

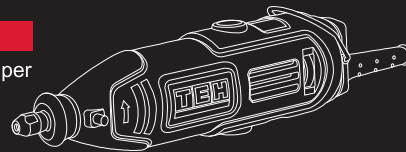


www.tehtools.com

Electric Mini Grinder

TG14218 TG17218

To Be Your Exclusive Helper

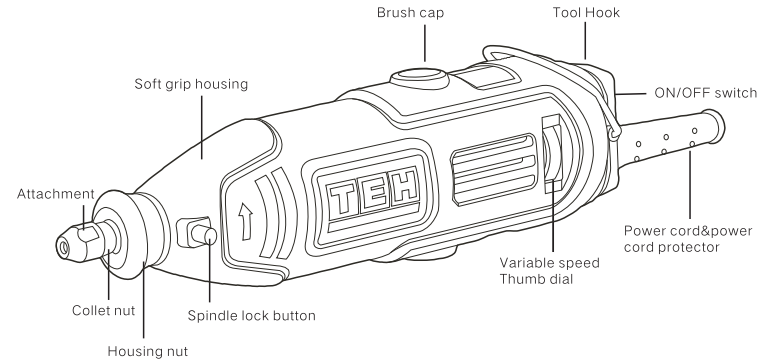


TEH

TECHNICAL SPECIFICATION

Model	TG14218	TG17218
Rated voltage	220V	220V
Rated frequency	50Hz	50Hz
Rated input power	135w	170w
No-load speed	16000~31000r/min	10000~32000r/min
Collet nut capacity	Φ3.2mm	Φ3.2mm
Accessory kit	218pcs	218pcs

COMPONENTS AND ACCESSORIES



SAFETY INSTRUCTIONS

WARNING ▲

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or other serious injury. The term “power tools” in all of the warnings listed below refers to mains-operated (corded) power tool or battery operated (cordless) power tool.

WORK AREA

- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) 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.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

- a) 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.
- b) 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.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tools. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increases the risk of electric shock.
- e) 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.

PERSONAL SAFETY

- a) 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.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce the risk of personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in the power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

POWER TOOL USE AND CARE

- a) 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.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce the risk of personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off-position before plugging in. Carrying power tools with your finger on the switch or plugging in the power tools that have the switch on invites accidents.ols. Such preventive safety measures reduce the risk of starting the power tool accidentally.

- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

POWER TOOL USE AND CARE

- a) 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.
- b) 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.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts, breakage or parts and any other condition that may affect the power tools operations. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

SERVICE

- a) Tool service must be performed only by qualified personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.
- b) When servicing a tool, use only identical replacement parts. This will ensure that the safety of the power tool is maintained.






ADDITIONAL SAFETY INSTRUCTIONS FOR ROTARY TOOLS

1. Accessories must be rated for at least the speed recommended on the tool nameplate. Wheels and other accessories running over rated speed can fly apart and cause injury.
2. Do not operate the flexible shaft with sharp bend. Over-bending the shaft can generate excessive heat on the jacket or hand piece. The recommended minimum is 6" radius.
3. After changing the bits or making any adjustments, make sure the collet nut and any other adjustment devices are securely tightened. Loose adjustment device can unexpectedly shift, causing loss of control, loose rotating components will be violently thrown.
4. Allow brushes to run at operating speed for at least one minute before using wheel. During this time no one is to stand in front or in line with the brush. Loose bristles or wires will be discharged during the run-in time. Wire and bristle brushes must never be operated at speeds greater than 15,000 min. Direct the discharge of the spinning wire brush away from you.
5. Do not use a grinding wheel that may be damaged. Inspect all grinding wheels and tips before use. Fragments from a wheel that bursts during operation will fly away at great velocity possibly striking you or bystanders.
6. Use clamps to support workpiece whenever practical. Never hold a small workpiece in one hand and the tool in the other hand while in use. Clamping a small workpiece allows you to use both hands to control the tool. Allow for sufficient space, at least 6" , between your hand and the spinning bit. When using the steel saws, cutoff wheels, high speed cutters or tungsten carbide cutters, always have the work securely clamped. Never attempt to hold work with one hand while using any of these accessories.
7. Never start the tool when the bit is engaged in the material. The bit cutting edge may grab the material causing loss of control of the cutter.
8. If the workpiece or bit becomes jammed or bogged down, turn the tool " OFF " by the switch.

Wait for moving parts to stop and unplug the tool, then work to free the jammed material.
9. Do not grind or sand near flammable materials. Sparks from the wheel could ignite these materials.

IMPORTANT NOTE

SYMBOLS

-  Read the manual
-  Warning
-  Wearing protection
-  Double insulation
-  WEEE marking

RECOMMENDATIONS ON ACCESSORY/ MATERIAL/ OPERATING SPEED

Your Rotary Tool is designed to accept standard rotary tool accessories, if you purchase accessories other than from TEH, always make sure that the maximum rpm of the accessory is suitable for the maximum speed of your tool.

Grinding stones

When using a grinding stone for the first time, use the dressing stone to balance it and even to give it a special shape if desired. Grinding stones cover virtually every possible kind of grinding application from deburring, sharpening, smoothing...etc.



Grinding Stones	
Material	Speed Setting
Stone	1
Steel	5
Aluminum, Brass	2
Plastic	1

Felt/Polishing Wheels

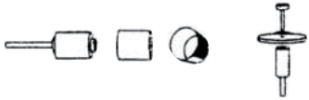
The felt/polishing wheels need to be screwed onto the screw mandrel. These felt/polishing wheels must only be operated at lower speeds and are largely used to bring metal surfaces to a smooth finish.



Felt/Polishing Wheels	
Material	Speed Setting
Steel	5
Aluminum, Brass	3
Plastic	5

Sanding Sleeves and Discs

These sleeves and discs can be used for any small sanding need you may have. The drum sander (drum and sanding sleeve) can shape wood and sand inside curves or other difficult places.



Sanding Sleeves and Discs	
Material	Speed Setting
Wood	6
Steel	1
Aluminum, Brass	3
Plastic	1

Stainless steel Brush and Bristle Brushes

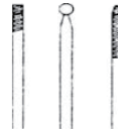
Important note: All brushing applications require lower speeds to avoid wire discharge from the holder. Stainless steel brushes perform well on aluminum, stainless steel and other metals, without leaving "after-rust". Bristle brushes are good for general purpose cleaning.



Brushes	
Material	Speed Setting
Stone	2
Aluminum	2

High Speed Cutter, Engraving Cutters and Drill Bits

High speed cutters are used in carving, cutting and slotting wood, plastics and soft metals. Engraving cutters are used for intricate work on ceramics, wood carvings and jewelry and drill bits are used to punch holes in just about any type of wood and wood composites. Different sized drill bits will require the appropriate collet to be used.



Cutter and Drill Bits	
Material	Speed Setting
Stone	6
Steel	3
Aluminum, Brass	6
Plastic	1

Abrasive Discs

These abrasive discs are used for slicing, cutting off and similar operations.



Abrasive Discs	
Material	Speed Setting
Steel	5
Aluminum, Brass	3
Plastic	5

OPERATION INSTRUCTIONS

WARNING

Always unplug Rotary Tool before changing accessories, changing collets or servicing.

ATTACHMENT, COLLET AND COLLET NUT ASSEMBLY

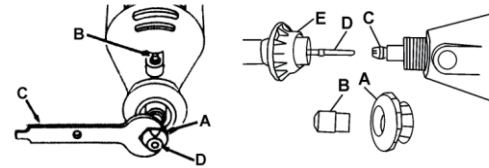
CAUTION! Always use the collet which matches the shank size of the accessory you plan to use. Never force a larger diameter shank into a smaller sized collet.

Collet Nut-To loosen the collet nut (A), press shaft lock button (B) and rotate the tool shaft by hand until the lock engages the shaft preventing further rotation.

WARNING! Do not engage shaft lock button while the tool is running.

With the shaft lock engaged, use the collet nut wrench (C) to loosen it if necessary. The collet nut must be loosely threaded on when inserting an accessory. Change accessories by inserting the new one into the collet (D) as far as possible to minimize runout and unbalance. With the shaft lock engaged, finger tighten the collet nut until the accessory shank is gripped by the collet. Avoid excessive tightening of the collet nut when there is not accessory inserted.

To install a different collet, remove the collet nut and the collet already in place. Insert the unslotted end of the collet in the hole at the end of the tools' shaft. Replace collet nut on the shaft and tighten.



ATTACHING THE FLEX SHAFT

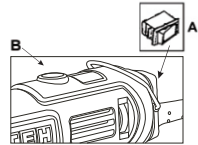
Unscrew the housing nut (A) and remove it. The collet nut (B) and the 1/8" collet (C) must be kept in place. Mount the Flex Shaft by placing the inner shaft (D) into the tools' chuck, secure it in place by tightening the collet nut. Then using the Flex Shaft housing nut (E), fix the Flex Shaft to the rotary tool by turning it clockwise.

OPERATION

WARNING

Before operating, make sure you have read all previous safety precautions before operating your rotary tool.

Hold the rotary tool in your hand and plug the power cord into the wall outlet. Switch on the rotary tool by pressing the ON/OFF switch (A). Then a speed setting must be selected using the variable speed thumb dial (B). The accessory and job to do will determine the speed setting to use.



SPEEDS OPERATING

1) Set the variable speed thumb dial to a speed to fit the job. To achieve the best results when working with different materials, the speed of the rotary tool should be adjusted.

- 2) To select the right speed for each job, we suggest you use a practice piece of material. Vary speed to find the best speed for the accessory you are using and the job to be done.
- 3) Needs for slower speeds-certain materials (some plastics and precious metals for example) require a relatively slow speed because at high speed the friction of the accessory generates heat and may cause damage to the material. Slow speeds usually are best for polishing operations using the felt polishing accessories. Important note: All brushing applications require lower speeds to avoid wire discharge from the holder.
- 4) Higher speeds are better for carving, cutting, routing, shaping, cutting dadoes or rabbets in wood. Hardwoods, metals and glass require high speed operation, and drilling should also be done at high speeds.

MAINTENANCE

WARNING ⚠

Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious injury and will void warranty.

CLEANING

To avoid accidents always disconnect the tool from the power source before cleaning or performing any maintenance. The tool is most effectively cleaned using compressed air. Ventilation openings and switch levers must be kept clean and free of foreign matter.

Certain cleaning agents and solvents damage plastic parts, such as gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents which contain ammonia.

CARBON BRUSHES

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend that the brushes be inspected after 50-60 hours of use.

If the carbon brushes are less than 1/8" long, replacement brushes are needed.

LUBRICATION

Your rotary tool requires no additional lubrication.

WARRANTY CARD

Dear customers, the warranty service for purchasing TEH products is as follows:

Under normal use, the wear of the rotor steering gear is less than 0.2 mm within three months from the date of purchase. It is guaranteed that the damage is caused by the quality of the tool.

The following conditions occur during the warranty period, not covered by the warranty:

- Any valid legal document (single ticket) certifying the date of purchase
- Any damage caused by natural wear and overload
- Any damage caused by the use of low-priced inferior accessories
- Any damage caused by improper carrying, transportation or storage
- Any product that has been opened, repaired, replaced, or modified by itself
- Any damage caused by misuse, beyond the scope of use of the tool, and failure to use and maintain in accordance with the instructions.

 ladies/gentlemen : _____ employer : _____

contact number : _____ fax number : _____

contact address : _____

warranty record : _____

post code : _____

IMPORTANT NOTE

- The invoice and warranty card must be presented at the time of warranty.
- The fuselage number on the invoice is the same as the fuselage number on the warranty card.
- Once this warranty card is issued, if it is lost, it will not be reissued. Please keep it properly.

Note: The company reserves the right to amend the above provisions and has the final interpretation right in the case that the warranty service does not violate national laws.