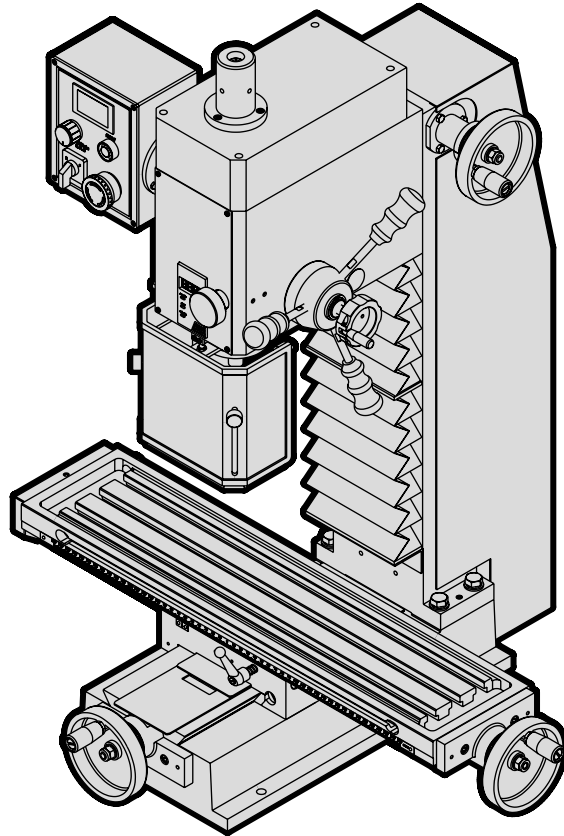




MODEL 33075, 33075T

VARIABLE SPEED BENCHTOP MILL

Instruction Manual



NEED HELP? CONTACT US!

Have product questions? Need technical support? Please feel free to contact us:



1-800-232-1195 (M-F 8AM-5PM CST)



TECHSUPPORT@WENPRODUCTS.COM

IMPORTANT: Your new tool has been engineered and manufactured to WEN's highest standards for dependability, ease of operation, and operator safety. When properly cared for, this product will supply you years of rugged, trouble-free performance. Pay close attention to the rules for safe operation, warnings, and cautions. If you use your tool properly and for its intended purpose, you will enjoy years of safe, reliable service.

For replacement parts and the most up-to-date instruction manuals, visit ***WENPRODUCTS.COM***

CONTENTS

WELCOME	3
Introduction	3
Specifications.....	3
SAFETY	4
General Safety Rules.....	4
Specific Rules for the Milling Machine.....	6
Electrical Information.....	7
BEFORE OPERATING	8
Unpacking & Packing List.....	8
Know Your Milling Machine	9
Assembly & Adjustment.....	11
OPERATION & MAINTENANCE	16
Operation	16
Maintenance.....	18
Troubleshooting Guide.....	20
Exploded View & Parts List.....	22
Warranty Statement	33

To purchase accessories for your tool, visit ***WENPRODUCTS.COM***

8-Piece 2-Flute HSS End Mill Set for Milling Machines Model 33108A

8-Piece Imperial Steel Collet Set for R8 Metal Milling Machines Model 33182A

3.5-Inch Quick-Release Vise for Milling Machines, Drill Presses, and Workbenches Model 33124A

INTRODUCTION

Thanks for purchasing the WEN Benchtop Mill. We know you are excited to put your tool to work, but first, please take a moment to read through the manual. Safe operation of this tool requires that you read and understand this operator's manual and all the labels affixed to the tool. This manual provides information regarding potential safety concerns, as well as helpful assembly and operating instructions for your tool.

⚠ SAFETY ALERT SYMBOL: Indicates danger, warning, or caution. The safety symbols and the explanations with them deserve your careful attention and understanding. Always follow the safety precautions to reduce the risk of fire, electric shock or personal injury. However, please note that these instructions and warnings are not substitutes for proper accident prevention measures.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. WEN reserves the right to change this product and specifications at any time without prior notice.

At WEN, we are continuously improving our products. If you find that your tool does not exactly match this manual, please visit wenproducts.com for the most up-to-date manual or contact our customer service at **1-800-232-1195**.

Keep this manual available to all users during the entire life of the tool and review it frequently to maximize safety for both yourself and others.

SPECIFICATIONS

Model Number	33075, 33075T
Motor	120V, 60Hz, 11A
Maximum Drilling Capacity	0.75" (20 mm)
End Mill Capacity	0.625" (16 mm)
Face Mill Capacity	2" (50 mm)
Swing	16" (406 mm)
Maximum Distance Spindle to Table	12.375" (314 mm)
Spindle Taper	R8
Spindle Speed	100 to 2000 RPM
Table Dimensions	27.6" x 6.3"
T-slot Size	0.5" (12 mm)
Table Longitudinal Travel (X)	19.75" (502 mm)
Cross Travel (Y)	6.5" (165 mm)
Headstock Travel (Z)	9.75" (248 mm)
Assembled Dimensions	24" x 35.5" x 33.5"
Foot Print	19.75" x 9.125"

GENERAL SAFETY RULES

⚠ WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

WORK AREA SAFETY

- 1. Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- 2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- 3. Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- 1. Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- 2. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- 3. Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 4. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- 5. When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

- 6. If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- 1. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- 2. Use personal protective equipment. Always wear eye protection.** Protective equipment such as a respiratory mask, non-skid safety shoes and hearing protection used for appropriate conditions will reduce the risk of personal injury.
- 3. Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- 4. Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- 5. Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- 6. Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.

GENERAL SAFETY RULES

⚠ WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

POWER TOOL USE AND CARE

1. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.

2. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

3. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

4. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

6. Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

7. Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

8. Use clamps to secure your workpiece to a stable surface. Holding a workpiece by hand or using your body to support it may lead to loss of control.

9. KEEP GUARDS IN PLACE and in working order.

SERVICE

1. Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.


CALIFORNIA PROPOSITION 65 WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities may contain chemicals, including lead, known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area with approved safety equipment such as dust masks specially designed to filter out microscopic particles.

SPECIFIC RULES FOR THE MILLING MACHINE

 **WARNING!** Do not operate the power tool until you have read and understood the following instructions and the warning labels.

MILL MACHINE SAFETY

1. Your milling machine is designed for drilling, end milling, and face milling operations on small workpieces. Using the machine for any other purpose for which it is not designed may result to serious injuries and/or damage to the machine.
2. This machine is intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of milling, do not use it until proper training and knowledge have been acquired.
3. Always wear ANSI Z87.1-approved eye protection and a face shield/dust mask when using this machine. Chips and dust fly at high speed during operation, and may cause injuries if they hit you.
4. DO NOT wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in the tool.
5. Securely mount the machine to a stable workbench to prevent it from sliding or tipping over.
6. Select the right tool for your task at hand. Make sure all cutters and bits are sharp and free of damage. DO NOT use dull or damaged tools. Securely tighten both the cutter holder and cutter before operation.
7. Use a milling vise (not included) to clamp your workpiece securely. Never hold the material with your hands.
8. Use the appropriate speed for the task and workpiece. The harder the workpiece and the larger the cutter diameter, the slower the spindle speed should be.
9. Never attempt to change the HIGH/LOW speed range when the machine is running.
10. Allow the machine to ramp up to the operating speed before engaging the workpiece. Do not turn on the machine while the cutter is contacting the workpiece.
11. Remove the chuck key, spindle lock rod and all adjustment devices before starting the machine.
12. Maintain a balanced stance at all times and do not lean over the machine during operation.
13. Always keep fingers and other body parts away from the cutter when the machine is running to prevent accidental injury. Never try to move workpieces while the cutter is in motion.
14. Always turn OFF and unplug the machine before cleaning, making adjustments or changing attachments. Accidental start-ups may occur if the tool is plugged in during an accessory change or adjustment.
15. Follow the maintenance instructions for cleaning, lubricating and making adjustments to the machine.
16. Check for damaged or worn out parts before using machine. Check for alignment of moving parts, jamming, breakage, improper mounting, or any other conditions that may affect the tool's operation. Any part that is damaged should be properly repaired or replaced before use.

ELECTRICAL INFORMATION

GROUNDING INSTRUCTIONS

In the event of a malfunction or breakdown, grounding provides the path of least resistance for an electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

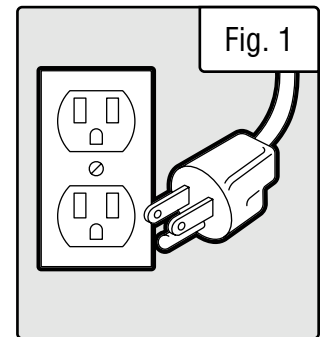
1. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

2. Improper connection of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, **DO NOT** connect the equipment grounding conductor to a live terminal.

3. Check with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

4. Use only three-wire extension cords that have three-pronged plugs and outlets that accept the tool's plug. Repair or replace a damaged or worn cord immediately.

CAUTION! In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet.



GUIDELINES AND RECOMMENDATIONS FOR EXTENSION CORDS

When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The table below shows the correct size to be used according to cord length and ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

AMPERAGE	REQUIRED GAUGE FOR EXTENSION CORDS			
	25 ft.	50 ft.	100 ft.	150 ft.
11A	18 gauge	16 gauge	16 gauge	14 gauge

1. Examine extension cord before use. Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.

2. Do not abuse extension cord. Do not pull on cord to disconnect from receptacle; always disconnect by pulling on plug. Disconnect the extension cord from the receptacle before disconnecting the product from the extension cord. Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

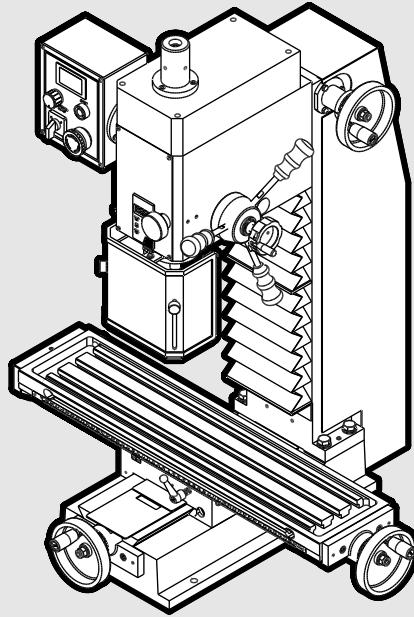
3. Use a separate electrical circuit for your tool. This circuit must not be less than a 12-gauge wire and should be protected with a 15A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

UNPACKING & PACKING LIST

UNPACKING

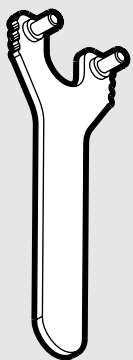
With the help of a friend or trustworthy foe, such as one of your in-laws, carefully remove the milling machine from the packaging and place it on a sturdy, flat surface. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list below to make sure you have all of the parts and accessories. If any part is missing or broken, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email techsupport@wenproducts.com.

Components

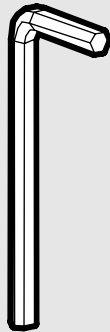


Milling Machine

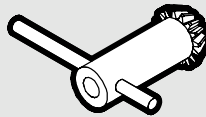
Hardware & Tools



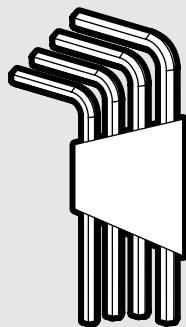
Spindle Wrench



**Hex Wrench
8mm**



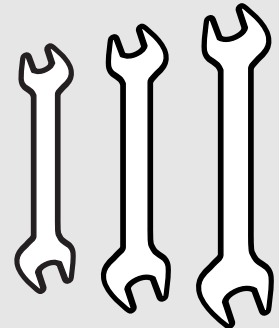
Chuck Key



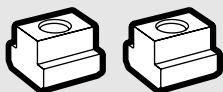
**Hex Wrench Set
3, 4, 5, 6mm**



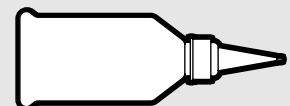
**Quill Lock
Lever**



**Open-End Wrench
17/19, 14/17, 8/10mm**



T-Nuts M12-1.75



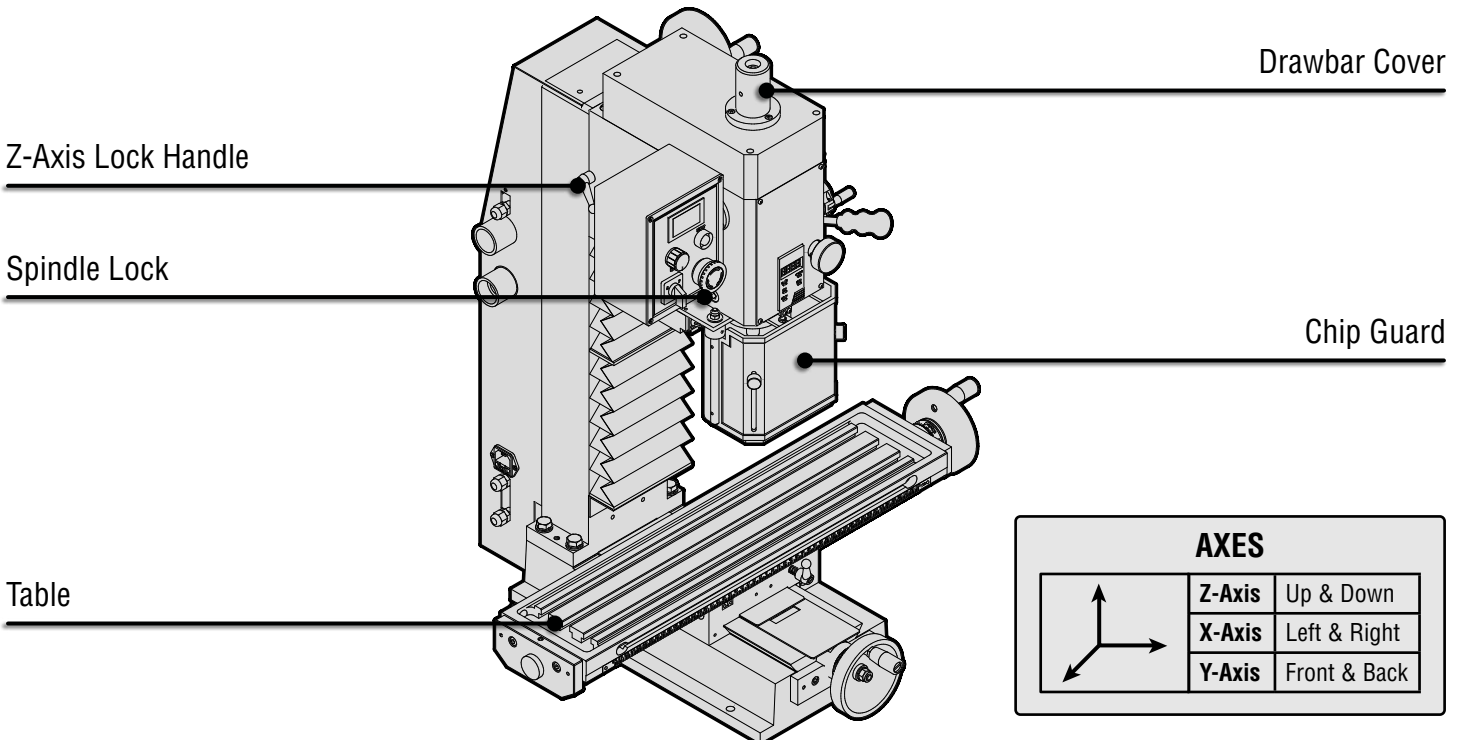
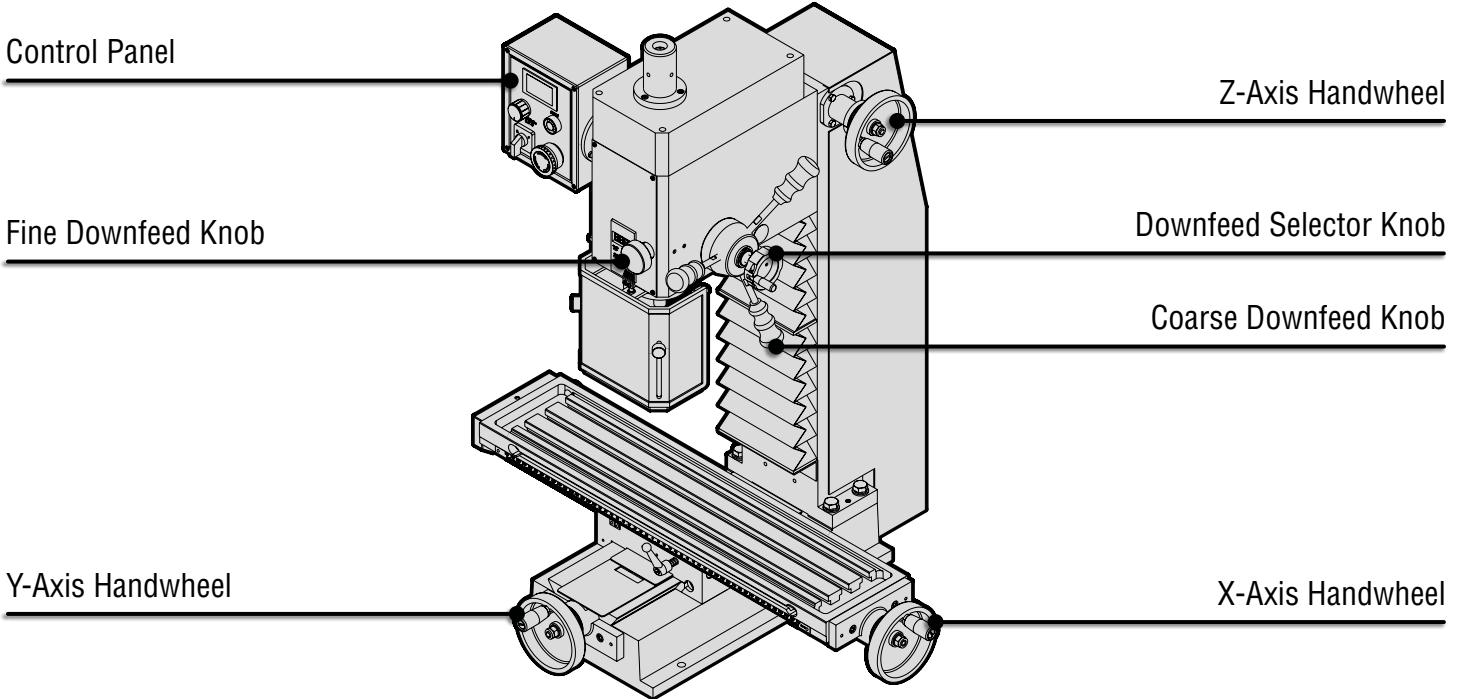
Oil

KNOW YOUR MILLING MACHINE

TOOL PURPOSE

Remove material from your workpiece with your WEN Benchtop Mill. Refer to the following diagrams to become familiarized with all the parts and controls of your milling machine. The components will be referred to later in the manual for assembly and operation instructions.

MILLING MACHINE



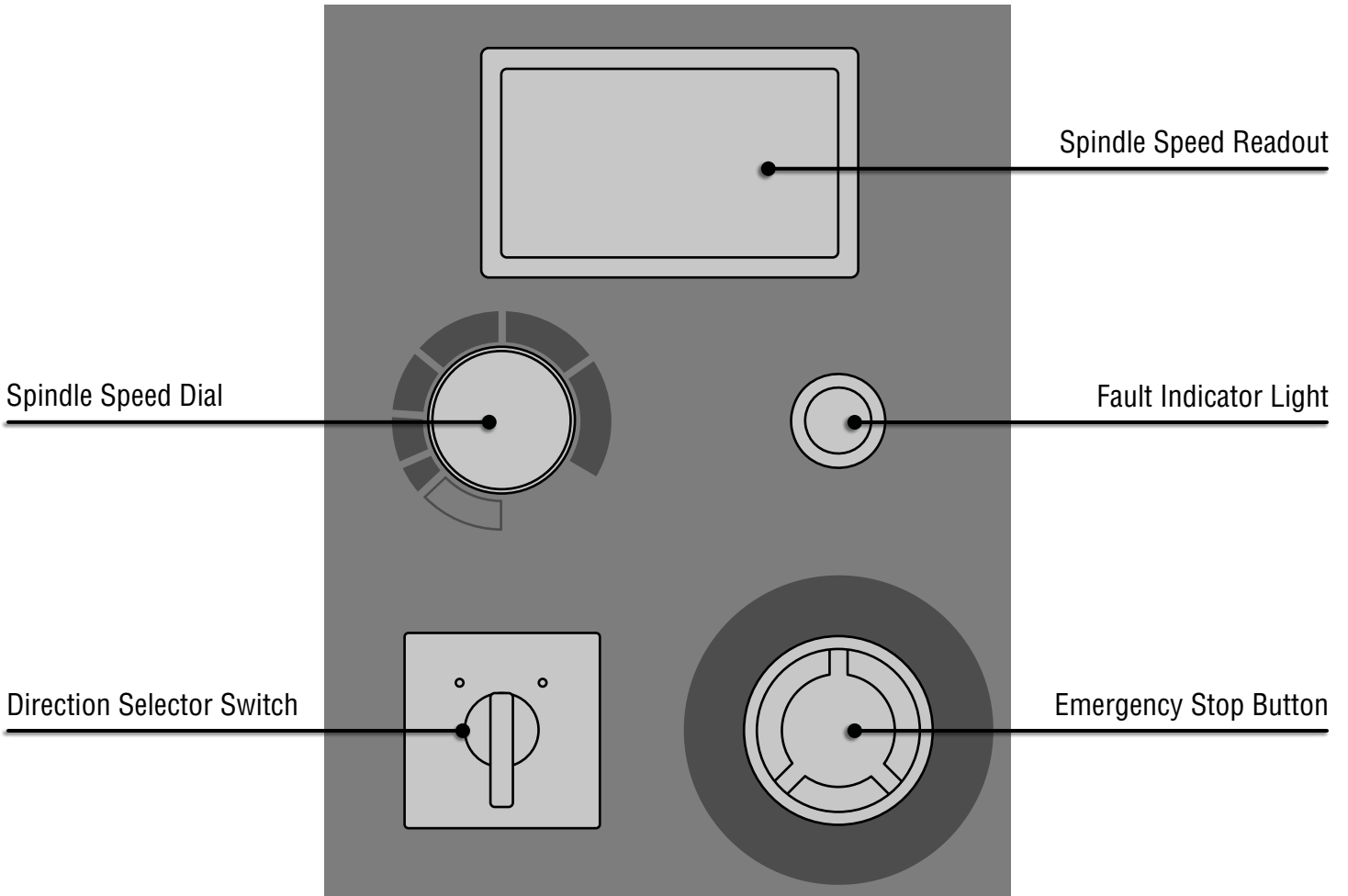
AXES		
	Z-Axis	Up & Down
	X-Axis	Left & Right
	Y-Axis	Front & Back

KNOW YOUR MILLING MACHINE

TOOL PURPOSE

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CONTROL PANEL



ASSEMBLY & ADJUSTMENTS

⚠ WARNING! To prevent injury from accidental operation, make sure the tool is switched OFF and unplugged from the power source before assembling the tool or making any adjustments.

CLEANING THE SURFACES

Your tool comes protected with a layer of heavy-duty anti-rust coating. Remove the protective coating from surfaces using a soft cloth, moistened with kerosene (do not use cellulose-based solvents such as paint thinner or lacquer thinner, as these will damage the painted surfaces). Apply a light layer of good-quality machine oil onto the machine's surfaces to protect from rust and corrosion.

MOUNTING TO A BENCHTOP

For safe operation, the machine must be securely mounted onto a flat, secure workbench. Place the workbench away from direct sunlight, high moisture, or dust.

Position the machine on the benchtop and leave enough space around the machine for table travel. For unrestricted handwheel operation, make sure the cross feed and longitudinal feed handwheels extend out beyond the edge of the benchtop. Square the machine to the benchtop using a precision level.

Drill four 10 mm-diameter mounting holes on the benchtop (same size as the machine's mounting hole). Mount the machine using four M10 hex bolts, eight flat washers, four lock washers, and four hex nuts (mounting hardware not included) (Fig. 2).

INSTALLING THE HANDWHEELS

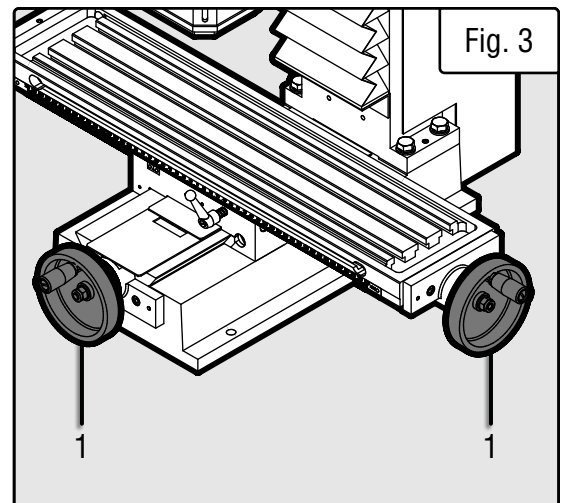
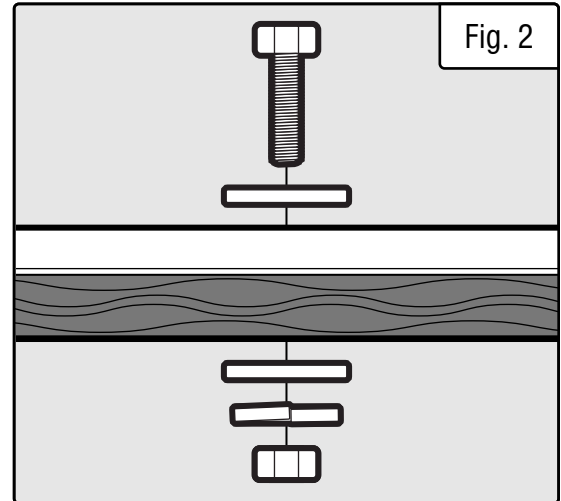
The two handwheels have been initially installed in the reversed direction for shipping purposes. Unscrew the handwheels and install them in the correct orientation (Fig. 3 - 1)

PREPARING VISES TO SECURE WORKPIECE

A vise (not included) is a crucial attachment to hold your workpiece in place when using the milling machine. You can purchase a milling vise or quick vise that is suitable for your workpiece and milling operation. The WEN 33124A 3.5 inch Quick Release Vise is perfect for holding your workpieces.

You may also use clamping kits to hold the workpieces to the machine's worktable. Follow the instructions with your accessory for proper installation and operation.

Your machine can work as both a milling and drilling machine, depending on the type of cutter that is installed. Refer to the introduction below for some common cutter holders and cutting tools that you can install onto your machine.



ASSEMBLY & ADJUSTMENTS

CUTTER HOLDER

The two most common cutting tools for the milling machine are drill bits and end mills. Drill bits are held in place by drill chucks (one included), while end mills are held in place by either collets or end mill holders (not included). Use the suitable holder for your cutting bit. The shank taper is R8.

- **Drill Chucks** The included drill chuck is ONLY able to hold drill bits for drilling operations. It is NOT able to hold milling bits. For end milling or face milling operations, collets or end mill holders are needed.
- **Collets (not included)** Collets are shorter than end mill holders to allow more vertical work area. It secures the end mill all the way around the shank to provide a better grip. They are also less expensive than end mill holders. The WEN 33182A 8-Piece Imperial Steel Collet Set is a great set to hold you over.
- **End Mill Holders (not included)** End mill holders are longer than collets and so the cutter can reach closer to the machine's worktable. The end mill is secured in the holder by a set screw that bears on the flat shank of the end mill. Changing end mills is easier to do on an end mill holder. They are also more robust than collets and are less prone to wearing out.

Collets, end mill holders, and drill chucks are held in the spindle by the drawbar (Part No. .2-46). The drawbar is tightened from the top of the spindle and extends through the spindle to the holder/chuck. When tightening the drawbar, make sure it is snug in the spindle threads, but do not overtighten.

CUTTING TOOLS

An end mill is the most common type of cutting tool for the milling machine. While a drill bit can only make plunge cuts in the vertical direction, an end mill can cut from the side of the workpiece. Some can also make plunge cuts.

- **End Mills** End mills can be classified into center-cutting and non-center-cutting mills. In a center-cutting mill, the flutes meet in the center on the tip of the end mill. This allows the mill to be plunged into the workpiece as is done with a drill press. In a non-center-cutting mill, the flutes do not meet at the tip, leaving a gap with no flutes in the center. The non-center-cutting mill can only cut from the side of the workpiece. It is recommended to use center-cutting mills for their cutting versatility.

End mills can also be classified into 2-flute and 4-flute end mills, identified by the number of flutes on the tip of the mill. Commonly, 2-flute end mills are used for making bigger cuts or when cutting soft metals such as aluminum, as there is more room between the flutes to extract larger chips. 4-flute end mills can produce a better finish because there are twice as many cutting edges, each taking off less material. These end mills are used more commonly on harder metal such as steel and brass.

- **Drill bits** Drill bits can be used on the milling machine for it to function as a drill press. However, drill bits are not designed to cut from the sides as they are not built to withstand the lateral forces imposed by sideways cutting. **DO NOT USE DRILL BIT IN PLACE OF AN END MILL.**

ASSEMBLY & ADJUSTMENTS

REMOVING THE DRILL CHUCK

The drill chuck and taper shank are pre-installed on your milling machine. To replace the drill chuck with a collet or end mill holder, follow the steps below for removing the drill chuck. Cover the table with a spare towel or rag to protect it from getting damaged, in case parts or bits are dropped onto the table.

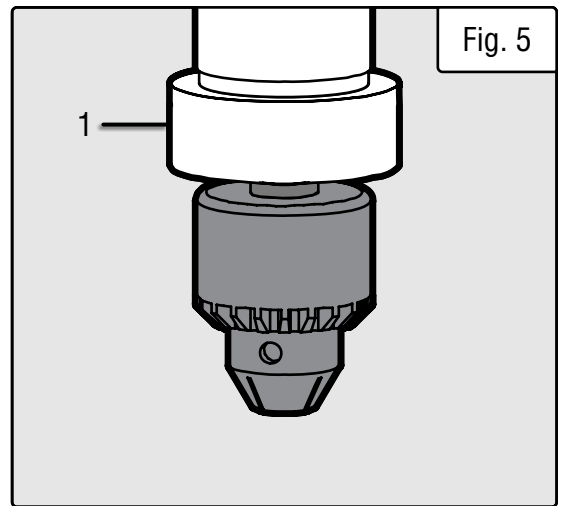
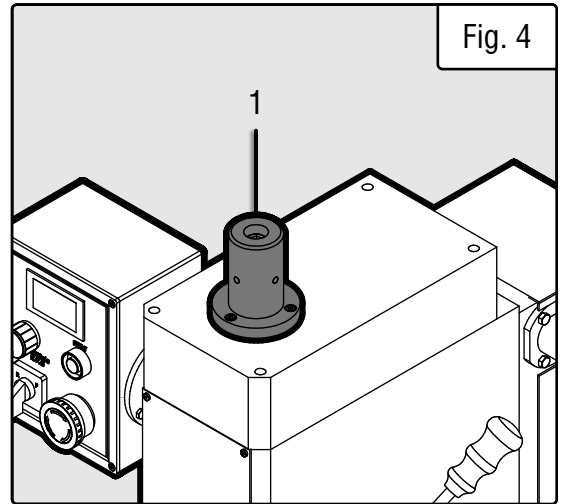
1. Make sure the machine is unplugged to prevent accidental starting.
2. Remove 3 cap hex screws securing drawbar cap (Fig. 4 - 1) to the headstock.
3. Secure the spindle (Fig. 5 - 1) from the bottom with the spindle wrench and loosen the drawbar from the top by using the 8 mm hex wrench and turning the drawbar only one full turn counter clockwise.

NOTE: Do not completely unscrew the drawbar from the spindle. Doing so before the next step of striking it with a hammer can potentially damage the threads on both the drawbar and the arbor.

4. Tap the top of the drawbar with a dead-blow or brass-head hammer to release the taper of the drill chuck.
5. Hold onto the drill chuck while fully unthreading the drawbar. Once the drawbar is unthreaded, carefully remove the drill chuck from the spindle.

INSTALLING DRILL CHUCK / COLLET / END MILL HOLDER

1. Make sure the machine is unplugged to prevent accidental starting.
2. Align the keyway of the chuck/collet with the pin inside the spindle taper. Firmly press the chuck/collet into the spindle taper to seat it.
3. Hold the chuck/collet in the spindle and insert the drawbar into the spindle from the top. Thread the spindle into the chuck/collet and hand-tighten the drawbar.
4. Use the 8 mm hex wrench in the drawbar and the spindle wrench in the spindle to tighten the drawbar securely.



ASSEMBLY & ADJUSTMENTS

ADJUSTING THE TABLE TRAVEL

The milling machine's worktable can be adjusted along the X axis and Y axis to accurately control the cutting location. The gauge on each handwheel indicates the distance of travel.

1. To move the table along the longitudinal (X) axis (left and right), loosen the longitudinal feed lock lever (Fig. 6 - 1), engage the cross axis handwheel (Fig. 6 - 2) with the clutch teeth and rotate the longitudinal handwheel. Tighten the longitudinal feed lock lever to lock the longitudinal travel.

2. To move the table forward and back along the cross (Y) axis, loosen the cross feed lock lever, and rotate the cross feed handwheel (Fig. 6 - 3). Tighten the cross feed lock lever to lock the cross travel.

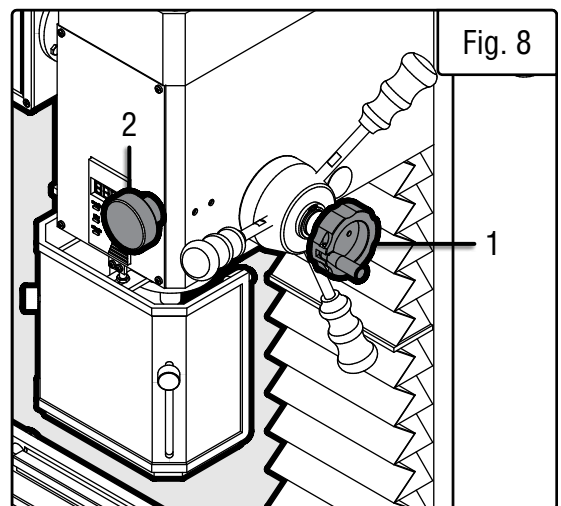
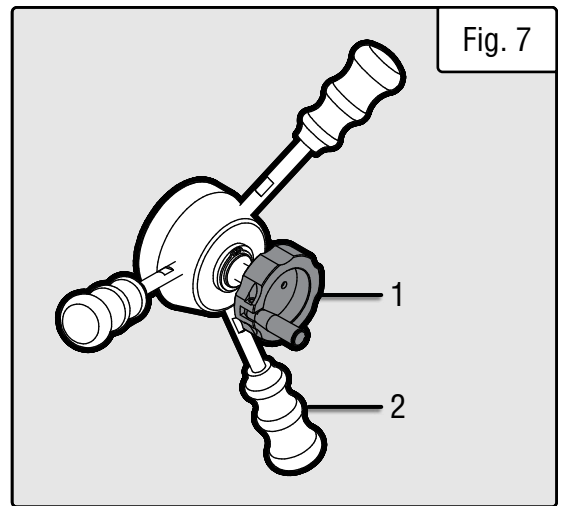
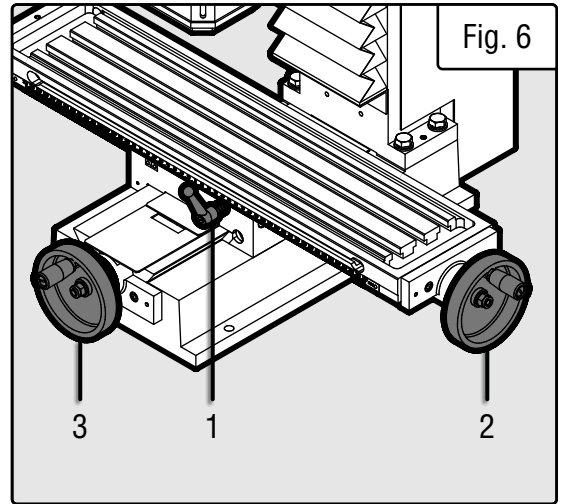
NOTE: The lock lever can be pulled outwards and repositioned on the screw if the handle cannot be completely rotated due to interference with another part.

ADJUSTING THE SPINDLE DEPTH

For normal feeding, the downfeed selector knob (Fig. 7 - 1) should be loose and disengaged. Rotate the downfeed feed handles (Fig. 7 - 2) to bring the headstock up or down. Use the digital depth readout in the front of the machine to read the cutting depth.

For fine feeding adjustment (down to 0.001 inch increment), rotate the downfeed selector knob clockwise (Fig. 8 - 1) until it is tight. Then rotate the fine downfeed knob (Fig. 8 - 2) to make fine adjustments to the headstock position. Use the digital depth readout in the front of the machine to read the cutting depth.

NOTE: The spindle is equipped with a depth lock. To engage the depth lock, insert the 8 mm hex wrench in the depth lock and rotate clockwise until it is tight and engaged. To disengage the spindle depth lock, insert the 8 mm hex wrench and rotate the spindle depth lock counter-clockwise until it is loose and the spindle can move smoothly with the normal or fine downfeed handles. Be aware not to try to adjust the spindle depth while the spindle depth lock is engaged as doing so might cause extreme damage to the spindle.



ASSEMBLY & ADJUSTMENTS

ADJUSTING THE HEADSTOCK HEIGHT

The headstock on your mill can be adjusted up and down to accommodate short or tall workpieces and enables you to change tools mid project. The dovetail design creates precise Z-axis movement that allows you to keep your workpiece aligned when changing the headstock height or changing tooling.

1. Ensure the machine is unplugged to prevent accidental starting.
2. Loosen the Z-axis lock handle (Fig. 9 - 1).
3. Turn the Z-axis handwheel (Fig. 10 - 1) to adjust the height of the headstock. Turn the handwheel clockwise to raise the headstock and counter-clockwise to lower it. Each full rotation of the handwheel moves the headstock 0.05".
4. Lock the Z-axis lock handle once the headstock is adjusted to the desired height.

DETERMINING THE SPEED SETTINGS

The suitable operating speed depends on the size and material of the workpiece. Generally, use higher speeds for cutting softer materials and smaller holes; use lower speeds for cutting harder materials and bigger holes.

Your machine has a range of 100 - 2000 RPM. Use the spindle speed knob (Fig. 11 - 1) on the control panel to select the desired speed range.

Your machine is also equipped to run in the forwards and reverse directions. Flip the direction selector knob (Fig. 11 - 2) to either forwards or reverse to chose the desired direction.

⚠ WARNING! Do not change the direction selector knob when the machine is running! Always turn the speed range knob to 0 before flipping the direction selector knob to either off or the other direction.

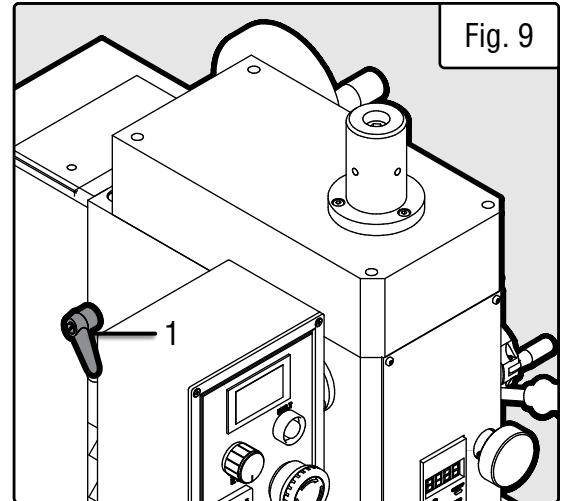


Fig. 9

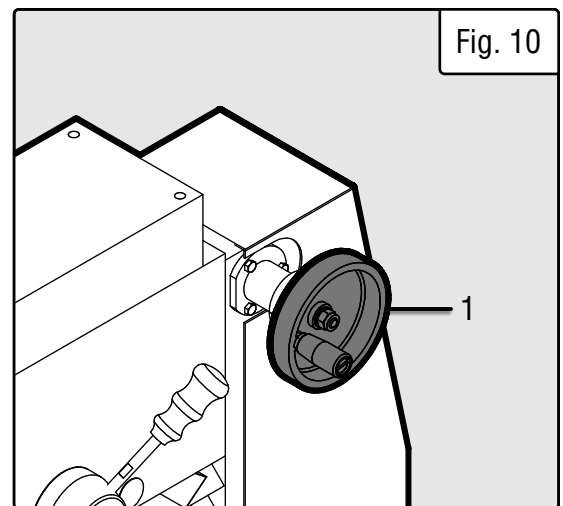


Fig. 10

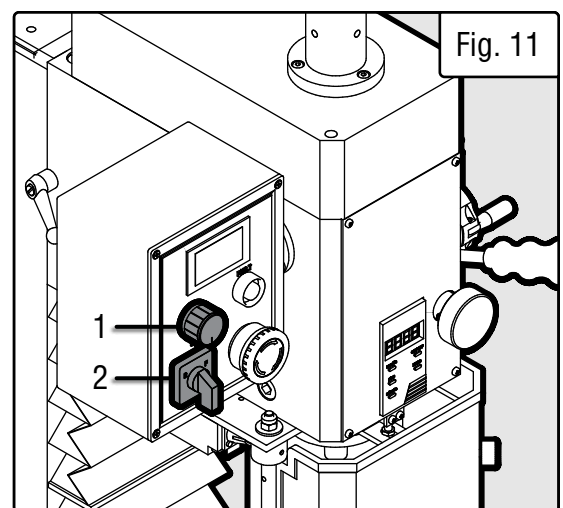


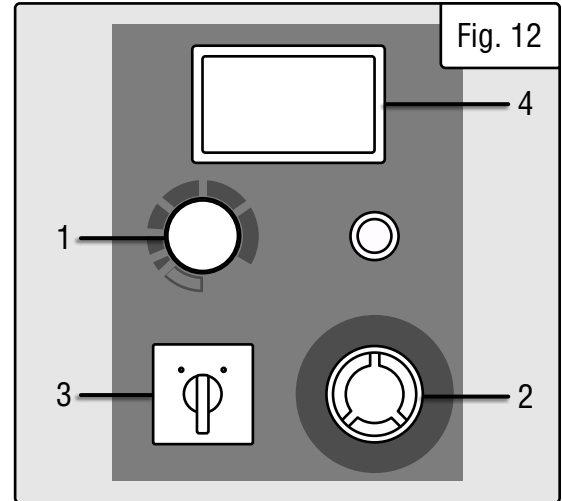
Fig. 11

ASSEMBLY & ADJUSTMENTS

TURNING ON / OFF AND ADJUSTING THE SPEED

The speed adjustment knob on the front of the control panel (Fig. 12 - 1) turns the machine ON and OFF and adjusts the speed within the unit's capable speed range.

1. Always make sure the speed adjustment knob is in the OFF setting before plugging in the machine
2. Release the E-Stop switch (Fig. 12 - 2) by rotating the switch clockwise, allowing the button to spring outward.
3. Select a direction for the spindle to turn (Fig. 12 - 3).
4. Turn ON the machine by rotating the knob clockwise. A "click" will be heard as the motor is turned ON, but the spindle will not rotate until the knob is turned further clockwise.
5. SLOWLY rotate the knob further and allow the speed to increase.



⚠ CAUTION! It is crucial to adjust the speed slowly or you may risk damaging the gears.

6. Give the machine an ample amount of time to ramp up to the operating speed before lowering the cutting tool into the workpiece. The current speed will show on the LED speed display (Fig. 12 - 4).
7. To turn OFF the machine, SLOWLY rotate the speed adjustment knob counterclockwise until a "click" is heard and the knob points to the 0 position, then turn the direction selector knob to the OFF position. For emergency stop, press down the E-Stop button (Fig. 12 - 2). Make sure to always return the speed adjustment knob and the direction selector knob to the OFF position so that you don't risk accidentally starting the machine when the Emergency stop button is released.

OPERATION

⚠ WARNING! To prevent serious injury, make sure all the warnings and instructions have been read and understood before operating this tool.

⚠ WARNING! Always wear ANSI Z87.1-approved eye protection and a face shield/dust mask when using this machine. Chips and dust fly at high speed during operation, and may cause injuries if they hit you.

OPERATION


PRIOR TO OPERATION

Check that the following requirements are met before plugging in the machine:

- The anti-rust protection has been cleared off from the machine.
- All obstacles have been cleaned and removed from the machine area and worktable.
- All adjustment tools (chuck key, rod, wrenches) have been removed from the machine.
- The cutter is properly installed and tightened in the holder.
- The workpiece is properly secured in a milling vise or quick vise (not included).
- The workpiece position has been adjusted on the X and Y axes to suit your task.
- The protective shield is in position.
- You are wearing ANSI Z87.1-approved eye protection and a face shield/dust mask.

DRILLING / MILLING OPERATIONS

1. Install the suitable holder/chuck and cutter bit. Tighten them securely.
2. Slowly rotate the speed adjustment knob (Fig. 12 - 1) to turn ON and set it to the appropriate speed. Wait a few seconds for the machine to reach full speed.

 **WARNING!** Do not turn on the machine while the cutter is contacting the workpiece.

3A. DRILLING OPERATION. Pull the feed handle towards you to lower the cutter into the workpiece. Use the digital depth read out on the front of the unit to determine the depth of the cut.

3B. MILLING OPERATION. Pull the feed handle towards you to lower the cutter to the desired depth and tighten the spindle depth lock. Rotate handwheels to make a cut along the X or Y axis.

NOTE: Make your cut in several progressive passes, instead of trying to take off too much material in one pass.

4. When the cut is complete, clear the cutter from the workpiece.
5. Rotate the speed adjustment knob to the OFF position. Wait for the cutter to come to a complete stop and raise the headstock all the way to the upper position.

OVERLOAD PROTECTION

The overload protection will shut off the machine automatically during an overload. When this happens, the yellow overload light on the right control box will illuminate.

The machine may overload if the feed rate is too fast or if the cutting depth is too deep. When this happens, rotate the speed adjustment knob to the OFF position. Wait a few minutes to allow the motor to cool down and start the machine again. This time, reduce the feeding rate and cutting depth to prevent overloading the motor again.

MAINTENANCE

⚠ WARNING! To avoid accidents, make sure the power switch is in the OFF position and unplug the tool from the electrical outlet before cleaning or performing any maintenance. Servicing of the tool must be performed by a qualified technician.

GENERAL MAINTENANCE

1. Before each use, inspect the general condition of the tool. Check for:
 - Loose hardware,
 - Misalignment or binding of moving parts,
 - Damaged cord/electrical wiring,
 - Cracked or broken parts, and
 - Any other condition that may affect its safe operation.
2. After every use, wipe the tool with a soft cloth. Do not let water enter the tool. Clean the worktable and apply a small amount of general purpose machine oil to protect the worktable.
3. Keep the top ventilation openings free from dust and debris to prevent the motor from overheating.
4. Store the tool in a clean and dry place away from the reach of children.

CUTTER & TAPER SHANK MAINTENANCE

Use a rag to protect your hands while handling or installing the cutter to prevent injuries. Keep the taper shank and cutter shank clean. Always use sharp cutters; do not use if the cutter is dull or damaged. Store the cutter and holder in a wooden or plastic box after use to maintain its condition.

LUBRICATION


To ensure smooth operation of the machine, keep the moving contact surfaces lubricated. Fill included oil bottle with lubricating oil ISO 68 or SAE 20W non-detergent oil, and inject the oil onto the contact surfaces before operation.

- Base and saddle slide face
- Saddle and worktable slide face
- Column and bevel center slide face
- Column and headstock slide face.

Then, apply light-weight lithium based lubricating grease onto the following parts.

- X-Axis feeding leadscrew (saddle)
- Y-axis feeding leadscrew (worktable)
- Z-axis feeding gear rack (column)

MAINTENANCE

 **WARNING!** To avoid accidents, make sure the power switch is in the OFF position and unplug the tool from the electrical outlet before cleaning or performing any maintenance. Servicing of the tool must be performed by a qualified technician.

GIBS ADJUSTMENT

The gibs act as a sliding interface between two slide faces. The gibs have been pre-adjusted from the manufacturer and should not require further adjustment until about after a year of operation. In order to maintain mechanical precision, the gib needs to be adjusted to maintain the correct pressure between the two slide faces. Check and adjust the gibs every year, more frequently if under heavier usage.

There are 4 gibs on this machine. Refer to the exploded view and parts list to locate the gibs below:

- X-axis gib (Part No. 33075-409), between the base and the saddle seat slide surface.
- Y-axis gib (Part No. 33075-424), between the saddle seat and worktable slide face.
- Z-axis gib (Part No. 33075-216), between column and headstock slide face.

1. Ensure the associated travel lock knobs are loose.
2. Locate the respective gib screws, there will be one on each end of the gib. Loosen one screw and tighten the other the same amount with a flat head screw driver.
3. Test the work table or head stock travel to ensure smooth but not too tight movement.

PRODUCT DISPOSAL

Used power tools should not be disposed of together with household waste. This product contains electronic components that should be recycled. Please take this product to your local recycling facility for responsible disposal and to minimize its environmental impact.



Please recycle the packaging and electronic components where facilities exist. Please contact your local auto garage or recycling facility to properly dispose of oil/fuel.

TROUBLESHOOTING GUIDE

⚠ WARNING! Stop using the generator immediately if any of the following problems occur or risk serious personal injury. If you have any questions, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email techsupport@wenproducts.com.

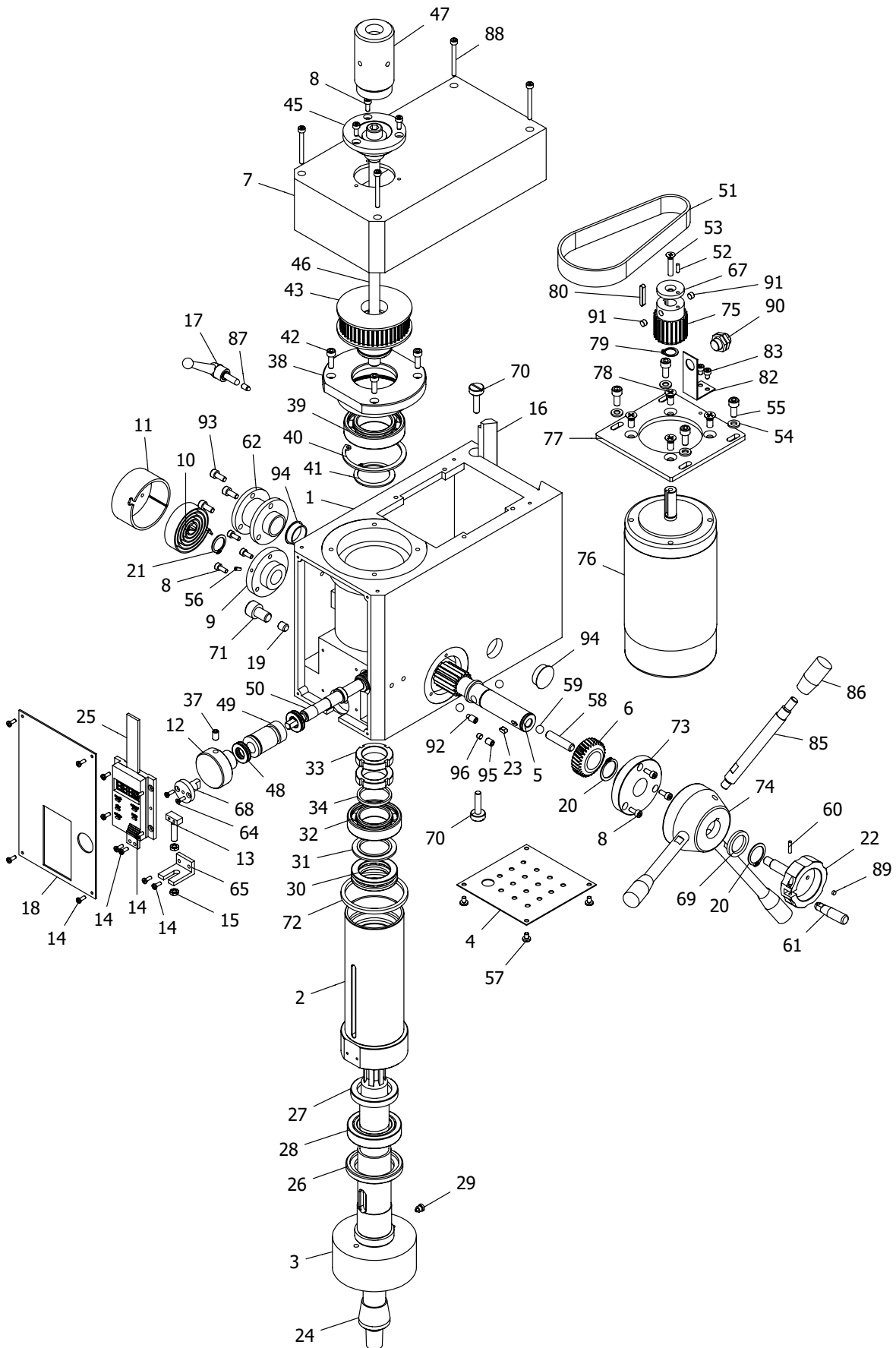
Machine does not power on or the breaker immediately trips.	1. Emergency stop button is pressed.	1. Rotate the button head to reset.
	2. Chip shield is open.	2. Completely close chip shield.
	3. Circuit breaker tripped or the fuse broke.	3. Make sure circuit is the right size and does not have a short.
	4. There is a fault in one of the components.	4. Test / replace the FWD/REV switch, spindle speed dial, and motor for faults or call customer service (1-800-232-1195) for assistance.
Mill is underpowered or stalls	1. Mill is undersized for desired task or the wrong tool/cutter type for the task is installed.	1. Use correct tool/cutter type and mill size for the job. Reduce spindle speed and feed rate. Use coolant when possible.
	2. Feed or speed is too fast.	2. Check for any blockage in the air filter. Check and clean the air filter as necessary.
	3. Motor is overheated.	3. Clean the motor and let it cool down. Decrease load on the motor.
	4. Motor brushes or bearings are faulty.	4. Test/ replace the motor brushes and bearings.
Machine is excessively noisy or vibrating.	1. Machine is not securely mounted to workbench.	1. Tighten mounting hardware and check page 11 for mounting instructions.
	2. Bit is chattering.	2. Replace or sharpen the bit. Ensure that the feeds and speeds are correct.
	3. Cut is too deep.	3. Decrease depth of cut.
	4. Workpiece is not secured properly.	4. Properly clamp the workpiece to the table with a clamp or vise.
	5. Motor or another component is loose.	5. Check the nuts of the motor and other parts to ensure that they are secured and tighten any bolts that are not.
	6. Belt is clogged or worn.	Inspect belt or call customer service (1-800-232-1195) for assistance.
FWD/REV switch does not turn work	1. Machine is faulted (check yellow FAULT light).	1. Set the spindle speed dial to the OFF position and then position the FWD/REV switch.
	2. Switch wiring has issues.	2. Inspect wiring or call customer service (1-800-232-1195) for assistance.
Table is difficult to move	1. Table locks are engaged.	1. Disengage table locks.
	2. Ways are not properly lubricated.	2. Lubricate ways.
	3. Ways have excessive amount of chips built up.	3. Clear ways of chip debris.
	4. Gibs are too tight.	4. Loosen gibs to proper tightness.

TROUBLESHOOTING GUIDE

⚠ WARNING! Stop using the generator immediately if any of the following problems occur or risk serious personal injury. If you have any questions, please contact customer service at **1-800-232-1195** (M-F 8-5 CST), or email techsupport@wenproducts.com.

Spindle speed readout does not display proper speeds or any readout.	1. Spacing between the sensor and the timing gear is incorrect.	1. Adjust spacing between sensor and timing gear.
	2. Sensor has gone bad or has poor/damaged wiring.	2. Inspect sensor and associated wiring or call customer service (1-800-232-1195) for assistance.
Digital depth readout does not display proper measurement or does not turn on.	1. Initial measurement is incorrect.	1. Zero/Reset the depth readout at the zero point.
	2. Sensor battery needs replacement.	2. Replace sensor battery.
	3. Sensor has gone bad or has poor/damaged wiring.	3. Inspect sensor and associated wiring or call customer service (1-800-232-1195) for assistance.

EXPLODED VIEW & PARTS LIST



EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.2-1	33075-201	Spindle box	1
.2-2	33075-202	R8 spindle sleeve	1
.2-3	33075-203	R8 spindle	1
.2-4	33075-204	Base plate	1
.2-5	33075-205	Gear shaft	1
.2-6	33075-206	Bevel gear	1
.2-7	33075-207	Spindle box cover	1
.2-8	33075-208	Hexagon socket head cap screw M4*10	9
.2-9	33075-209	Shaft gear support flange	1
.2-10	33075-210	Torsion spring	1
.2-11	33075-211	Torsion spring cover	1
.2-12	33075-212	Fine feeding handwheel	1
.2-13	33075-213	Square screw	1
.2-14	33075-214	Cross head pan screw M3x8	12
.2-15	33075-215	Hex nut M5	2
.2-16	33075-216	Z-axis gib	1
.2-17	33075-217	Headstock Travel lock	1
.2-18	33075-218	Panel	1
.2-19	33075-219	Spindle sleeve locking shaft	1
.2-20	33075-220	Check ring 20	2
.2-21	33075-221	Check ring 16	1
.2-22	33075-222	Downfeed selector knob	1
.2-23	33075-223	Parallel key 4*10	1
.2-24	33075-224	JT6 taper shank	1
.2-25	33075-225	Digital Depth DRO	1
.2-26	33075-226	Lower spindle oil seal 1	1
.2-27	33075-227	Lower spindle oil seal 2	1
.2-28	33075-228	Taper roller bearing 32907	1
.2-29	33075-229	Cylindrical Key with shoulder	1
.2-30	33075-230	Thrust ball bearing 8106	1
.2-31	33075-231	Upper Spindle Washer 2	1
.2-32	33075-232	Deep groove ball bearing 80106	1

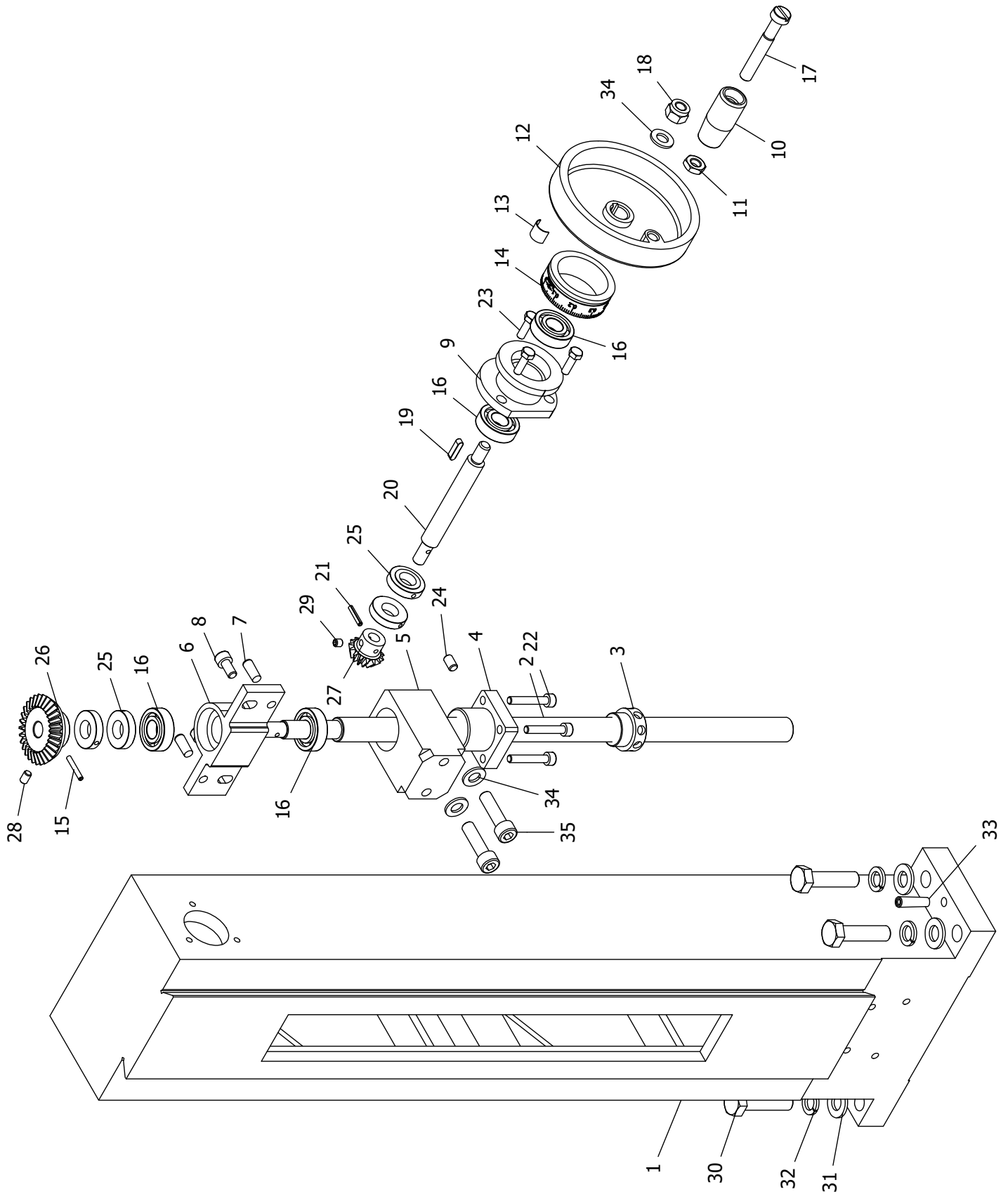
NO.	PART NO.	DESCRIPTION	QTY.
.2-33	33075-233	Spanner nut	2
.2-34	33075-234	Upper Spindle Washer 1	1
.2-37	33075-237	Set Screw M6x10	1
.2-38	33075-238	Bearing seat	1
.2-39	33075-239	Deep groove ball bearing 80107	1
.2-40	33075-240	Internal retaining ring 62	1
.2-41	33075-241	External retaining ring 35 mm	1
.2-42	33075-242	Hex head screw M5x16	4
.2-43	33075-243	Spindle timing pulley	1
.2-45	33075-245	Dust guard base	1
.2-46	33075-246	Drawbar	1
.2-47	33075-247	Dust guard top	1
.2-48	33075-248	Thrust ball bearing single 7/70	2
.2-49	33075-249	Eccentric worm sleeve	1
.2-50	33075-250	Worm shaft	1
.2-51	33075-251	Timing belt	1
.2-52	33075-252	Pin A3x10	1
.2-53	33075-253	Flat head screw M5x25	1
.2-54	33075-254	Flat washer 6 mm	4
.2-55	33075-255	Hex head screw M6x14	4
.2-56	33075-256	Roll pin 3x8	1
.2-57	33075-257	Screw M4x6	4
.2-58	33075-258	Lock shaft	1
.2-59	33075-259	Ball	3
.2-60	33075-260	Pin A3x14	1
.2-61	33075-261	Downfeed selector handle	1
.2-62	33075-262	Torion spring support	1
.2-64	33075-264	Flat head screw M3x12	2
.2-65	33075-265	Depth guage bracket	1
.2-67	33075-267	Washer	1
.2-68	33075-268	Spindle sleeve position shaft	1
.2-69	33075-269	Adjusting washer	1
.2-70	33075-270	Wedge screw	2

EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.2-71	33075-271	Cap screw M10x16	1
.2-72	33075-272	Sleeve limit washer	1
.2-73	33075-273	Right shaft gear support flange	1
.2-74	33075-274	Handle seat	1
.2-75	33075-275	Motor timing gear	1
.2-76	33075-276	750W/110V DC motor	1
.2-77	33075-277	Motor connection plate	1
.2-78	33075-278	Screw M6x14	4
.2-79	33075-279	External retaining ring 12	1
.2-80	33075-280	Motor timing gear key	1
.2-82	33075-282	RPM sensor bracket	1
.2-83	33075-283	hex head screw M4x6	2
.2-85	33075-285	Handle lever	3

NO.	PART NO.	DESCRIPTION	QTY.
.2-86	33075-286	Handle sleeve	3
.2-87	33075-287	Locking rod	1
.2-88	33075-288	Hex head screw M4x40	4
.2-89	33075-289	Magnet 4x2	1
.2-90	33075-290	RPM sensor subassembly	1
.2-91	33075-291	Ø6 Magnet	2
.2-92	33075-292	Set screw M6*12	1
.2-93	33075-293	Hex bolt M5x12	3
.2-94	33075-294	End cap	2
.2-95	33075-295	Set screw M6x8	1
.2-96	33075-296	Eccentric sleeve locking block	1

EXPLODED VIEW & PARTS LIST

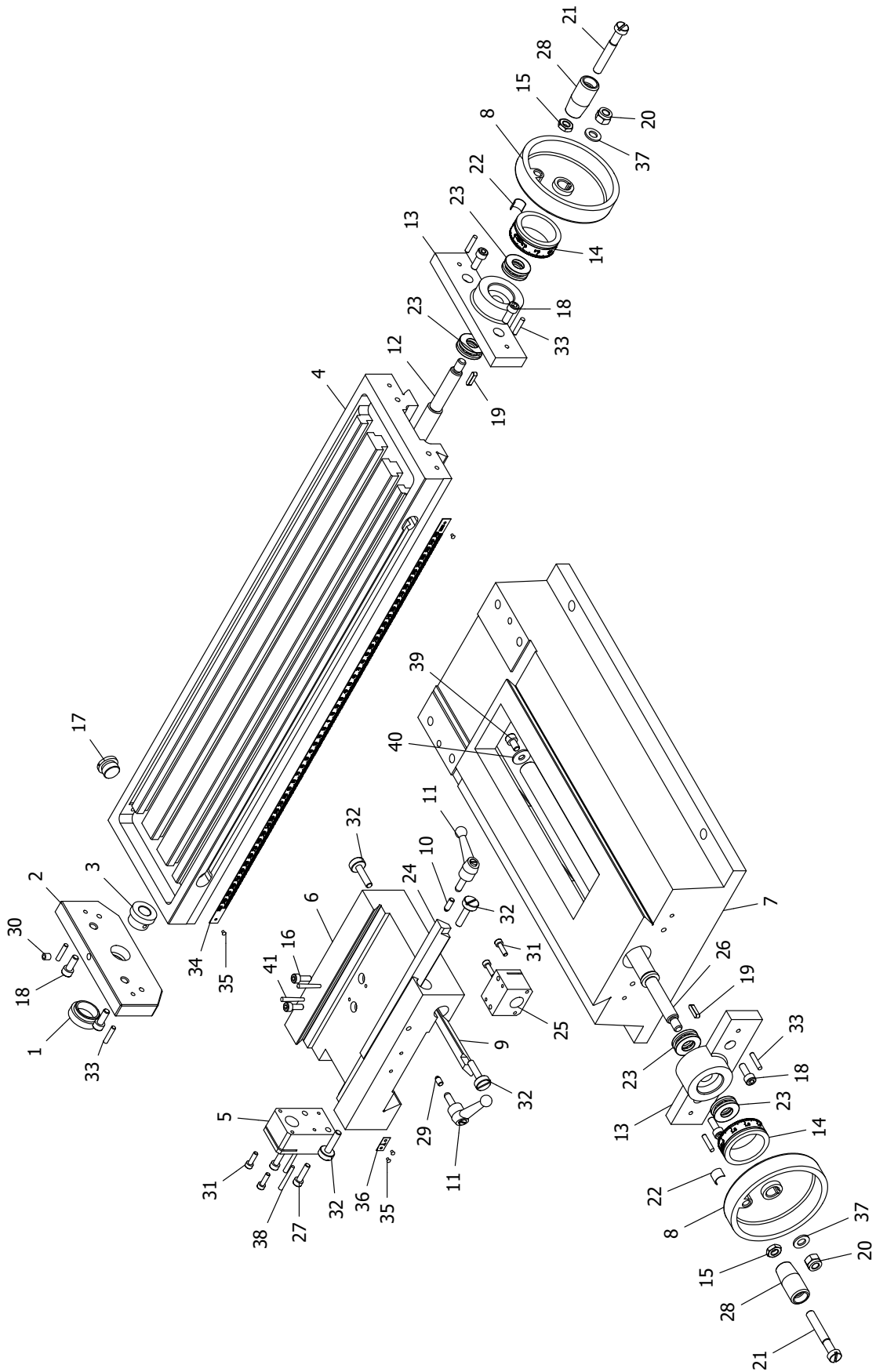


EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.3-1	33075-301	Column	1
.3-2	33075-302	Leadscrew	1
.3-3	33075-303	Leadscrew locking nut	1
.3-4	33075-304	Leadscrew lift nut	1
.3-5	33075-305	Column nut block	1
.3-6	33075-306	Leadscrew support	1
.3-7	33075-307	Taper pins with internal thread 6x16	2
.3-8	33075-308	hex head cap screw M6x12	2
.3-9	33075-309	Lift support seat	1
.3-10	33075-310	Z-axis handle	1
.3-11	33075-311	Hex nut M8	1
.3-12	33075-312	Handwheel	1
.3-13	33075-313	Handwheel curved spring	1
.3-14	33075-314	Scale Dial	1
.3-15	33075-315	Pin 3x20	1
.3-16	33075-316	Deep groove ball bearing 6001	4
.3-17	33075-317	Slotted screw M8-1.25x55	1

NO.	PART NO.	DESCRIPTION	QTY.
.3-18	33075-318	M8 lock nut	1
.3-19	33075-319	Key 4x16	1
.3-20	33075-320	Lifting shaft	1
.3-21	33075-321	Pin 3x16	1
.3-22	33075-322	Cap Screw M5x20	4
.3-23	33075-323	Hex bolt M5x16	3
.3-24	33075-237	Set Screw M6x10	1
.3-25	33075-325	Lock ring M6x10	4
.3-26	33075-326	Large bevel gear	1
.3-27	33075-327	Small bevel gear	1
.3-28	33075-328	Set screw M5x8	1
.3-29	33075-329	Set screw M5x5	1
.3-30	33075-330	Hex bolt M10x40	4
.3-31	33075-331	Washer 10	4
.3-32	33075-332	Spring washer 10	4
.3-33	33075-333	Taper pins with internal thread M6*24	2
.3-34	33075-334	Washer 8	1
.3-35	33075-335	Cap screw M8x30	2

EXPLODED VIEW & PARTS LIST

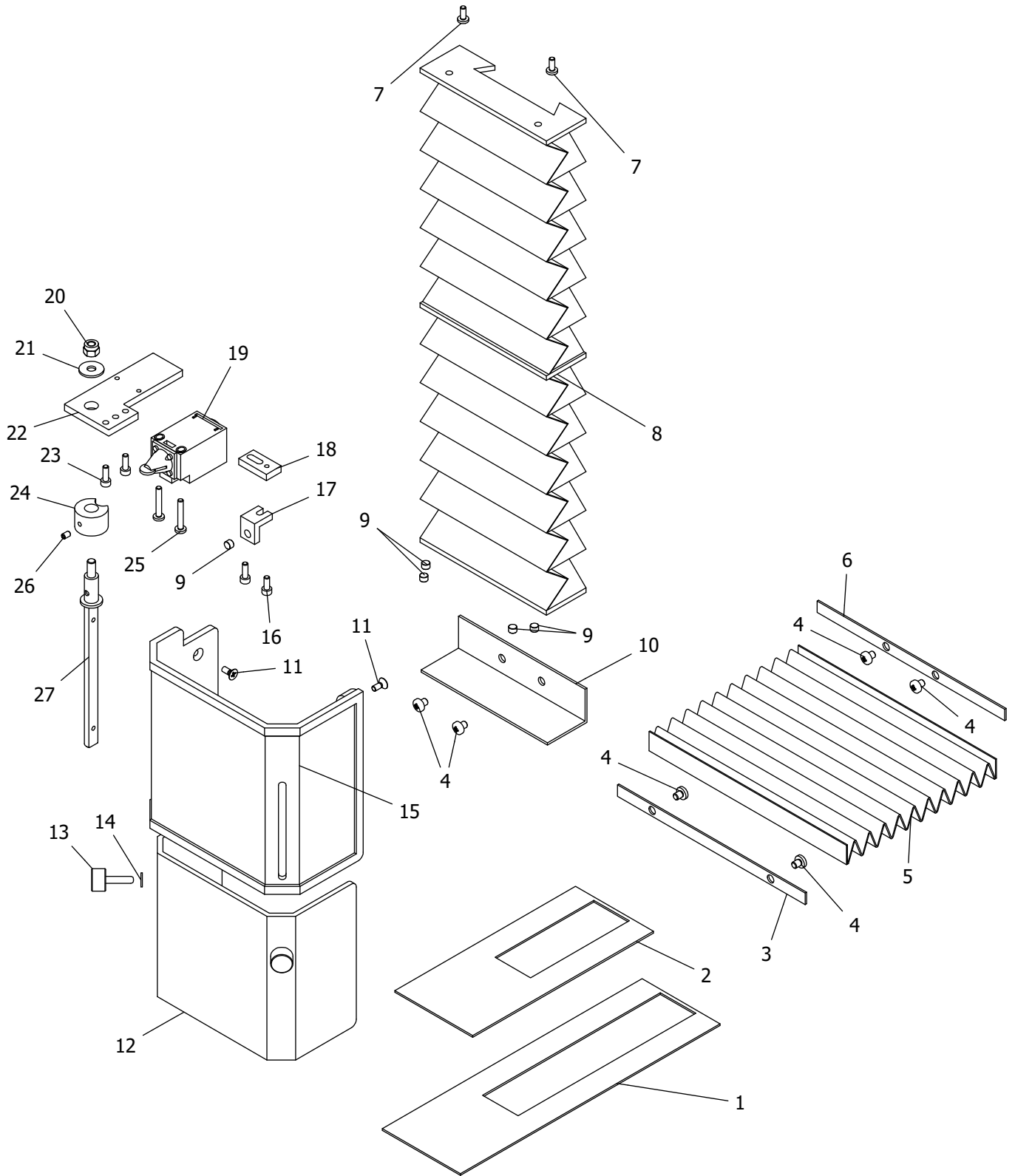


EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.4-1	33075-401	Left bracket cover	1
.4-2	33075-402	Left leadscrew sleeve seat	1
.4-3	33075-403	Left longitudinal lead-screw sleeve	1
.4-4	33075-404	Work table	1
.4-5	33075-405	Longitudinal leadscrew nut	1
.4-6	33075-406	Saddle	1
.4-7	33075-407	Base	1
.4-8	33075-312	Handwheel	2
.4-9	33075-409	X-axis gib	1
.4-10	33075-410	Longitudinal crown bar	1
.4-11	33075-411	Small handle assembly	2
.4-12	33075-412	Longitudinal leadscrew	1
.4-13	33075-413	Leadscrew bearing seat	2
.4-14	33075-414	Scale dial	2
.4-15	33075-311	M8 hex nut	2
.4-16	33075-416	Cap screw M5x14	2
.4-17	33075-294	End cap	1
.4-18	33075-418	Cap screw M6x16	6
.4-19	33075-319	Key 4x16	2
.4-20	33075-318	M8 lock nut	2

NO.	PART NO.	DESCRIPTION	QTY.
.4-21	33075-317	Slotted screw M8-1.25x55	2
.4-22	33075-313	Handwheel curved spring	2
.4-23	33075-423	Thrust ball bearing 8101	4
.4-24	33075-424	Y-axis gib	1
.4-25	33075-425	Y-axis leadscrew nut	1
.4-26	33075-426	Y-axis leadscrew	1
.4-27	33075-427	Cap screw M5x20	2
.4-28	33075-428	Handwheel handle	2
.4-29	33075-287	Locking rod	1
.4-30	33075-430	Column oil cup	1
.4-31	33075-431	Cap screw M4x14	4
.4-32	33075-270	Gib screw	4
.4-33	33075-433	Round pin A4*20	6
.4-34	33075-434	Scale label	1
.4-35	33075-435	Rivet	4
.4-36	33075-436	Zero label	1
.4-37	33075-334	Washer 8	2
.4-38	33075-438	Taper pin A3*30	2
.4-39	33075-439	Cap screw M6x10	1
.4-40	33075-440	Washer 6	1
.4-41	33075-441	Taper pin B3x26	2

EXPLODED VIEW & PARTS LIST

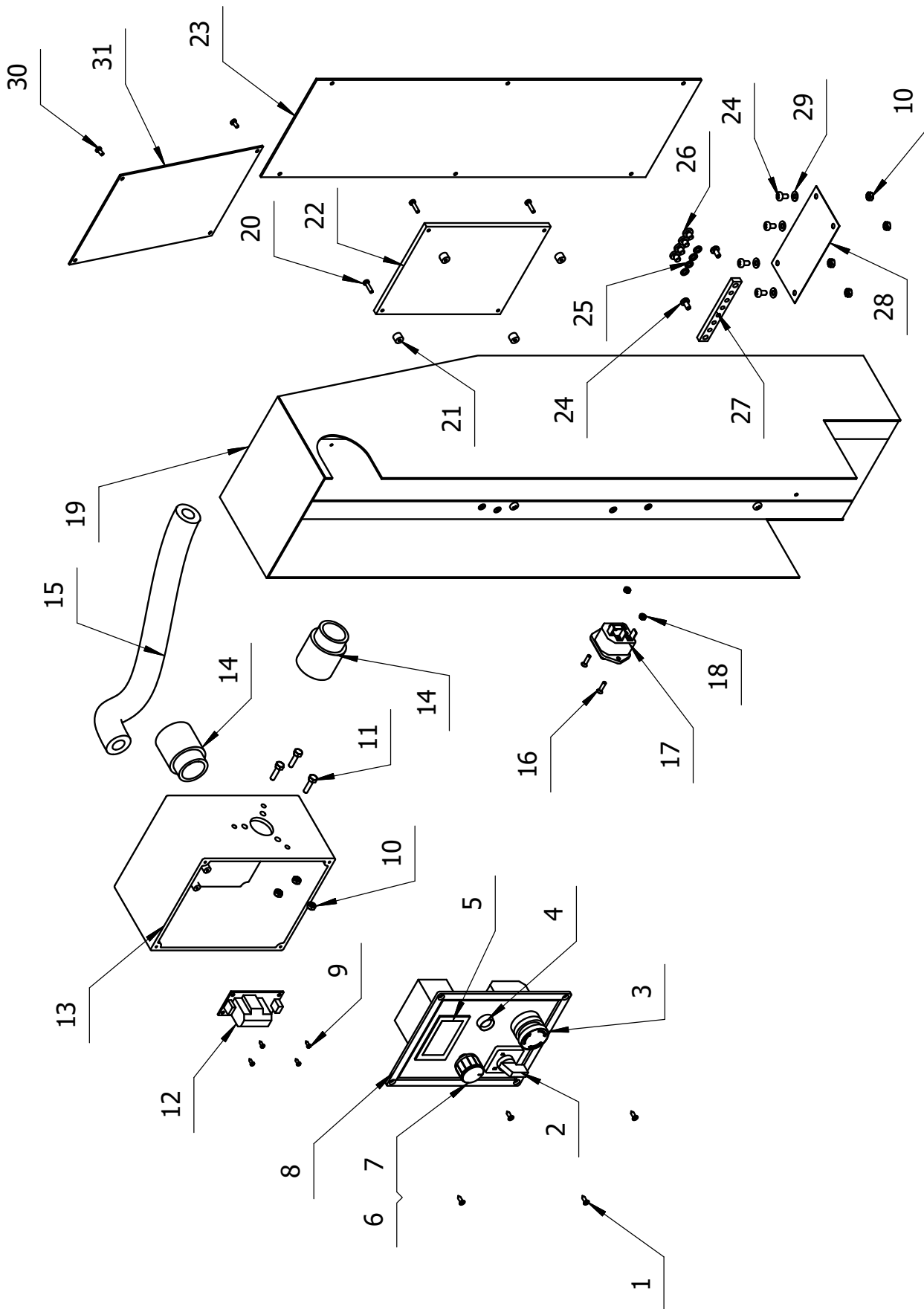


EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.5-1	33075-501	Lower splash guard	1
.5-2	33075-502	Upper splash guard	1
.5-3	33075-503	Front plate cover	1
.5-4	33075-257	Cross head screw M5x6	6
.5-5	33075-505	Horizontal dust guard	1
.5-6	33075-506	Rear plate cover	1
.5-7	33075-507	Cross head screw M4x10	2
.5-8	33075-508	Vertical dust guard	1
.5-9	33075-291	Ø6 Magnet	5
.5-10	33075-510	Shield bracket	1
.5-11	33075-511	Cross head screw M4x10	3
.5-12	33075-512	Inner shield	1
.5-13	33075-513	Knurled screws M5x20	2

NO.	PART NO.	DESCRIPTION	QTY.
.5-14	33075-514	Washer 5	2
.5-15	33075-515	Outer shield	1
.5-16	33075-208	Cap screw M4x10	1
.5-17	33075-517	Shield stop block	1
.5-18	33075-518	Connecting plate	1
.5-19	33075-519	Safety limit switch	1
.5-20	33075-520	M6 Nut	1
.5-21	33075-440	Washer 6	1
.5-22	33075-522	Support plate	1
.5-23	33075-523	Cap screw M4x12	3
.5-24	33075-524	Spacer bushing	1
.5-25	33075-525	Cross head screw M4x25	2
.5-26	33075-526	Set screw M4x6	1
.5-27	33075-527	Shield shaft	1

EXPLODED VIEW & PARTS LIST



EXPLODED VIEW & PARTS LIST

NO.	PART NO.	DESCRIPTION	QTY.
.6-1	33075-601	Tapping screw M3x9	4
.6-2	33075-602	FWD/REV switch	1
.6-3	33075-603	Emergency stop button	1
.6-4	33075-604	Fault light	1
.6-5	33075-605	Digital speed readout	1
.6-6	33075-606	F4.7K Potentiometer	1
.6-7	33075-607	Spindle speed dial	1
.6-8	33075-608	Control panel cover	1
.6-9	33075-609	Tapping screw	4
.6-10	33075-610	M4 nut	7
.6-11	33075-611	Bolt M4x16	3
.6-12	33075-612	Control panel PCB	1
.6-13	33075-613	Control panel housing	1
.6-14	33075-614	Conduit connector	2
.6-15	33075-615	Conduit	1
.6-16	33075-616	Cross head screw M3x12	2

NO.	PART NO.	DESCRIPTION	QTY.
.6-17	33075-617	Power socket	1
.6-18	33075-618	M3 nut	2
.6-19	33075-619	Back cover	1
.6-20	33075-620	Cross head pan screw M3x12	4
.6-21	33075-621	Spacer	4
.6-22	33075-622	Main control board	1
.6-23	33075-623	Back plate	1
.6-24	33075-624	Cros head pan screw M4x8	6
.6-25	33075-625	Lock washer 5mm	4
.6-26	33075-626	Cross head pan screw M5x6	4
.6-27	33075-627	Grounding bar	1
.6-28	33075-628	Lower dust net	1
.6-29	33075-629	Washer 4	4

WARRANTY STATEMENT

WEN Products is committed to building tools that are dependable for years. Our warranties are consistent with this commitment and our dedication to quality.

LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC (“Seller”) warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship during personal use for a period of two (2) years from date of purchase or 500 hours of use; whichever comes first. Ninety days for all WEN products if the tool is used for professional or commercial use. Purchaser has 30 days from the date of purchase to report missing or damaged parts.

SELLER’S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of Purchase must be a direct vendor of Great Lakes Technologies, LLC. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 with the following information to make arrangements: your shipping address, phone number, serial number, required part numbers, and proof of purchase. Damaged or defective parts and products may need to be sent to WEN before the replacements can be shipped out.

Upon the confirmation of a WEN representative, your product may qualify for repairs and service work. When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge for addresses within the contiguous United States.

THIS LIMITED WARRANTY DOES NOT APPLY TO ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME, INCLUDING BELTS, BRUSHES, BLADES, BATTERIES, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO LIABILITY FOR LOSS OF PROFITS) ARISING FROM THE SALE OR USE OF THIS PRODUCT. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE U.S., PROVINCE TO PROVINCE IN CANADA AND FROM COUNTRY TO COUNTRY.

THIS LIMITED WARRANTY APPLIES ONLY TO ITEMS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE. FOR WARRANTY PARTS OR PRODUCTS REPAIRED UNDER WARRANTY SHIPPING TO ADDRESSES OUTSIDE OF THE CONTIGUOUS UNITED STATES, ADDITIONAL SHIPPING CHARGES MAY APPLY.

**THANKS FOR
REMEMBERING**

