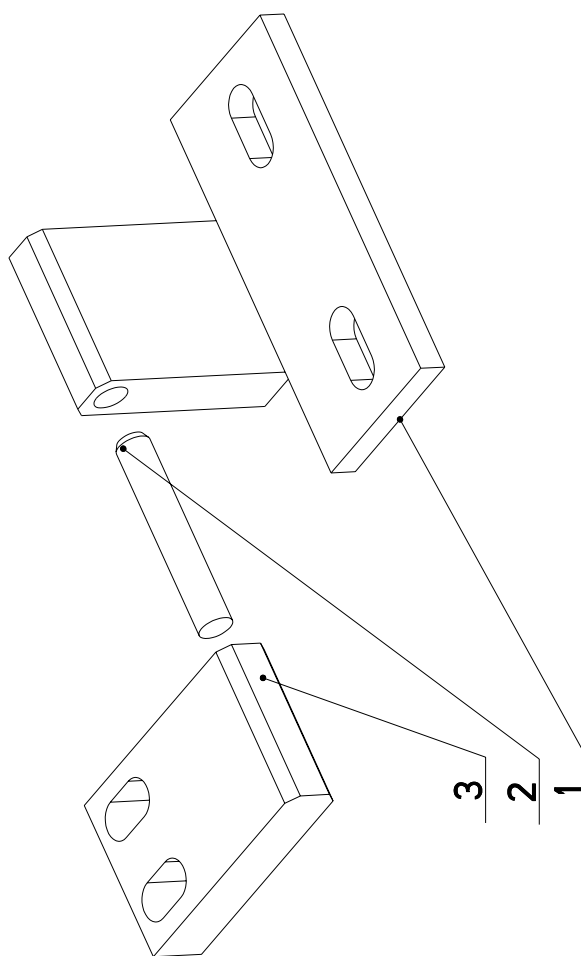
Cislo Sestavy 201.1714-300		Ver. 0	Nazev sestavy PANT/HINGE / TÜRBAND	
Poz.	Objednací číslo	Ver.	Nazev položky	Ks
1	30.1714-102	0	KONZOLA / CONSOLE / KONSOLE	1
2	30.1714-103	2	KOSTKA / CUBE / WÜRFEL	1
3	90.301.02.006	0	KOLÍK VALCOVÝ MEKKÝ / CYLINDRICAL PIN SOFT / ZYLINDERSTIFT WEICH	1



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Nazev sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Nazev položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung

7.53. Pant / Türband / Hinge - 2

Cislo Sestavy 201.1714-400		Ver. 0	Název sestavy PANT/HINGE / TÜRBAND	
Poz.	Objednací číslo	Ver.	Název položky	Rozměr
1	30.1714-102	0	KONZOLA / CONSOLE / KONSOLE	I
2	90.301.02.006	0	KOLÍK VALCOVÝ MEKKÝ / CYLINDRICAL PIN SOFT / ZYLINDERSTIFT WEICH	KOLÍK 6X38
3	30.1714-103	2	KOSTKA / CUBE / WÜRFEL	HR 30 x 10



Cislo Sestavy/Number of assembly/Nummer der Baugruppe; Verze (Ver.)/Version/Version; Název sestavy/Assembly title/Name der Baugruppe; Pozice (Poz.)/Position/Position;
Objednací číslo/Purchase order number/Bestellnummer; Název položky/Volume title/Name der Position; Rozměr/Stock size/Abmessung