

WARRANTY CARD

1. KH Trading machines and tools are covered by 6/24 months warranty, starting on the date of purchase, as described in the Civil Code (proof of purchase or invoice receipt must be enclosed with the warranty card when making a claim).
2. This warranty does not cover defects caused by unprofessional handling, machine overloads, not complying with instructions contained in this manual, using accessories that are not approved, unauthorized repair, regular wear and tear and damages occurred during transport. Further, this warranty does not cover parts and accessories such as the motor, carbon brushes, seals and hot-air operated parts and parts that need to be changed regularly.
3. If the repair is to be found as not covered by the warranty policy, all costs including the repair and shipping to and from the repair centre will be paid by the customer, according to valid price list. See www.
4. When making a claim, you must present the warranty card, showing the date of the purchase, the serial number of the machine, vendor stamp and signature of sales clerk, as well as the proof of purchase receipt.
5. Warranty claim shall be made at the vendor shop where you bought your machine or you may mail it to a service centre. The vendor is obligated to fill out the warranty card (date of sale, serial number, vendor stamp and signature). All these information must be filled in at the time of sale.
6. The warranty period will be extended for the period of time for which the machine has been in the service centre possession. If the repair or defect is not covered by the warranty policy, all costs including the repair and shipping will be paid by the owner of the machine / tool. We recommend sending the machine in its original packaging. Please, also enclose brief description of the defect with the packaging.
7. Before sending the machine for repair, clean it thoroughly. If the received machine is dirty, it may be rejected by the service shop or you may be charged a cleaning fee.

SERVICE

Logistic centre Klecany

Topolová 483

250 67 Klecany

Czech Republic

Claim department phone number: 266 190 156

266 190 111

Fax:

260 190 100

T-mobile: 603 414 975

O2: 601 218 255

Vodafone: 608 227 255

<http://www.KHnet.cz>

Email: servis@KHnet.cz

Product: OSCILLATING BELT GRINDING MACHINE SB-108	
Type: SB108	Serial number (product series):
Date of manufacture:	Repair centre notes:
Date of sale, stamp, signature:	

Without the correctly filled warranty card or without proof of purchase receipt, including the product type (invoice, purchase receipt) no warranty claim will be processed.

uni-max

USER'S MANUAL

OSCILLATING BELT GRINDING MACHINE SB-108



SB108



General

- Plastic bags and packaging materials pose danger for small children and animals.
- Make sure you know your tool or machine and that you are familiar with its operating procedure. Know the hazards if not used correctly.
- Person using this machine must know how to safely operate this equipment, must be properly trained and familiar with hazards and risk that may occur during use of this machine.
- Pay special attention to safety notes and safety labels. Do not remove or damage them. If the warning label becomes unreadable or damaged please, contact your vendor.
- Maintain your working area clean. Disorganized and dirty working area may cause accidents.
- Never work in narrow or poorly lit rooms. Make sure that the floor is stable and that your work may be done comfortably. Always keep stable posture.
- Observe your work continuously and use all your senses during work. Do not continue to work if you cannot pay full attention.
- Maintain your tools clean.
- Handles must be kept free of grease and dirt.
- Make sure no children, unauthorized persons or animals have access to your workshop.
- Never put your hands or legs inside the working area.
- Never leave your machine unattended during operation.
- Use only for purposes for which it has been designed.
- Use personal protective gear such as safety goggles, ear protection, respirator, safe working shoes etc.
- Do not underestimate your abilities and know your limits. Use both hands.
- Never work under the influence of alcohol or other drugs.
- Do not use the device if you feel dizzy or weak.
- Any modifications or improvements to the machine are strictly prohibited. DO NOT USE if you discover bent part, crack or other damage.
- Never perform any maintenance while the device is in use.
- If you see any unusual sign or hear any strange sound, stop the device immediately and stop working.
- Do not forget to remove all wrenches and screwdrivers from you machine after use.
- Before use, make sure that all screws are tightened securely.
- Perform maintenance regularly. Before use make sure the machine is in good working conditions and without any damage.
- Use only original spare parts during repairs.
- Using non-original spare parts or other parts not approved by the manufacturer may cause injury to the operating personnel.
- Use suitable tool or machine for particular type of work. Use this machine only for work that is capable of handling. Do not overload tools, accessories or the machine. For large work volume use more powerful machine.
- Do not overload your machine. Measure the work load in such way, so it could be done with comfortable speed. Damages due to machine overload are not covered by warranty.
- Do not expose to extremely high temperatures or direct sunlight.
- This machine is not design for use in humid environments or under water.
- if you are not using your machine, store it in a dry and safe place, out of reach of children.
- Before turning your device on, make sure that all safety elements are working properly and effectively. Make sure all moving parts are in good condition.
- Before use make sure that no part is cracked or stuck. Make sure all parts are attached and assembled as designed. Beware of all other conditions that may have a negative effect on the proper functioning of your machine.
- If not stated otherwise in this manual, all damaged parts must be repaired or changed.

PEDESTAL

Position	Description	Pcs
1	PEDESTAL	1
2	SCREW M4 × 10	4
3	FLAT WASHER 4	2
4	FUSE	1
5	SPECIAL WASHER	2
6	WASHER	1
7	SUPPLY CABLE PROTECTIVE COVER	4
8	PLASTIC NUT	5

TRANSMISSION 2

Position	Description	Pcs
1	TRANSMISSION PLATFORM	1
2	SCREW WITH NUT M8×20	4
3	TURBINE ROD	1
4	BALL BEARING 6202	4
5	RING	4
6	OIL SEAL WITH HOLE	2
7	WASHER	1
8	TOOTHED GEAR	1
9	TOOTHED WHEEL SHAFT	1
10	WEDGE	1
11	TRANSMISSION PLATFORM	1
12	SCREW M6 × 20	4
13	NUT M8	4
14	SAFETY WASHER 8	4
15	FLAT WASHER 8	4
16	TRANSMISSION HOUSING	1
17	OIL SEAL	1

28	ADJUSTING PLATFORM	1
29	DEFLECTIVE SHAFT	8
30	BALL BEARING 6201	8
31	CLOSED NUT M10	8
32	NUT M6	4
33	BEVELLED SEAL MEASURING GAUGE	4
34	DIAL WITH SCALE	1
35	LABEL	1
36	SCREW M6 × 30	4
37	ANGLE RULER	1
38	FLAT WASHER Ø8	2
39	HANDLE	2
40	FLAT WASHER Ø5	19
41	SCREW M5× 15	19
42	EXPANDABLE COVER	1
43	EXPANDABLE COVER SET	4
44	PLATFORM III	4

RULER

Position	Description	Pcs
1	STUD 2 × 16	1
2	SELF-CUTTING SCREW M3×15	1
3	BEVELLED EDGE LEDGE	1
4	SELF-CUTTING SCREW M3.5 x12	2
5	RIGHT RULER COVER	1
6	ALUMINIUM ALOY RULER	1
7	LEFT RULER COVER	1
8	SUPPORTING SCREW WITH NUT M6×35	2
9	BEVELLED EDGE MEASURING GAUGE	1
10	FLAT WASHER 8	1
11	PLASTIC HANDLE	1
12	KNOB WITH INNER THREAD M6	2
13	DIAL	1
14	REVERSE IMPACT PIN	1
15	SELF-CUTTING SCREW	1
16	SUPPORTING COLUMN	1
17	BEVELLED PRISM	2
18	FLAT WASHER 4	2
19	CLOSED SCREW M4×6	2



Additional safety rules regarding oscillating belt grinders

- Do not work on machine that is not completely assembled and installed in accordance with the instructions contained in this manual.
- Your machine has been designed only for grinding wooden surfaces and work pieces. If you attempt to grind different materials, you are risking fire or work piece damages.
- Always use eye protection.
- Machine is designed only for indoor use.
- Make sure machine is installed on even and flat surface. If you are using machine installed improperly, you may damage the electric motor.
- If you work with long and heavy pieces the machine may tip over or move from its installation place. Make sure the machine is securely fastened to the floor.
- Before starting your work, make sure that the belt is moving in the correct direction that is along the arrow located on the back of the belt.
- Make sure that the grinding belt is properly aligned on the guiding rollers.
- Inspect the belt for correct tension and damages.
- Always hold the work piece strongly during work.
- Always use stopper if the arm of the grinder is in the horizontal position.
- If you are using the wheel part of the machine, always grind on its lower side and make sure that the work piece is securely fastened on the worktable. If you attempt to use the upper side of the wheel the work piece may get thrown away.
- Make sure to maintain the maximum gap of 1.6 mm between the table or the stopper and the grinding wheel or belt.
- Do not wear working gloves during work. Do not hold the work piece using a piece of cloth.
- Perform the grinding along the wood fibre pattern.
- Do not attempt to grind too small pieces that may not be securely fastened.
- Try to avoid grinding in positions where your hands may slip from the work piece and touch the grinding wheel or belt.
- If you are working on a large piece of wood, use auxiliary support stand with the same height as the height of the worktable.
- Do not try to grind work piece that is not properly supported and fastened. Support it with the bevelling ruler, stopper or worktable. The only exception that applies to grinding of a work piece with difficult shape is the use of outer grinding cylinder.
- Before switching your machine on, remove all stoppers, sawdust or small cut-offs from the worktable.
- If the machine is running, never perform setting changes, assembly or adjusting operations.
- Before assembly or disassembly, always disconnect the main supply cable form the wall outlet.
- When you finish your work, lock your machine with padlock to prevent use by unauthorized persons or children. Store the key in safe place, away from children and unauthorized persons.





Electrical equipment

- Observe all basic safety rules when using electrical equipment to prevent risk of fire, injuries by electrical shock and other hazards. Before using this machine, read this manual entirely and follow all safety instructions.
- Make sure the power cable plug is plugged into the correct wall outlet.
- The voltage in the wall outlet must be the same as shown on the specification label to prevent overheating or damage to the electric motor. Too low voltage will not provide your machine with enough power.
- Before connecting the machine to the wall outlet make sure that the main switch is in the "OFF" position. When you finished your work, disconnect the power plug from the wall outlet and switch off the main switch.
- When disconnecting the plug from the wall outlet, never pull the cable by its cord.

- Protect the power cable from high temperatures, oils, paint thinners and make sure that the cable is not hanging over sharp edges.
- Inspect the power cable regularly. If damaged have it replaced by qualified technician. Inspect extension cables regularly. If damaged, have it replaced.
- If you need to use an extension cable, use cable with appropriate power rating. Use only completely unwound. Inspect extension cables regularly. Damaged cables must be repair immediately.
- Before performing any maintenance, repair or adjustment, switch off the main switch and disconnect the power cable from the wall outlet.
- Make sure no one may switch you machine incidentally on. Do not keep your fingers close to the main switch, unless absolutely necessary.
- Do not use in environments where explosives are stored or used (paint shops, warehouse with flammables etc.).
- Do not use in humid environments or if wet.

Fire prevention

-   During work do not smoke or use open fire.

ASSEMBLY

- Before throwing the packaging material out, make sure no part is left inside. If so, take it out and install it. Use the part listing for check-up and the installation drawing for guidance.

Connecting your machine to the power source/wall outlet

- Machine must be connected to a separate electrical loop. This loop must be rated for minimum current load of 10 A and must be equipped with 10 A fuse.
- Damaged or worn out supply cable must be repaired or changed immediately by qualified electrician.
- Before connecting your machine to the power source make sure that the main switch is in the OFF position. Make sure the electrical parameters of the source comply with the requirements shown on the specification label. All wirings must have solid contact. Using your machine with low voltage may damage the electric motor.

Grounding your machine

WARNING: YOUR MACHINE MUST BE PROPERLY GROUNDED TO PREVENT ELECTRICAL SHOCK INJURIES TO THE OPERATING PERSON.

- Make sure that the machine is switched on for the first time by qualified electrician only.
- In case of machine breakdown, make sure that the machine is properly grounded to prevent injuries from electrical shock.
- Your machine is equipped with a supply cable with a plug and grounding pin. The plug may only be connected to a wall outlet properly installed in accordance with local rules and regulations.
- Do not try to modify the supplied plug. If the plug cannot be connected to your wall outlet, have qualified electrician perform the applicable modification of the plug.
- Incorrect connection of the grounding pin poses great risk of injuries by electrical shock. The grounding wire is green with yellow stripes or without. If you need to change or repair the supply cable or its plug do not do so under live current.
- If you are not sure how to connect your machine or do not understand any of the rules and regulations regarding the connection of the grounding wire, wall outlet or other electrical parts, have qualified electrician to perform the entire operation.

11	SCREW M8x15	4
12	SAFETY WASHER Ø 8	4
13	TURBINE BOX	1
14	TURBINE ROD	1
15	JOINT	1
16	PLATFORM	1
17	SCREW M8 × 20	3
18	ADJUSTING SCREW SHAFT	1
19	LARGE WASHER	1
20	SCREW WITH NUT M6×12	1
21	SHAFT	1
22	HAND WHEEL	1
23	WASHER	1
24	ADJUSTING PLATFORM	1

SETTING CONSOLE

Position	Description	Pcs
1	TABLE	1
2	SUPPORTING PLATFORM	2
3	SUPPORT	2
4	SCREW M8 × 12	6
5	SETTING CONSOLE	1
6	NUT M10	6
7	SAFETY WASHER Ø 10	6
8	FLAT WASHER 10	6
9	SCREW WITH NUT M10X20	6
10	SWITCH	1
11	SCREW M5× 8	2
12	SUPPLY CABEL	1
13	REVOLVING SHAFT	2
14	REVOLVING CONSOLE	2
15	SAFETY WASHER Ø 8	8
16	SCREW M8 × 20	8
17	SCREW M8 × 12	6
18	POSITIONING SHAFT SEAL	2
19	C-RING	4
20	SAFETY NUT	2
21	HANDLE	2
22	HANDLE M10	2
23	COPPER WASHER	2
24	SPECIAL NUT M18	2
25	NUT M8	6
26	SETTING SCREW M8 x20	6
27	HANDLE	2

MOTOR

Position	Description	Pcs
1	TRANSMISSION COVER	1
2	HANDLE	1
3	SETTING SCREW M6×15	2
4	SCREW M6 × 15	4
5	FLAT WASHER Ø 6	4
6	SCREW WITH NUT M8×20	2
7	FLAT WASHER Ø 8	2
8	TRANSMISSION MOUNTING TABLE PLATFORM	1
9	UNIVERSAL COUPLING	1
10	SETTING SCREW M8 x8	2
11	UNIVERSAL COUPLING WASHER	1
12	UNIVERSAL COUPLING	1
13	SCREW WITH NUT M10x25	4
14	SAFETY WASHER Ø 10	4
15	MOTOR PLATFORM	2
16	MOTOR CONSOLE PLATFORM	1
17	PLATFORM	1
18	SCREW M6 × 40	2
19	SCREW M8 × 25	1
20	SPECIAL NUT M12	1
21	FLAT WASHER Ø 12	1
22	GREASE BOX	2
23	PRESS BALL BEARING 51101	2
24	PRESS SHAFT	1
25	NUT M16×1,5	1
26	SAFETY WASHER Ø 16	1
27	DRIVING CYLINDER	1
28	MOTOR	1

TRANSMISSION 1

Position	Description	Pcs
1	HANDLE	1
2	NUT M8	1
3	WEDGE 5×5×20	1
4	WEDGE 8×7	1
5	SCREW M4 × 10	6
6	PLATFORM	2
7	SCREW M6 × 15	7
8	CLUTCH	2
9	TOOTHED GEAR	1
10	SHAFT	1

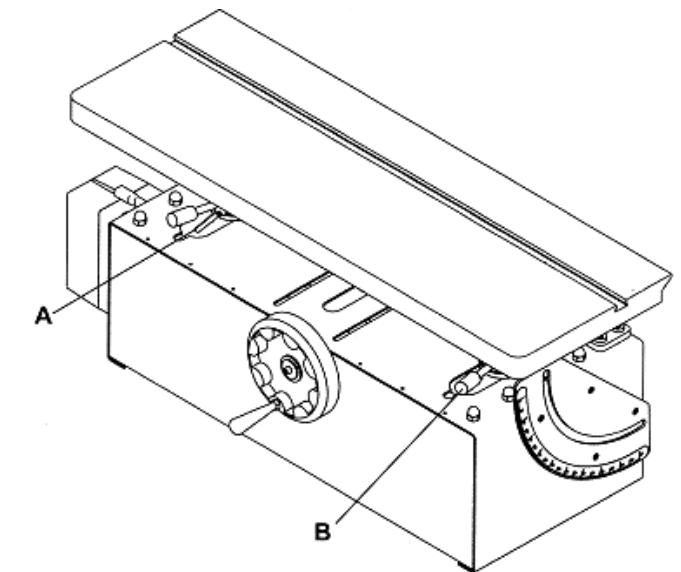
- Use only 3 wire extension cables with a grounded 3-pin plug. The 3-pin wall outlet must be fully compatible with the 3-pin plug.
- Damaged or worn out cable must be repaired or changed immediately.

OPERATION

Before switching your machine on, turn on the sawdust vacuuming system.
Recommended suction speed 20 m.s⁻¹.

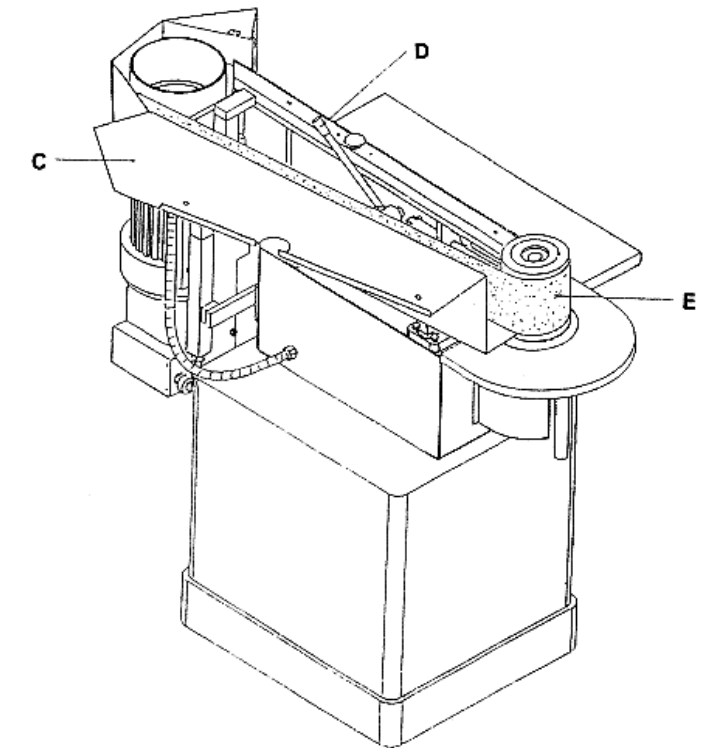
Setting the height of the main table

- Release the two setting handles **(A)** and **(B)** on the left side.
- Turn the turn-handle on the front side of the table up and set the required height.
- Tighten the two setting handles **(A)** and **(B)** to secure the table position.



Changing the grinding belt

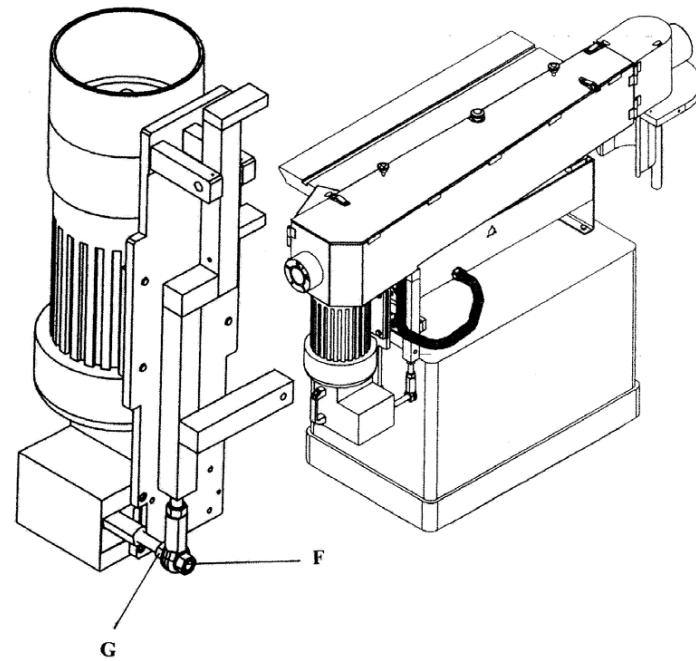
- Loosen the two screws on the upper side of the table cover **(C)** and open it. Lift the lever **(D)** to release the grinding belt **(E)**. Change the old belt for a new one. Press on the lever **(D)** to tension the grinding belt.



Setting the position of the grinding belt - fine adjustment.

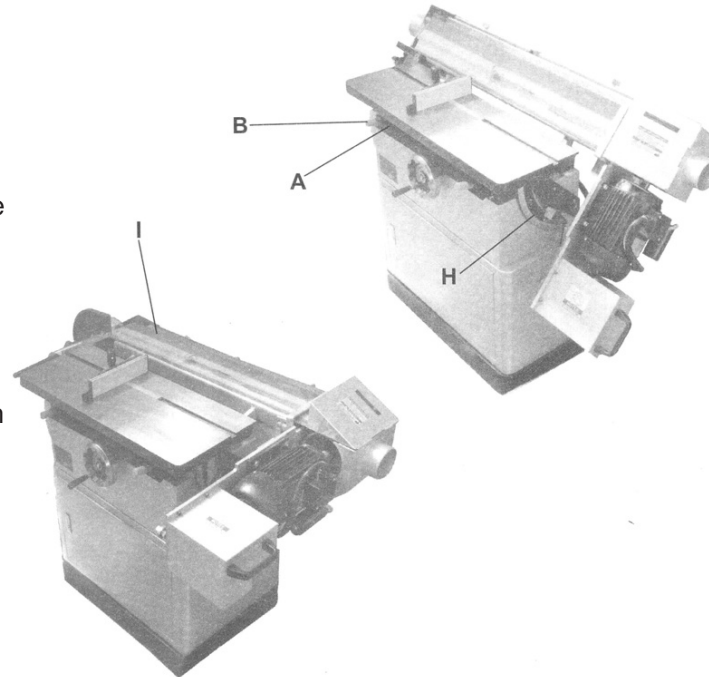
(When the belt is still in the middle of the worktable).

- Loosen the nut **(F)**.
- Turn the nut **(G)** clockwise or counter clockwise to set the desired position of the belt.
- If the track of the belt is correct, tighten the nut **(F)** again.



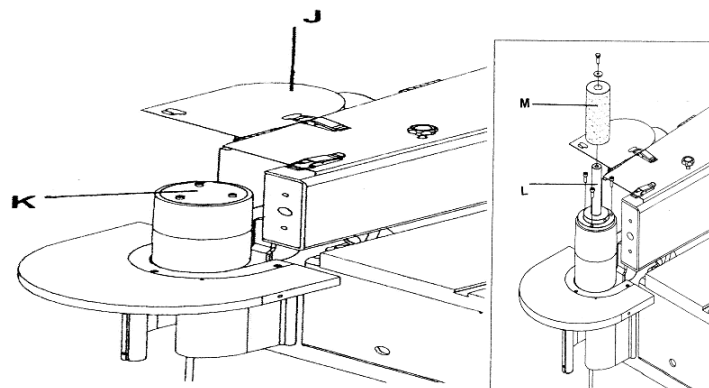
Vertical and horizontal grinding operations

- Loosen the handles **(A)** and **(B)** under the main table and move them to the back position.
- Loosen the setting handle **(H)** and by turning the table **(I)** set the desired angle. Observe the dial during turning. When you set the required angle, tighten the setting handle **(H)**.
- Move the main table to the side table and tighten the handles **(A)** and **(B)** to ensure the table stability.



Observe the following procedure during shape grinding

- Open the table cover **(J)** and secure it in the open position.
- Loosen the three screws with the inner notches. Remove the guiding cylinder cover **(K)** and place the grinding shaft **(L)** on its place. Tighten the three screws M5×15 with the inner notches.
- Place the rubber cylinder **(M)** on its place and secure it with one screw with hexagonal head 6,35 × 12,7 mm and a washer. Now you may start using your machine for shape grinding.



BELT TABLE

Position	Description	Pcs
1	GRINDING TABLE	1
2	GRINDING TABLE FASTENING DEVICE	1
3	FLAT WASHER 8	2
4	SCREW WITH NUT M8×12	2
5	HANDLE	1
6	OUTER WASHER	1
7	INNER WASHER	1
8	ROTATING SEAL	1
9	BALL BEARING	2
10	NUT M14	5
11	LONG SCREW	1
12	SHORT SCREW	1
13	GRAPHITE PAPER	1
14	SPECIAL NUT M6	2
15	CONNECTING PLATFORM	1
16	SHAFT	1
17	SPRING	1
18	FLAT WASHER Ø 16	1
19	NUT M16	1
20	SCREW M8 × 25	4
21	SAFETY WASHER Ø 8	4
22	FLAT WASHER Ø 8	4
23	FASTENING SHAFT	2
24	SCREW M6 × 25	1
25	LARGE WASHER Ø 8	1
26	SCREW M8 × 12	1
27	SCREW M6 × 20	1
28	NUT M12	1
29	HANDLE ROD	1
30	HANDLE KNOB M12	1
31	GRINDING BELT	1
32	SEALING WASHER	1
33	COLLECTOR	1
34	NUT M8	2
35	HANDLE	2
36	GRINDING TABLE COVER	1
37	SEALING WASHER	1
38	FLAT WASHER Ø 6	4
39	SCREW M6 × 10	4
40	SCREW M6 × 8	4
41	FLAT WASHER Ø 6	4
42	SEALING WASHER	1
43	SCREW M5× 20	2
44	NUT M5	2
45	END SWITCH	1
46	SWITCH COVER	1
47	DIAL	1
48	SCREW M5× 8	1

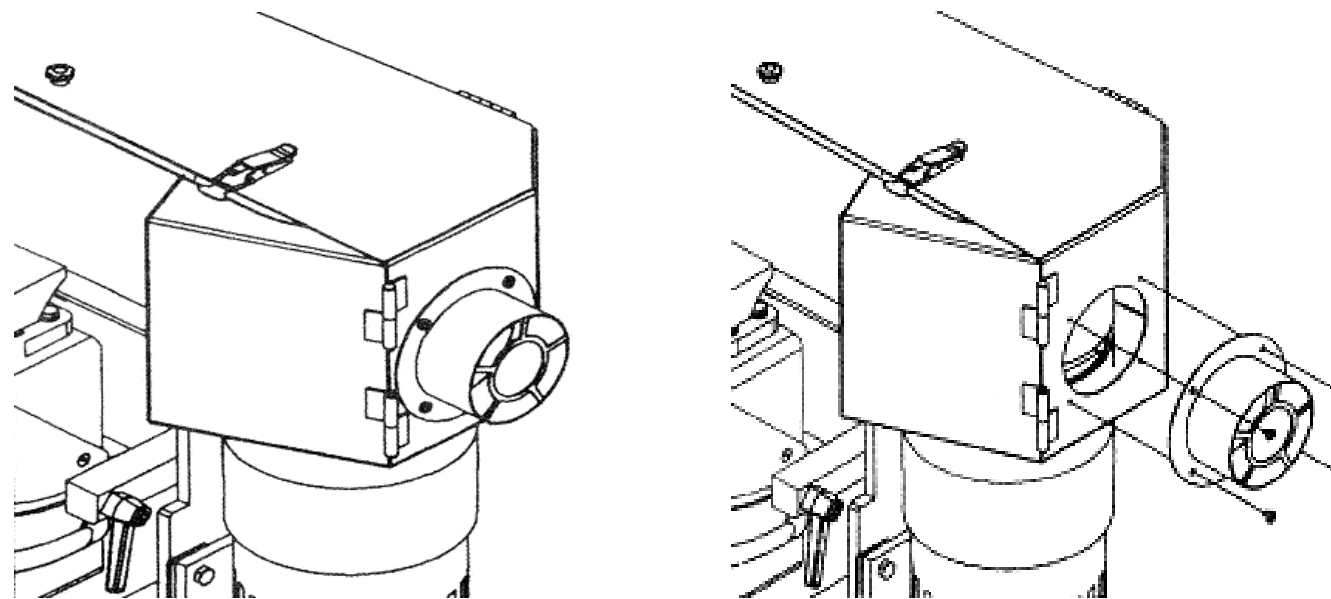
PART LIST

U-TABLE

Position	Description	Pcs
1	SCREW M8 × 15	1
2	WASHER	2
3	PAPER FOR CYLINDRICAL GRINDING Ø 38	1
4	RUBBER CYLINDER Ø 38	1
5	GRINDING CYLINDER SHAFT	1
6	ROD	1
7	GUIDING CYLINDER COVER	1
8	SCREW M6 × 15	3
9	RING Ø 25	1
10	BALL BEARING 6205	2
11	GUIDING CYLINDER	1
12	GUIDING CYLINDER SHAFT	1
13	GREASE BOX	2
14	SCREW M6 × 45	1
15	GUIDING CYLINDER CONSOLE	1
16	SCREW M8 × 25	1
17	HANDLE	1
18	SCREW M5× 8	6
19	FLAT WASHER Ø 5	6
20	U-BLOCK I	1
21	U-TABLE SPINDLE	1
22	WEDGE	1
23	SCREW M4 × 10	3
24	SCREW M10 × 20	1
25	U-BLOCK II	1
26	U-TABLE	1
27	U WASHER TYPE III	1
28	U WASHER TYPE II	1
29	U WASHER TYPE I	1
30	U WASHER TYPE IV	1
31	PAPER FOR CYLINDRICAL GRINDING Ø 50	1
32	PAPER FOR CYLINDRICAL GRINDING Ø 76	1
33	RUBBER CYLINDER Ø 50	1
34	RUBBER CYLINDER Ø 76	1
35	SETTING SCREW M5x10	3

Installing the sawdust vacuum outlet

- Mount the outlet in place with four screws 6,35 × 6,35 mm with half-circle head. See the following instructions.



TROUBLE-SHOOTING

! WARNING: Before performing repair always disconnect the main supply cable from the wall outlet.

DEFECT	PROBABLE CAUSE	REMEDY
The motor is not working	<ul style="list-style-type: none"> • Defective or broken main switch ON/OFF. • Damaged or defective supply cable. • Switch relay is damaged or not working correctly. • Burned electrical motor. • Burned fuse. 	<ul style="list-style-type: none"> • Remove and change all damaged parts before switching your machine on. • Have qualified electrician perform all electrical repairs. Each attempt to repair the electrical motor is dangerous. • Repair must be done by qualified electrician only.
The speed (revolutions) of the belt are slowing down during work	<ul style="list-style-type: none"> • The operating person is pressing on the work piece too hard. 	<ul style="list-style-type: none"> • Do not press on the work piece so hard during work.
The grinding belt is leaving its track during work	<ul style="list-style-type: none"> • Incorrectly set belt track. 	<ul style="list-style-type: none"> • Set the correct belt track. • See chapter Changing, tensioning and belt adjustment
The wood is getting burned during the grinding process	<ul style="list-style-type: none"> • The grinding belt or wheel is clogged with the resin from the wood. • Too hard pressure on the work piece. 	<ul style="list-style-type: none"> • Change the belt or grinding wheel. • Lower the pressure on the work piece.

MAINTENANCE

- Keep your device clean. Dirt may enter the inner mechanism of your machine and cause damage.
- Do not use aggressive cleaning solution or paint thinners to clean the machine.
- Clean plastic parts with cloth dipped in soap water.
- Clean and lubricate metal surfaces with a cloth dipped in paraffin oil.
- If you are not using your machine, lubricate it with suitable grease and store it in a dry place to prevent corrosion.



Detailed description of use of this machine is not included in this manual, because the manufacturer / distributor assumes that the user is experienced in similar type of work. Also according to the applicable law, this machine is considered as a commonly sold and used tool. If the user is unfamiliar with the use of this machine, we recommend finding out more information about using this machine at the Department of work safety.

DISPOSAL

When the operational life of your device is over, dispose off it in accordance with valid rules and regulations. Your product is made of metal and plastic parts that may be recycled when separated.

1. Disassemble all parts.
2. Separate all parts according to the material they are made of (e.g. metals, rubber, plastics, etc.). Take the separated parts to the recycling facility near you.
3. Electrical waste (used electrical power tools, electric motors, recharging equipment, electronics, accumulators, batteries etc.).

Dear customer. In accordance with the valid regional rules and regulations describing the management of electrical waste, electrical waste is considered dangerous. Disposal of electrical waste must be therefore handled as dangerous waste in accordance with waste management rules valid in the state you are in. It is prohibited to mix electrical waste with regular household waste.

You may return your used electrical appliance to a recycling facility near you. More information about electrical and dangerous waste disposal may be obtained from your local authority or from the Internet.

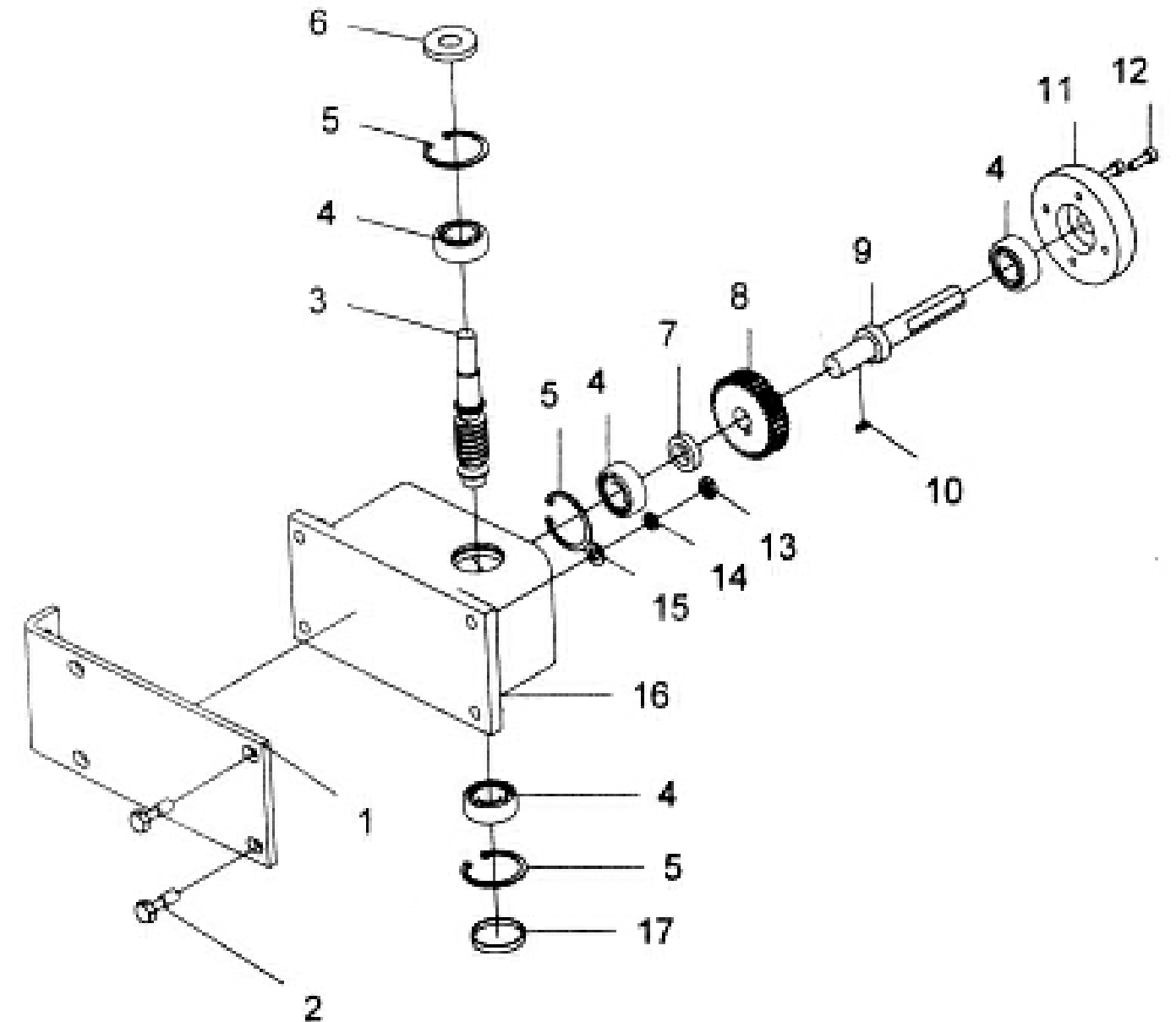
CAUTION

If the machine breaks down, send it back to the vendor for quick repair. Please, enclose brief description of the defect. That makes repair easier. If the machine is still covered by warranty, enclose the warranty card and proof of purchase receipt. After the warranty period expires, we repair your device for a special price.

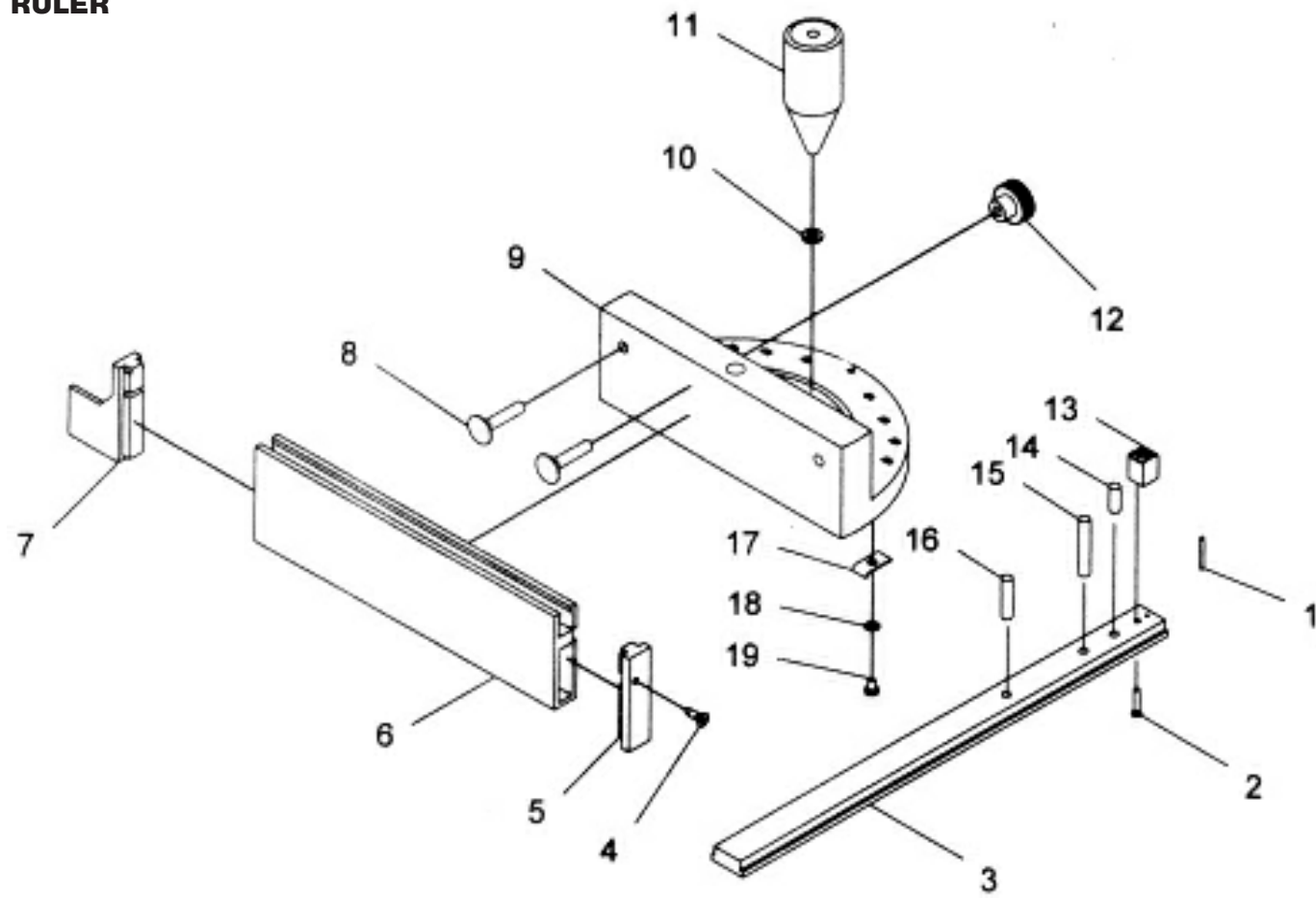
To prevent possible damages during shipping, pack the device carefully or use the original packaging material. We are not liable for shipping damages due to incorrect packaging of your device. If making a claim at the shipping company the level and method of packaging plays a major role during claim evaluation process.

Note: Pictures and contents in this manual may slightly differ from the actual product or accessories. It is due to continuous improvement of our products. Such small differences have no effect on the product functionality.

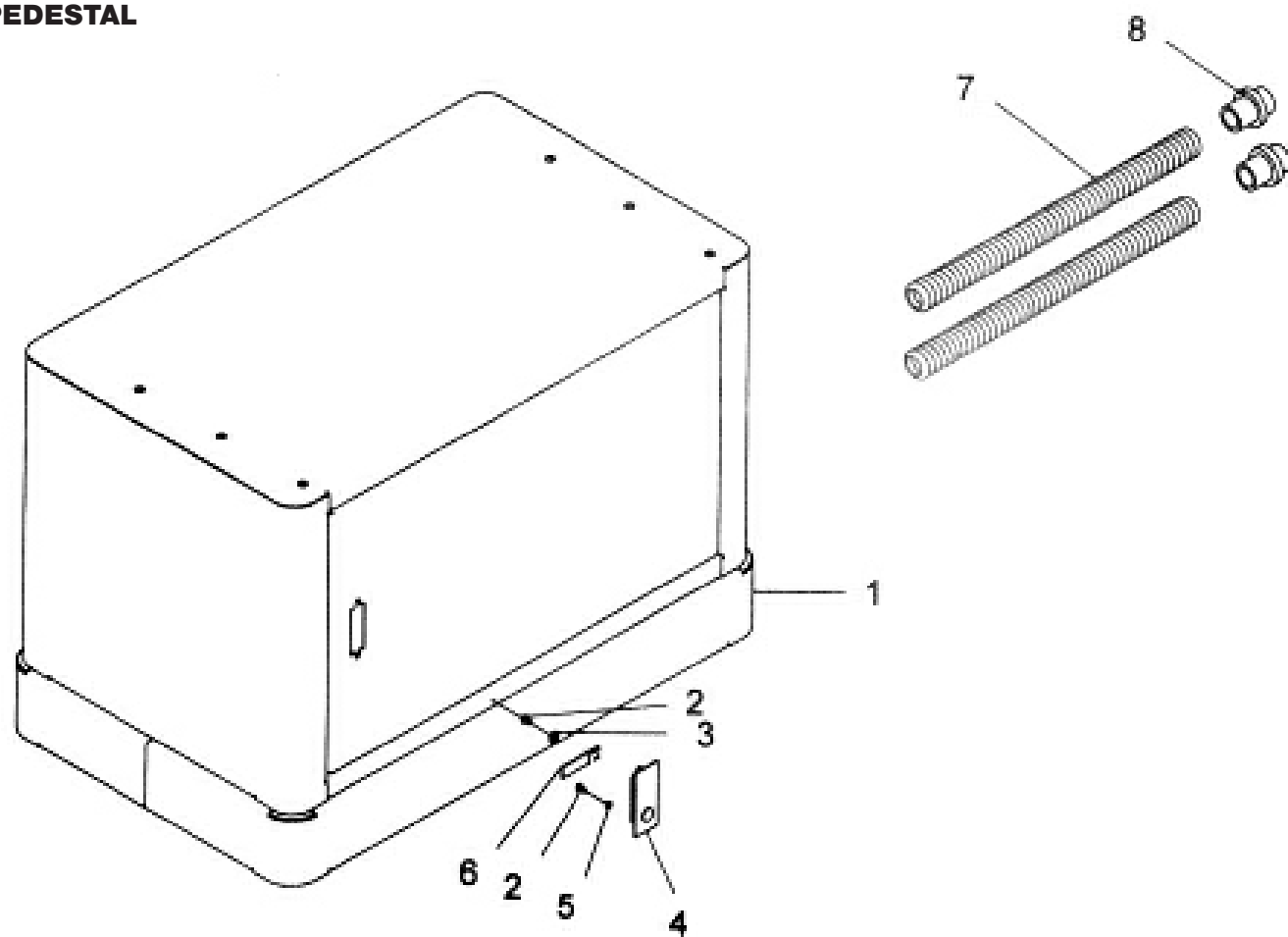
TRANSMISSION 2



RULER

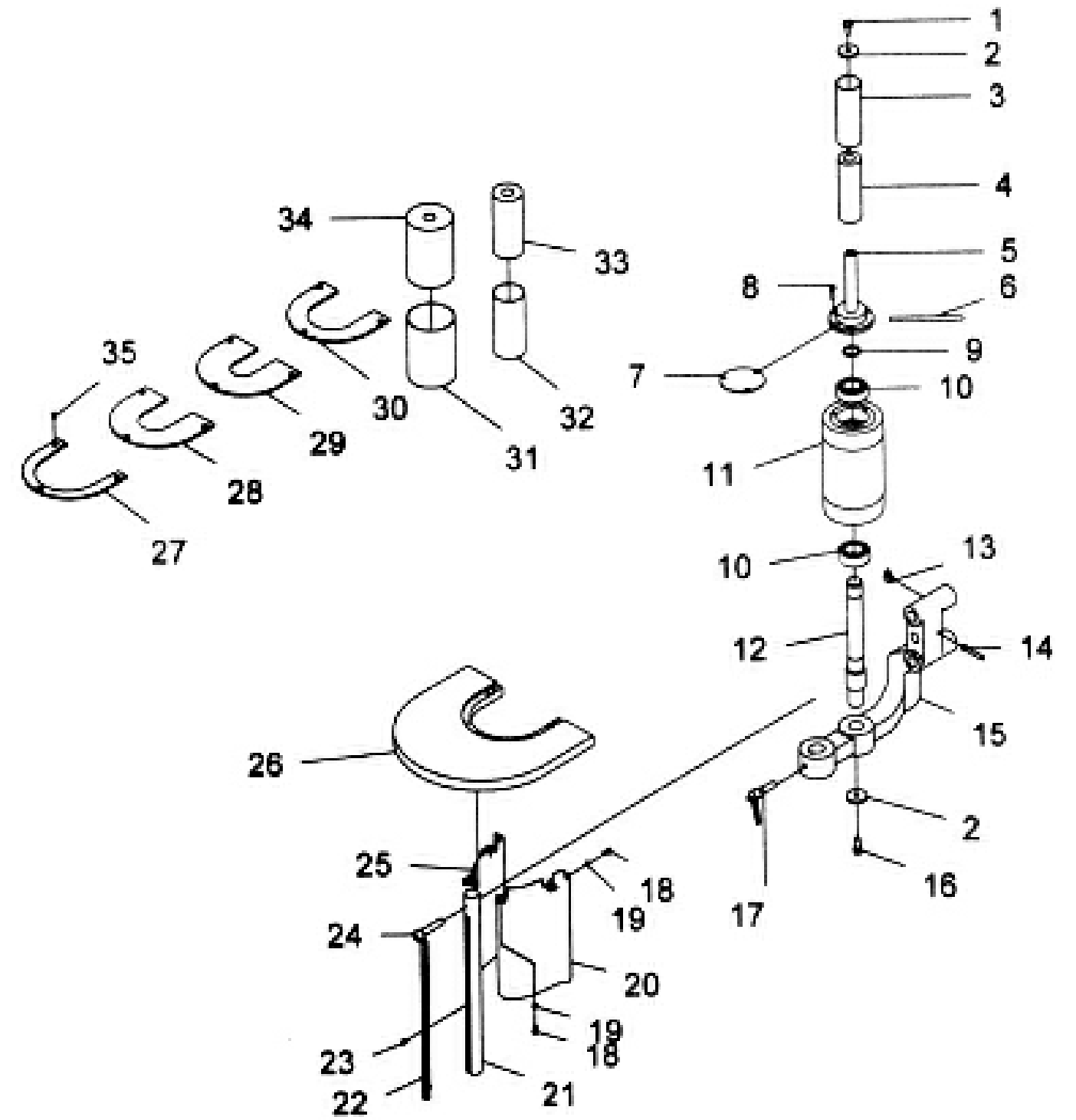


PEDESTAL

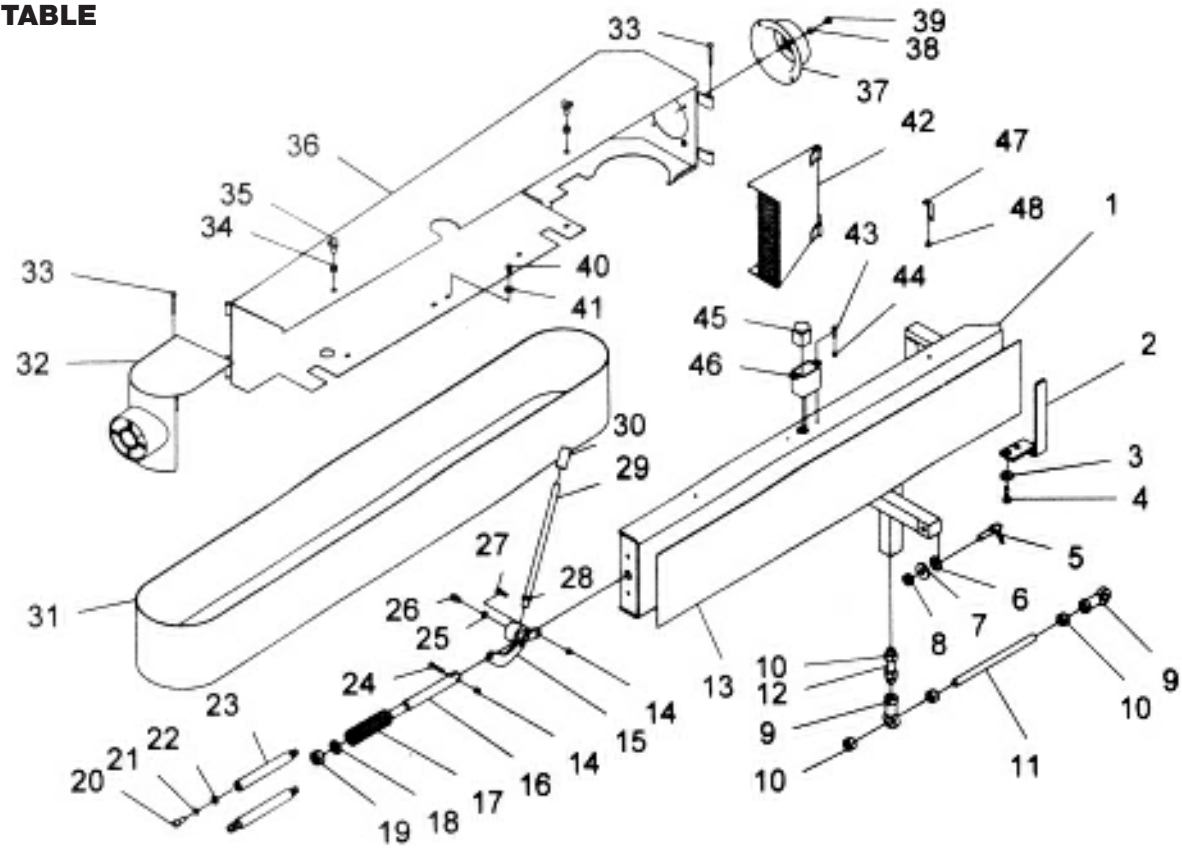


DETAILED PART DRAWING

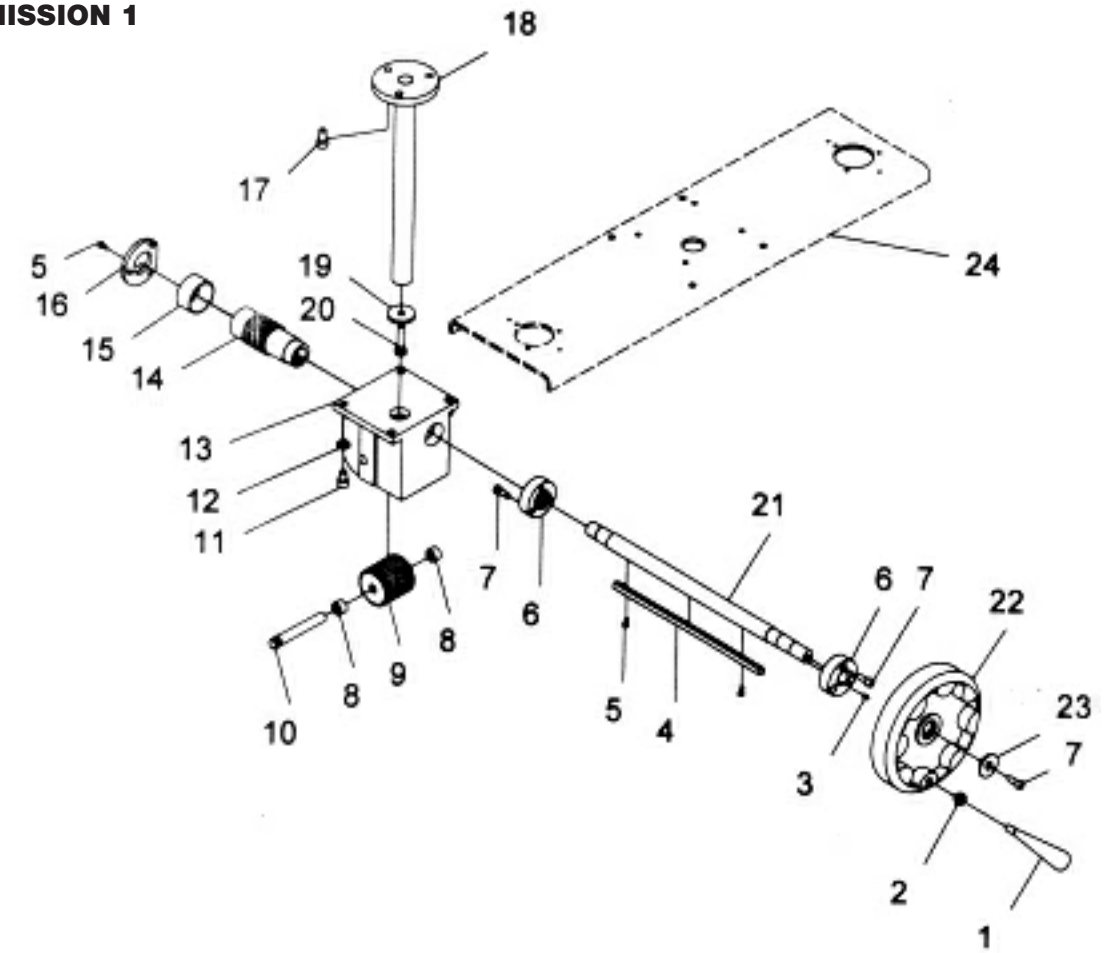
U-TABLE



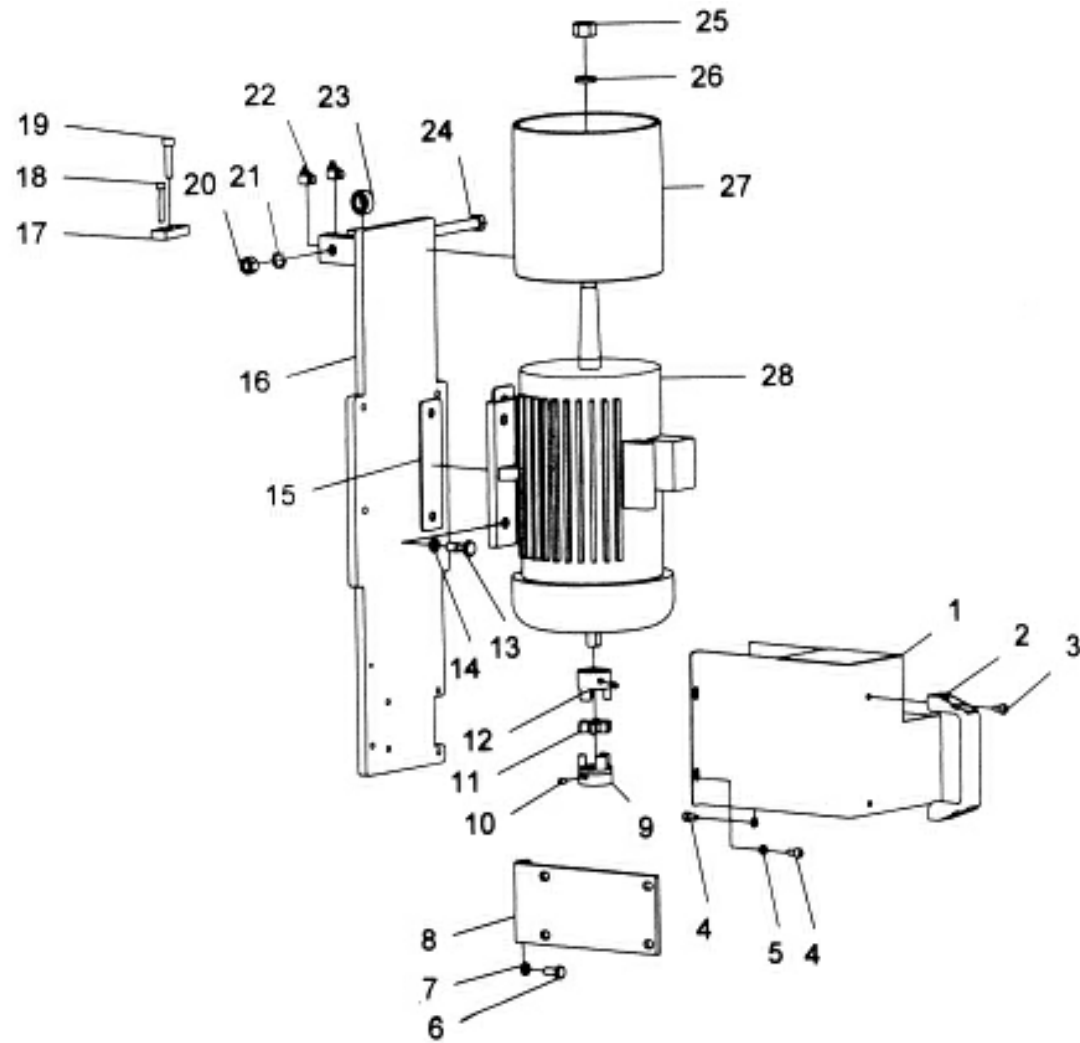
BELT TABLE



TRANSMISSION 1



MOTOR



SETTING CONSOLE

