CZ **Návod k použití** **Tesařská pila**

EN **User Manual** **Carpenter table saw**

TS 400Z / TS 400ZAL

Tesařská pila s válečkovou dráhou
carpenter table saw and roller stand

Přečtěte si a dodržujte návod a bezpečnostní pokyny!

Read the operation manual carefully before first use!

Technické změny, jakož i chyby tisku vyhrazeny!

Technical data subject to changes, errors excepted!

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9 PREFACE

Dear Customer!

This manual contains Information and important instructions for the installation and correct use of the carpenter table saw TS 400Z.
This manual is part of the machine and shall not be stored separately from the machine. Save it for later reference and if you let other persons use the machine, add this instruction manual to the machine.

Please read and obey the security instructions!
Before first use read this manual carefully. It eases the correct use of the machine and prevents misunderstanding and damages of machine and the user's health.

Due to constant advancements in product design construction pictures and content may diverse slightly. However, if you discover any errors, inform us please.
Technical specifications are subject to changes!

Please check the product contents immediately after receipt for any eventual transport damage or missing parts.

Claims from transport damage or missing parts must be placed immediately after initial machine receipt and unpacking before putting the machine into operation.

Please understand that later claims cannot be accepted anymore.

Copyright

CUSTOMER SERVICE CONTACT

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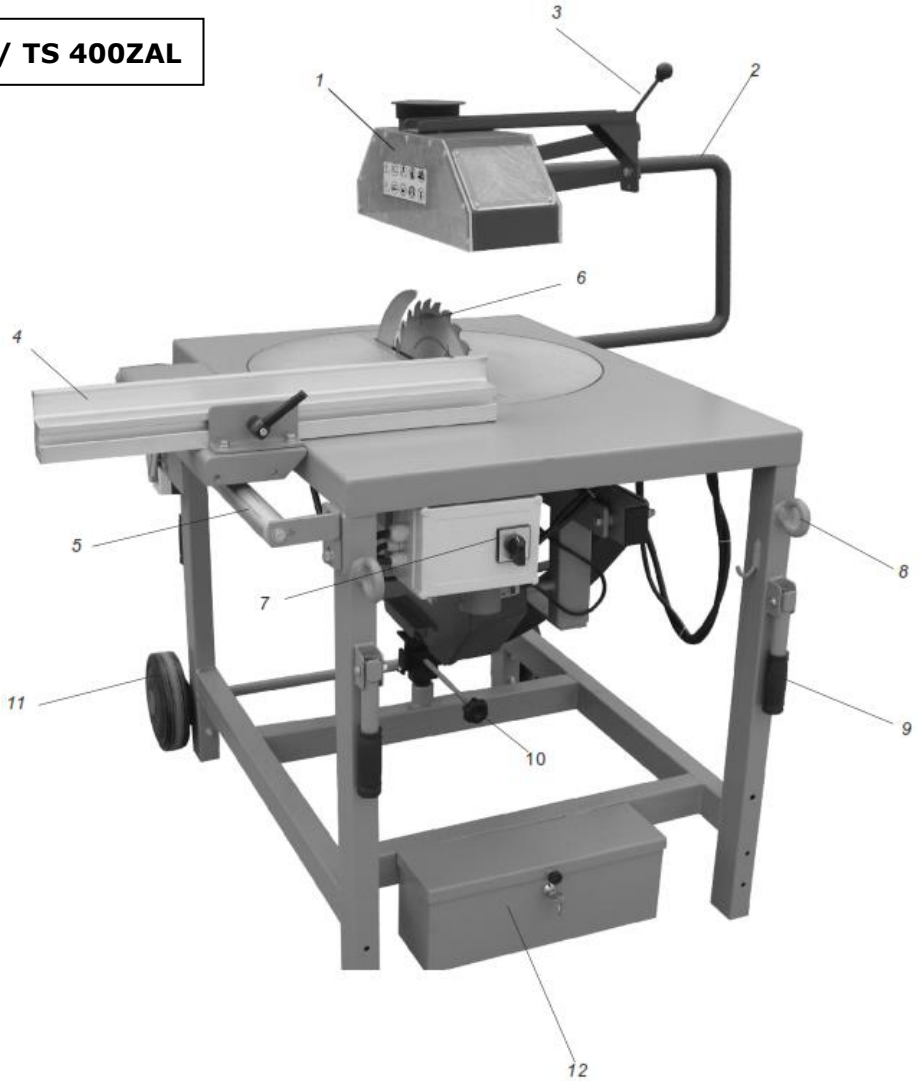
10 TECHNIC

10.1 Main Components

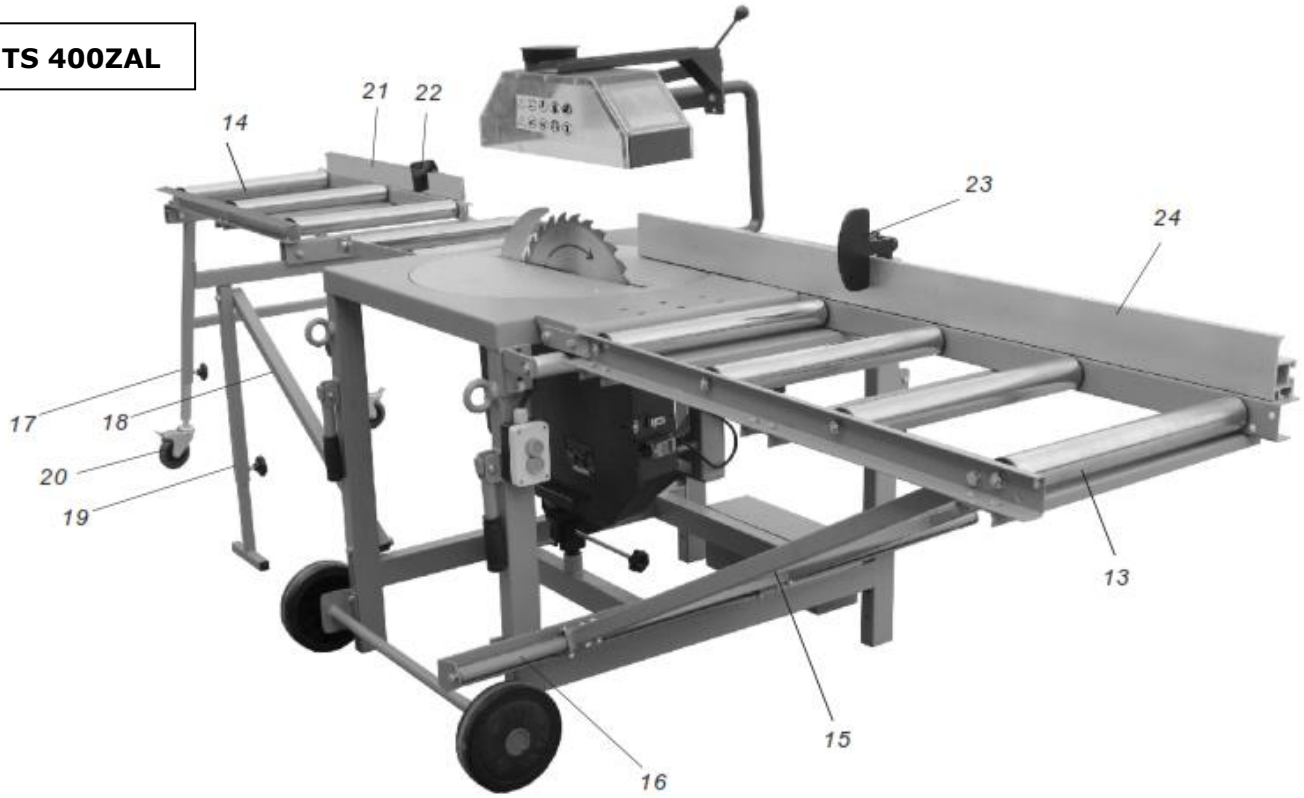
TS 400Z / TS 400ZAL



10.1 Controls

1	Blade safe guard	**7**	Power switch
2	Blade safe guard holding bracket	**8**	Hoist ring
3	Blade safe guard adjust lever	**9**	Machine carrier lever
4	Rip fence	**10**	Blade tilting lock knob
5	Rip fence rail	**11**	Wheel kit
6	Saw blade	**12**	Tool kit

TS 400ZAL



13	Work piece infeed roller	**19**	Outroller support C
14	Work piece outfeed roller	**20**	Wheel kit for outroller
15	Infeed roller support	**21**	Rip fencn for outfeed
16	Infeed roller support guide	**22**	Stop for outfeed
17	Outroller support A	**23**	Stop for Infeed
18	Outroller support B	**24**	Rip fence for Infeed

10.2 Technical Data

	TS 400Z	TS 400ZAL
Mains voltage	400V / 50Hz	
Engine power (S1 100%) (S6)	2,8 / 3,9 kW	
Engine speed	2800 min^{-1}	
Saw blade diameter	400x30x3 mm	
Cutting height max. 90°	120 mm	
Cutting height max. 45 °	90 mm	
table dimensions	715x945 mm	
table height	845 mm	
Ø extraction connection	2x100 mm	
sliding roller track		1000x550 mm
Dimensions (WxDxH)	1350x1100x1180 mm	3380x1400x1180 mm
Weight	210 kg	240 kg
Sound pressure level L_{PA}	81 db(A)	
Sound power level L_{WA}	97 db(A)	

11 SAFETY

11.1 Intended use

The machine only in technically perfect condition in accordance with, safety and danger, and use! Disturbances which can affect safety must be rectified immediately!

It is generally prohibited to modify safety equipment of the machine or to make ineffective!

The TS 400Z is solely for cutting wood materials (solid, particle board, veneer, etc.) determined with properly sharpened saw blade.

Branches and other materials with round / uneven cross-section may not be processed without proper fixation. The saw blade can rotate or throw out this.

11.1.1 Working conditons

The machine is designed for the work under the following conditions:

humidity max. 70%

temperature +5°C to +40°C +41°F to +104°F

The machine is not intended for outdoor use.

The machine is not intended for use in potentially hazardous conditions.

11.2 Prohibited use

- The operation of the machine under conditions outside of the limits, given in these instructions is not permitted.
- The operation of the machine without the safety devices provided is inadmissible
- The removal or turning off the protection devices is prohibited
- It is not permitted processing of materials with dimensions outside the limits specified in this manual.
- It is not permitted the use of tools that are not for use with TS 400Z are suitable.
- The operation of the machine on a way or for any purpose that does not comply with the instructions of this manual to 100%, is prohibited.
- Do not leave the machine unattended, especially when children are not around. DO NOT LEAVE the workplace!

For another, additional use or for overload the machine and resulting property damage or injury takes HOLZMANN-MASCHINEN no responsibility or warranty.

11.1 General Safety

Warning labels and / or stickers on the machine that are illegible or removed shall be replaced immediately!

To avoid malfunctions, damage and physical injury MUST be observed:

Wood dust may contain chemical substances that have a negative impact on personal health. Work on the machine only in well-ventilated areas with appropriate dust mask to perform!

Before maintenance or adjustments, the machine must be disconnected from the power supply! Switch off the main switch before disconnecting the power (OFF).

Use the power cord never for transport or manipulation of the machine!

On the device there are only few of them serviceable components. It is not necessary to dismantle the machine. Have repairs carried out only by an expert!

Accessories: Only use of HOLZMANN Accessories!

If you have any questions and problems to our customer service.

11.2 Safety devices

In designing the machine, the following protective devices are provided:

- Blade guard: This is fixed in order to avoid contact with the saw blade.
- EMERGENCY STOP switch. This is located at the front and the side of the machine. Make sure it is functioning at regular intervals.
- Push stick: This is mandatory to use less than **120**mm in blanks.
- Rip fence. Serves to guide the workpiece in the longitudinal cutting. It is made even of de-usable material (aluminum).
- The setting of the rip fence is possible without the use of tools.
- Impeccable sharpened tools. The use of blunt tools is not permissible due to kickback, over-loading the machine and produce poor surface during machining.

11.3 Residual risks

Also in compliance with all safety regulations and when used properly, the following residual risks must be observed:

- Risk of injury to the hands / fingers through the circular saw blade during operation.
- Risk of injury from contact with live electrical components.
- Risk of injury due to breakage or being thrown out of the circular saw blade and circular saw blade parts, especially in case of overload and in the wrong direction.
- Hearing damage unless precautions have been taken by the user of hearing protection.
- Risk of injury from kickback of the cut material, ejecting the cut material or portions thereof.
- Risk of injury to the eye by flying debris, even with goggles.
- Risk of inhalation of toxic wood dust in chemically treated workpieces.

These risks can be minimized if all safety rules are applied, the machine is properly maintained and serviced the machine is performing as intended and in accordance operated by properly trained personnel. Despite all the safety devices and remains her good common sense and your corresponding technical suitability / training on the operation of a machine such as the table saw TS 400Z is the most important safety factor!

12 ASSEMBLY

12.1 Preparatory activities

After receipt of the delivery, if all parts are in order. Report any damage or missing items immediately to your dealer or the shipping company. Visible damage must also be recorded without delay in accordance with the provisions of the warranty on the delivery note, otherwise the goods shall be accepted as properly.

12.1.1 Workplace

Choose a suitable place for the machine.

Observe the safety requirements of Chapter **5** as well as the dimensions of the machine from Section **4.3**.

The location selected must ensure as well as the possibility for connection to an extraction system an appropriate connection to the electrical grid.

Make sure that the floor can support the weight of the machine. The machine must be leveled on all bases simultaneously.

You must also ensure all round a distance of at least **0.8** m around the machine. Before and behind the machine must be made for necessary clearance for the supply of long workpieces.

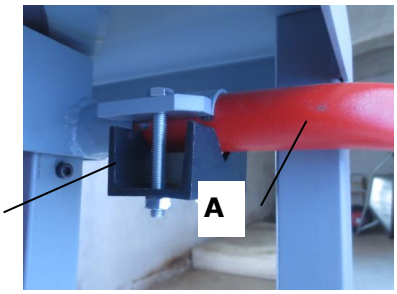
	⚠ ATTENTION
	**When working on an ungrounded machine:** **Serious injury due to electric shock in the event of a malfunction possible!** Therefore: Machine must be operated in a grounded power outlet.

12.2 Assembly

12.2.1 mount Holder

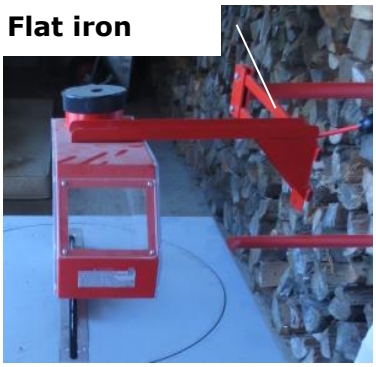
- The clamp is easily screwed with screws to the mounting plate (**B**) beneath the work table.
- The bracket (**A**) is pushed onto the frame tube and tightened in the correct position with the clamp.

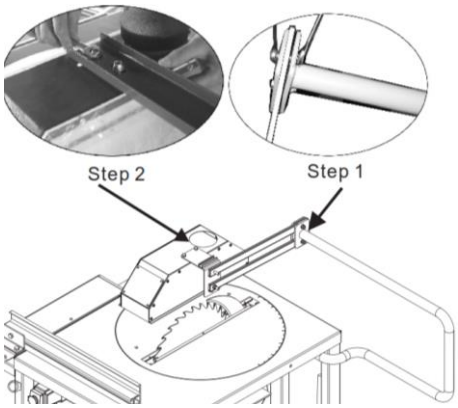
clamp



12.2.2 mount saw blade guard cover

- The blade guard cover is screwed to the two flat bars to the holder.
- The self-locking nuts tighten so hard that the whole thing with the lifting handle (3) can still move.

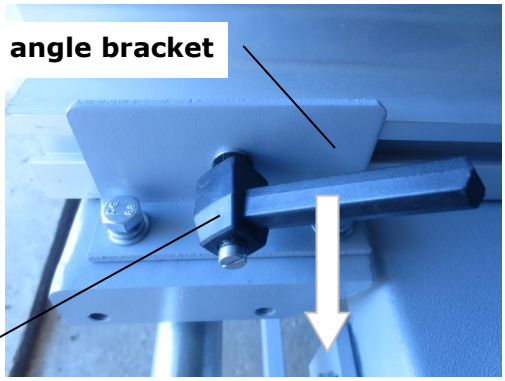




12.2.3 mount the rip fence

- With the two screws holding bracket is screwed into the threads on the guide plate.
- The aluminum profile is pushed into 2 possible guide to the sliding block at the angle bracket.
- With the locking lever can be clamped variable.

The locking lever can be set by tightening direction of the arrow like a ratchet (ratchet).



12.2.4 Power connector

At the main switch box is below the connector for the power supply.

12.3 Electrical connection

ATTENTION

When working on an ungrounded machine:
Serious injury due to electric shock in the event of a malfunction possible!
Therefore:
Machine must be connected to a grounded outlet.

- Check with a qualified electrician or service technician that the grounding instructions have been understood and the machine is grounded!
- A damaged cable must be replaced immediately!
- Check whether the supply voltage and the current frequency as marked on the rating plate. It is a deviation from the value of the supply voltage of ± 5% are permissible (eg: a machine with a working voltage of 380V can work in the voltage range of 370 to 400V).
- To determine the required cross section of the supply cable, use the data from the rating plate and in the following table.

Energy consumption(A)	***Cross-section of the conduit***	***fuse***
bis 10	2.5 mm^2	12A AM
von 10 bis 14	4.0 mm^2	16A AM
von 14 bis 18	6.0 mm^2	20A AM
von 18 bis 22	6.0 mm^2	25A AM
von 22 bis 28	10.0 mm^2	32A AM
von 28 bis 36	10.0 mm^2	40A AM
von 36 bis 46	16.0 mm^2	50A AM

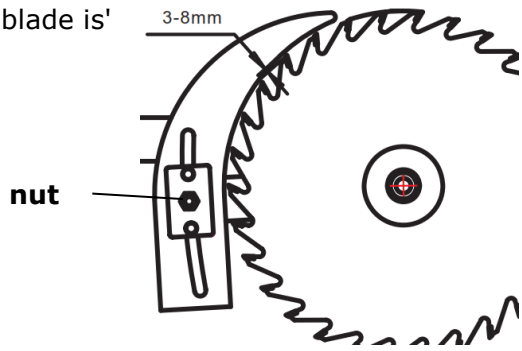
13 OPERATION

13.1 Adjustments before operation

13.1.1 Adjusting the riving knife

- Open the two quick releases left and right at the vacuum and reduce the protective flap down.

- Using a wrench, loosen the nut slightly.
- Adjust the riving knife so that the distance from the saw blade is' **3-8** mm.
- Tighten the nut after adjustment firmly.



- Close the safety door and lock it with the two quick releases.

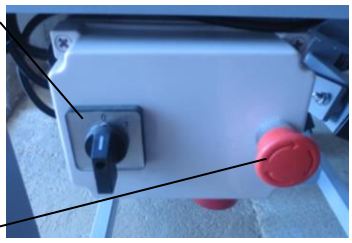
NOTE: if the machine does not turn, it may be that the stop plate is not actuated the limit switch.

- When the safety valve, press the stop plate a little towards the limit switch.

13.2 Operation

13.2.1 switch on the machine

Main switch 0 - 1



- Switch the main power switch to position 1

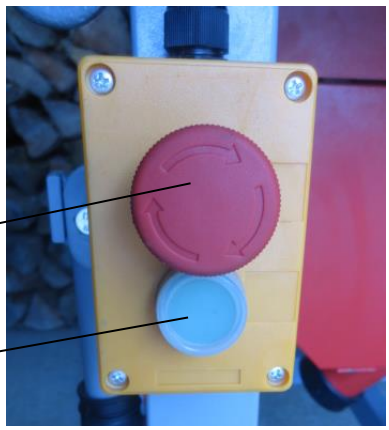
INFO: The main switch has only its function when the **EMERGENCY STOP** switch in the open state are located !

EMERGENCY STOP

13.2.2 start the engine

- To turn **ON** the lower switch button is pressed.

INFO: When you start the **EMERGENCY STOP** switch must be in the open state.



OFF switch
EMERGENCY STOP

ON switch

13.2.3 stop the engine

- To stop the motor, press the **OFF** switch as well as **EMERGENCY STOP** switch.

13.2.4 Switch off the machine

- The main power switch to the **0** position switch.

13.2.5 Saw blade height adjustment

To adjust the height of the saw blade to adapt the material to raise or lower the blade.

- Unscrew the locking screw.
- Pull the lever tube out and fix it with the locking screw.

Lever tube

locking screw

- Rotate the locking lever counterclockwise loose.
- Now you can move the drive unit / blade up to the desired height with the lever tube.
- Secure with the locking lever, the drive unit firmly.
- Loosen the locking screw and push back the lever tube again.
- Tighten the set screw.

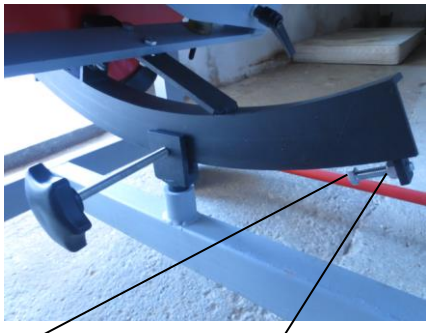
INFO: In the top position of the drive unit of the locking lever can be pulled in the direction of arrow and like a ratchet loosely be rotated.

13.2.6 Setting the saw blade tilt / slant

The saw blade can range from 0° - 45° inclined.

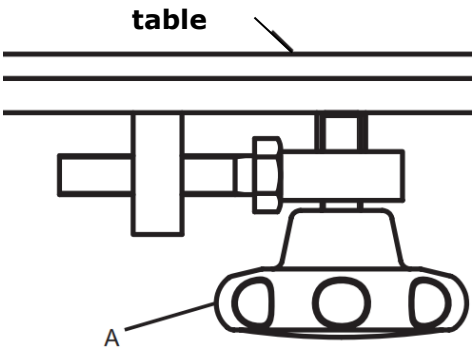
NOTE: When loosening the set screw in the 90 ° position slide the drive unit through the lateral motor focus down.
The saw blade on the work table tilts thus unexpectedly quickly to the side in the slope.

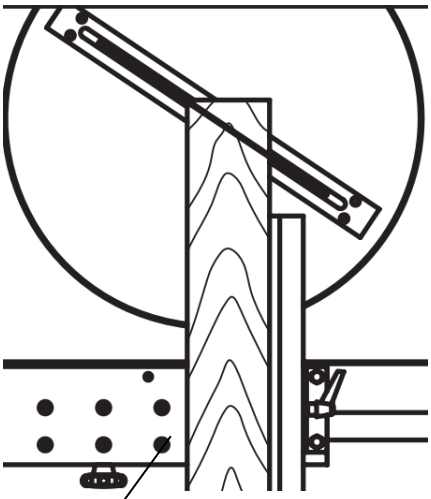
- Loosen the set screw down to the frame and tilt the drive unit / blade to the desired slope.
- Tighten the fixing screw good.
- To set the 0 ° and 90 ° stop just loosen the lock nuts on the screws on the frame and adjust with the screws from the crossroad.
- Then screw the locknuts securely.

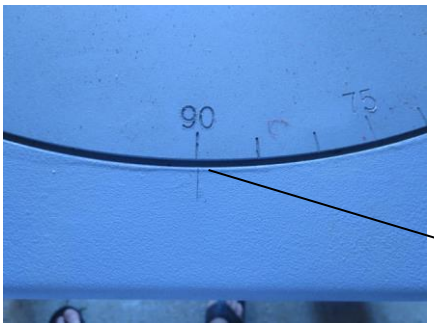


13.2.7 setting the miter angle

Turn the star screw (**A**) below the work table.
The complete unit can be adjusted in the desired angle.
On the inner round work table and on the work table are angle markings.
On the angular scale you can read the set angle.



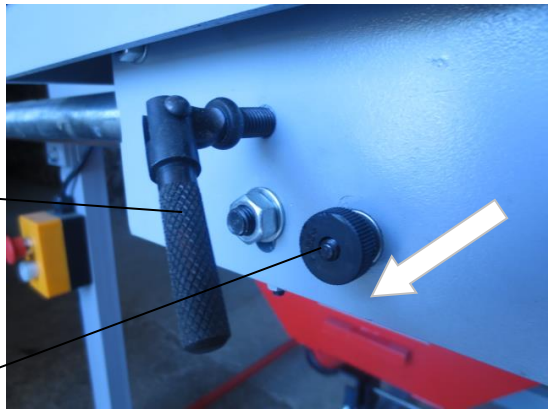




13.2.8 Clamp rip fence

With the clamping lever of the rip fence can be clamped.

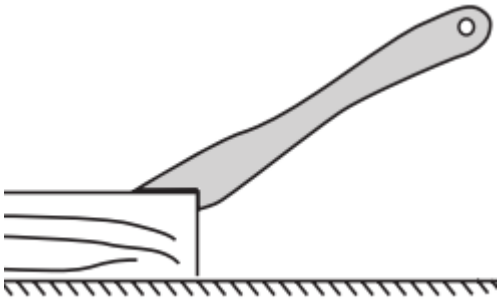
The safety pin is to fold the rip fence pulled up and out.
Arrow



13.3 Notes on using the room-table saw

Longitudinal cuts, long cuts

Here is to be managed by the rip fence the side guide.
For blanks with a width of less than **120** mm for feeding the workpiece NECESSARILY THE SLIDING STOCK TO USE!



Cross-cutting of workpieces made of solid wood

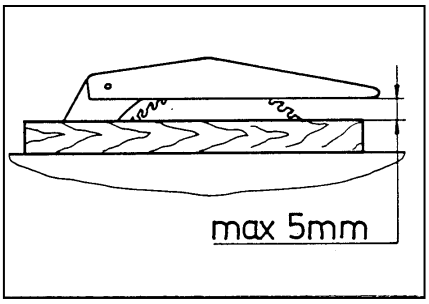
When performing this operation, the following devices must be used for safe working:

- the miter fence
- the guard of the circular saw blade
- the riving knife

Cutting boards

When performing this operation, the following devices must be used for safe working:

- the guard of the circular saw blade;
- the riving knife



14 MAINTENANCE

⚠ ATTENTION

No cleaning and maintenance with a connected machine!

Before carrying out any maintenance or cleaning work the machine is to be taken from the power supply!

The machine is low maintenance and contains little parts that must undergo a maintenance operator.

Failures or defects which may affect the safety of the machine, must be rectified immediately.

Repair work may only be carried out by qualified personnel!

The complete and utter cleaning ensures a long life for the machine and represents a safety requirement.

After each shift the machine and all its parts must be thoroughly cleaned! The complete and utter cleaning ensures a long life for the machine and represents a safety requirement

Check regularly that all warning and safety instructions on the machine available and properly legible condition.

Check before every use the perfect condition of the engine.

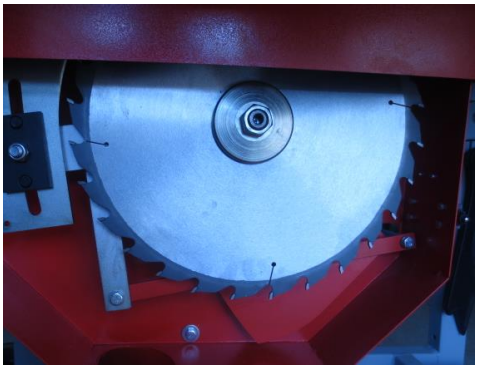
When storing the machine should this not be stored in a humid room and must be protected against the influence of weather conditions.

+ **The elimination of defects does your dealer**
+ **Repair work may only be carried out by qualified personnel!**

14.1 maintenance

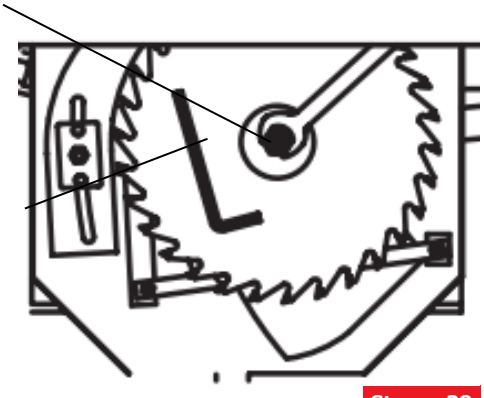
14.1.1 Saw blade change

ATTENTION: Use safety gloves!



- Lower the blade as described in 14.2.5 all the way down.
- Open the two side quick release and fold down the protective flap.

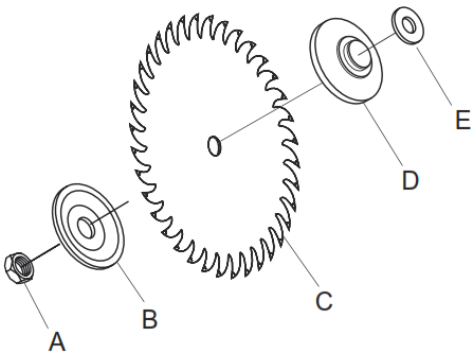
drive shaft



- Insert the supplied Allen key into the drive shaft.
- With the 17mm wrench, the nut can be unscrewed.

Allen key

- The 6-point nut, flange and blade from the drive shaft remove.
- Insert the new blade, flange and nut onto.



ATTENTION: Observe the direction of rotation of the saw blade!

14.1.2 Before each use

Visually check that the riving knife has 3-8 mm distance from the saw blade.
Visual inspection of the saw blade guard hood.
Visually check box and cable inlet for damage.
Visual inspection of circular saw blade is in good condition

14.1.3 Monthly

Connecting parts and moving parts with a thin layer of oil wetting.
Verification functionality EMERGENCY OFF switch!

14.1.4 Cleaning

NOTE
The use of solvents, harsh chemicals or abrasives results in damage to the machine! **Therefore:** When cleaning only water and if necessary, use a mild detergent.

14.2 Transport

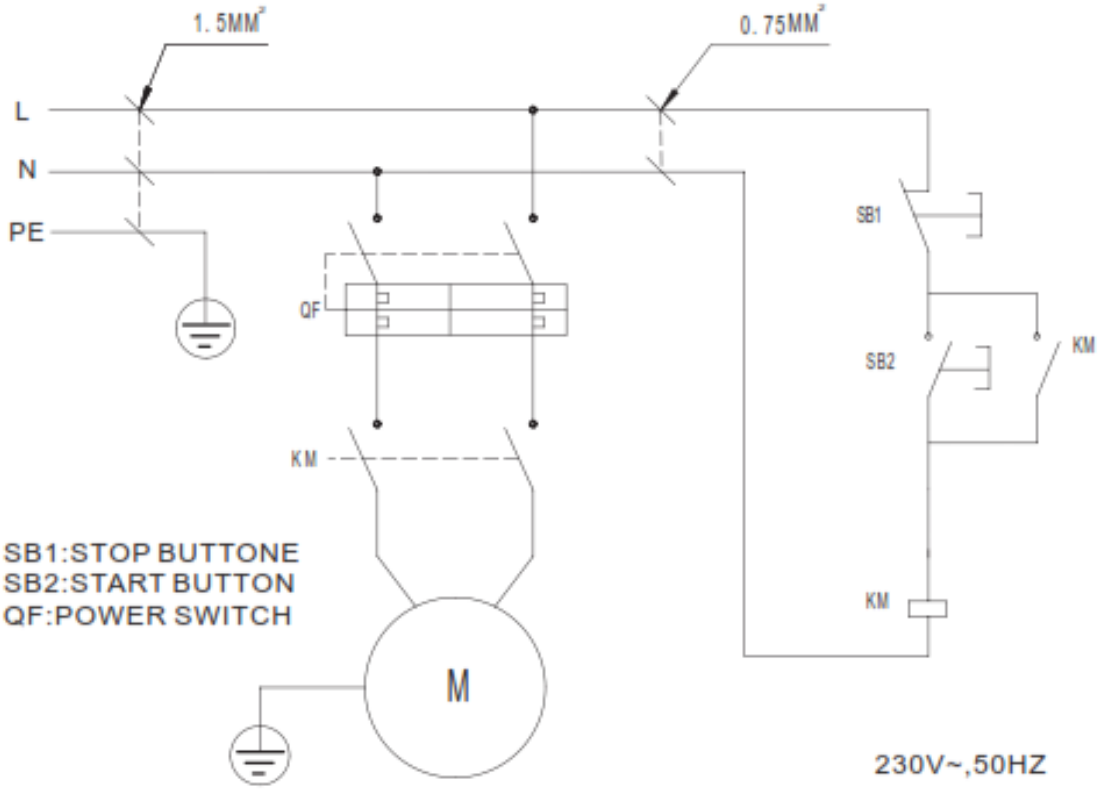
The TS 400Z is equipped with two transport wheels and 4 carrying handles.
Completely cut before transporting circular saw blade under the table!
Remove Before moving circular saw blade guard.
If possible carry, in their original box.

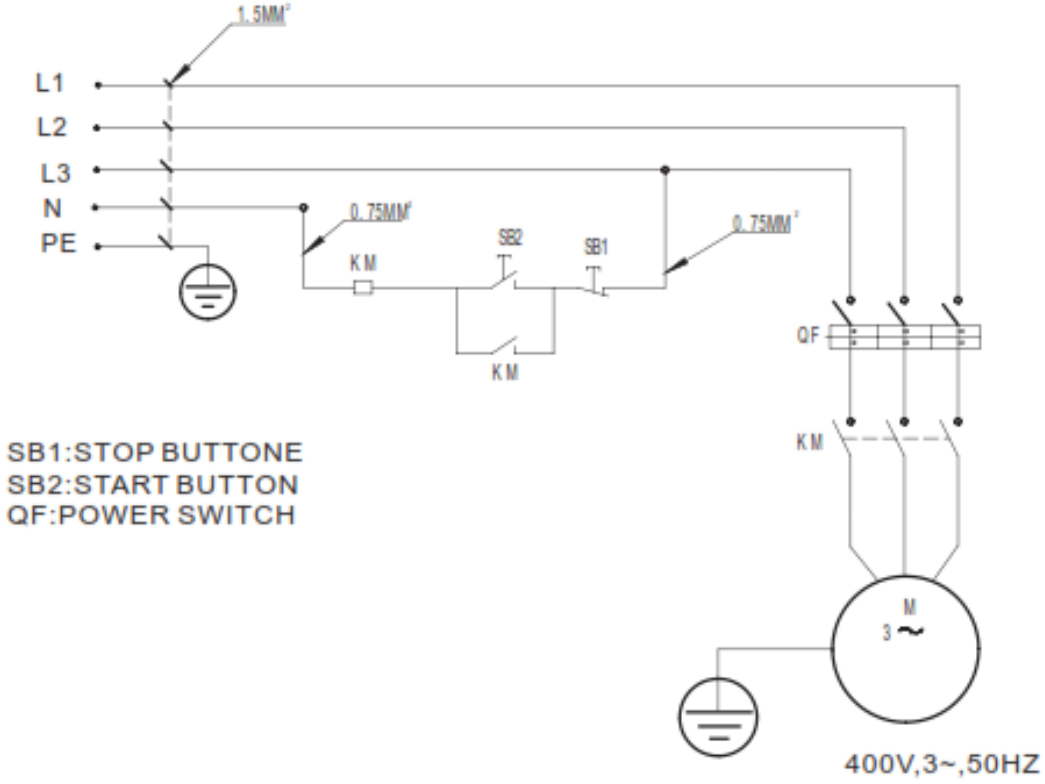
TROUBLE SHOOTING

Disconnect the machine from the power supply prior to any checks performed at the machine itself !

Trouble	Possible cause	Solution
Machine is not running	• Network connection is incorrect • Switch or a phase is broken • 400V possibly a current-carrying phase was connected wrong.	• Have it checked by a specialist. • And repair the faulty switch or faulty phase • Forsaking electrician the power supply and check 3PH motor!
Machine heats up very fast (3 min)!	• 400V possibly a current-carrying phase was connected wrong.	• Forsaking electrician the power supply and check 3PH motor!
Engine heats up after a certain period of operation	Overload of the engine by one or more of the following factors: • blunt saw blade • Too long or not appropriate extension lead! • hard material • to high feed • to high continuous load high humidity	• Circular saw blade sharpen, swap! • See Section Electrical connection • hard material out slowly. • Take breaks after prolonged use. • Save when the ambient temperature or humidity Motor particularly

15 ELEKTRISCHE SCHALTUNGEN / WIRING DIAGRAM





16 NÁHRADNÍ DÍLY / SPARE PARTS

16.1 Objednávka náhradních dílů / spare parts order

Použitím originálních dílů od společnosti Holzmann používáte díly, které spolu dokonale sedí a jejich montáž je časově méně náročná. Originální náhradní díly zajišťují delší životnost stroje.

POKYN

Použití jiných než originálních náhradních dílů má za následek ztrátu záruky!

Platí:
Při výměně komponent/dílů používejte pouze originální náhradní díly.

Při objednávání dílů použijte servisní formulář, který najdete na konci tohoto návodu na obsluhu. Vždy uvádějte typ stroje, číslo náhradního dílu a jeho název. Aby se předešlo neshodám, doporučujeme společně s objednávkou zaslat i kopii výkresu rozpadu náhradních dílů, na kterém Vámi požadované díly označíte.

Adresu pro objednání dílů naleznete v kontaktech na zákaznický servis.

With original HOLZMANN spare parts you use parts that are attuned to each other shorten the installation time and elongate your products lifespan.

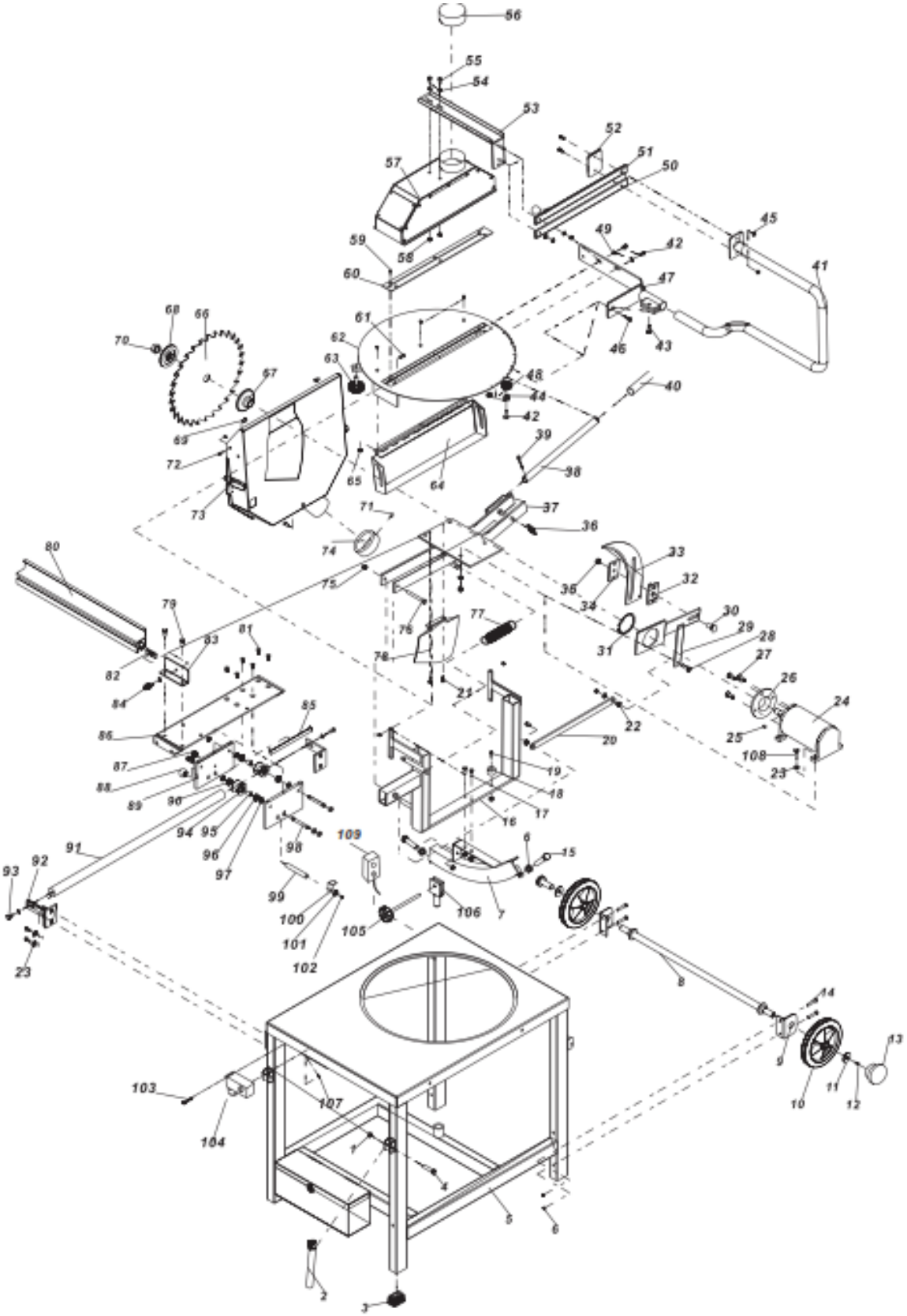
IMPORTANT

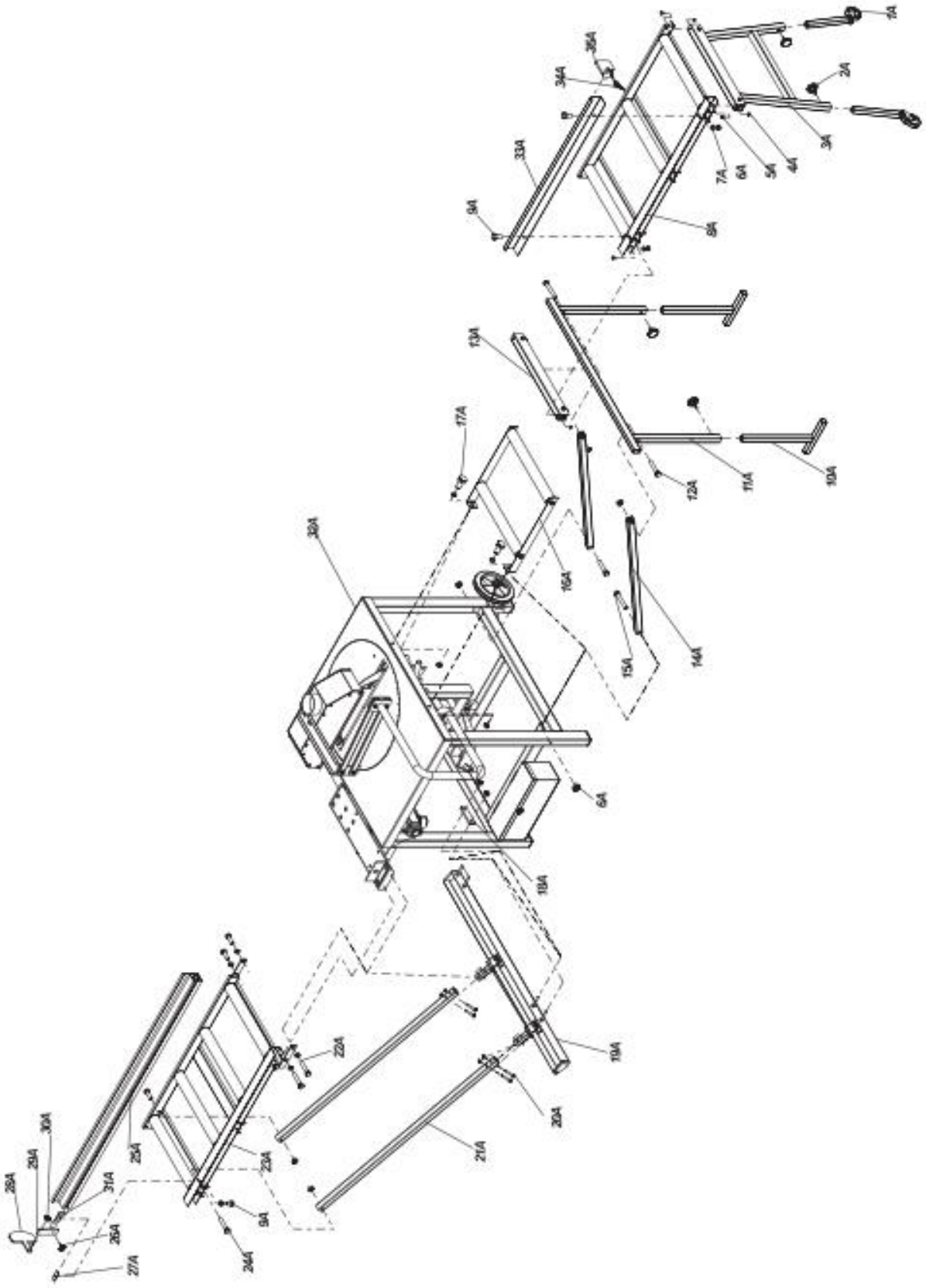
The installation of other than original spare parts voids the warranty!
So you always have to use original spare parts

When you place a spare parts order please use the service formular you can find in the last chapter of this manual. Always take a note of the machine type, spare parts number and part-name. We recommend to copy the spare parts diagram and mark the spare part you need.

You find the order address in the preface of this operation manual.

16.2 Výkres dílů / explosion drawings

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16.3 Stücklisten / spare part lists

51	Sunk head screw M8x16	6
52	Bolt guide	1
53	Fence carrier	1
54	Ratchet screw M8x12	1
55	Insert	1
56	Sliding	1
57	Star type screw M8x16	1
58	Ball	1
59	Outer support, sliding	1
90	Bearing 6000	3
91	Sliding rail	1
92	sliding T block	2
93	Hex head screw M10x16	6
94	Roller	3
95	Spacer	3
96	Special washer	6
97	Inner support, sliding	1
98	Pin	3
99	Pin B	1
100	Lock plate	1
101	Washer 6	1
102	Pan head screw M6x12	2
103	Pan head screw M5x12	4
104	Power switch	1
105	Swivel lock knob	1
106	Lock block	1
107	Hex nut M5	4
108	Hex head screw M10x40	4
109	On/Off switch	4

No.	Description	Q'ty
1A	Lower support, out-feed roller	2
2A	Lock knob	4
3A	Upper support, out-feed roller	1
4A	Hex nut M6	6
5A	Hex head screw M8x16	4
6A	Hex nut M10	17
7A	Washer 10	9
8A	Out-feed roller	1
9A	Hex head screw M10x12	3
10A	Rail lower support	2
11A	Rail	1
12A	Hex head screw M10x80	2
13A	Roller assemble	1
14A	Jointing rod	2
15A	Hex head screw M10x100	2
16A	Fixed roller	1
17A	Hex head screw M10x20	2
18A	Duo hole plate	2
19A	Movable roller rail	1
20A	Hex head screw M8x40	4
21A	Support, movable roller	2
22A	Hex head screw M10x20	4
23A	Movable roller	1
24A	Hex head screw M10x45	2
25A	Cutting fence	1
26A	Star type screw M8x16	1
27A	Bolt guide M6	1
28A	Work piece stop	1
29A	Segment, work piece stop	1
30A	Star type nut M8	1
31A	Bolt guide M6	1
32A	Saw unit	1
33A	Sub-fence	1
34A	Ratchet screw M8x25	1
35A	Work stop	1

1	Hex lock nut M8	13
2	Carrier lever	4
3	Feet	4
4	Hex head screw M8x40	7
5	Machine frame	1
6	Hex nut M8	9
7	Swivel plate	1
8	Rod, castor	1
9	Base, castor	2
10	Castor	2
11	Spacer	2
12	Sunk head screw M6x16	2
13	Cap, castor	2
14	Hex head screw M8x80	4
15	Hex head screw M8x45	2
16	Saw frame	1
17	Hex head screw M8x25	2
18	Rubber spacer	1
19	Allen screw M8x40	1
20	Connector	1
21	Pan head screw M6x10	2
22	Spacer	2
23	Washer 10	12
24	Motor	1
25	Key 5x5x20	1
26	Flange	1
27	Sunk head screw M6x12	3
28	Hex head screw M8x20	5
29	Fixed plate	1
30	Carriage bolt M12x40	1
31	Ring circle 60	1
32	Inner clamp, riving knife	1
33	Riving knife	1
34	outer clamp, riving knife	1
35	Hex lock nut M12	1
36	Wing nut M10	1
37	Rising frame	1
38	Rising lever	1
39	Roll pin 3	1
40	Sleeve, rising lever	1
41	Support, blade guard	1
42	Hex head screw M8x16	5
43	Hex head screw M10x25	1
44	Spacer	3
45	Hex lock nut M8	4
46	Hex head screw M8x25	1
47	Segment, support	1
48	Bearing 6003	4
49	Washer 8	16
50	Segment, blade guard	1
51	Segment B, blade guard	1
52	Plate	1
53	Angle plate	1
54	Washer 6	2
55	Hex head screw M6x16	1
56	Dust pot cover	1
57	Blade guard	1
58	Hex lock nut M6	2
59	Sunk head screw M5x10	9
60	Table insert	1
61	Hex head screw M6x25	2
62	Round table	1
63	Star type screw M12x25	1
64	Blade house cover	1
65	Hex nut M5	3
66	Blade	1
67	Inner flange, blade	1
68	Outer flange, blade	1
69	Hex head screw M8x10	2
70	Hex nut (LH) M20	1
71	Set screw M6x8	1
72	Hex head screw M8x20	2
73	Blade house	1
74	Dust pot	1
75	Hex head screw M8x40	1
76	Hex nut M10	11
77	Spring	2
78	Plate	1
79	Hex head screw M10x16	2
80	Fence	1

17 PROHLÁŠENÍ O SHODĚ / CERTIFICATE OF CONFORMITY

CE	**Prodejce / Distributor** HOLZMANN MASCHINEN® GmbH A-4170 Haslach, Marktplatz 4 Tel.: +43 7289 71562-0; Fax.: +43 7289 71562-4 info@holzmann-maschinen.at www.holzmann-maschinen.at
Název / name	
Zimmerer Tischkreissäge / Carpenter table saw	
Typ / model	
TS 400Z / TS 400ZAL	
EU směrnice / EC-directives	
2006/42/EG	
Použité normy / applicable Standards	
EN 60204-1/A1:2009	

Tímto prohlašujeme, že výše uvedený typ stroje splňuje bezpečnostní a zdravotní požadavky norem EU. Toto prohlášení ztrácí svou platnost, pokud by došlo ke změnám nebo úpravám stroje, které námi nebyly odsouhlaseny.

Hereby we declare that the above mentioned machines meet the essential safety and health requirements of the above stated EC directives. Any manipulation or change of the machine not being explicitly authorized by us in advance renders this document null and void.

Haslach, 18.07.2014

Místo / Datum place/date

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Klaus Schörgenhuber
Jednatel / Director

Gerhard Brunner
Technická dokumentace
Technical documentation