



# OPERATOR'S MANUAL

## Variable Speed Rotary Tool

Model # 2307



### **⚠ IMPORTANT:**

Your new tool has been engineered and manufactured to WEN's® high standards for dependability, ease of operation, and operator safety. Properly cared for, it will give 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 only for what it is intended, you will enjoy years of safe, reliable service.



### Product Questions or Technical Support? Please Feel Free to Contact Us!



WenProducts.com



800- 232-1195 M-F 8-5 CST



techsupport@wenproducts.com

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## **TECHNICAL DATA**

### ROTARY TOOL KIT

MODEL:	2307
RATING:	120V, 60Hz, AC only
INPUT:	1.0AMP
NO LOAD SPEED:	8,000-30,000 rpm
COLLET SIZE:	Supplied with 3/32" & 1/8" collets
WEIGHT:	1.1 lbs.

## **RULES FOR SAFE OPERATION**

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

Symbol	Meaning
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**Safety Alert Symbol:**

Indicates danger, warning, or caution, may be used in conjunction with other symbols or pictographs. Always follow the safety precautions to reduce the risk of fire, electric shock and personal injury.

Note:	Advises you of information or instructions vital to the operation or maintenance of the equipment
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### **IMPORTANT**

Servicing requires extreme care and knowledge and should be performed only by a qualified service technician. For service we suggest you return the tool to WEN<sup>®</sup> PRODUCTS a division of Great Lakes Technologies, LLC for repair. When servicing, use only identical WEN<sup>®</sup> replacement parts.



### **WARNING:**

Do not attempt to operate this tool until you have read thoroughly and understand completely all instructions, safety rules, etc...contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury. Save this operator's manual and review frequently for continuing safe operation and instructing others who may use this tool.

Safe operation of this power tool requires that you read and understand this operator's manual and all labels affixed to the tool. Safety is a combination of common sense, staying alert, and knowing how your tool works.

## **GENERAL INSTRUCTIONS FOR ALL POWER TOOLS**

**READ ALL INSTRUCTIONS!!!**

- Know your power tool. Read the operator's manual carefully. Learn the application and limitations as well as specific potential hazards related to this tool.
- Keep guards in place and in working order. Never operate the tool with any guard or cover removed. Make sure all guards are operating properly before each use.
- Remove adjusting keys & wrenches. Form a habit of checking to see keys and adjusting wrenches are removed from tool before turning it on.
- Keep work area clean. Cluttered work areas and work benches invite accidents.
- Do not use in dangerous environments. Do not use power tools near gasoline or other flammable liquids, in damp or wet locations or expose them to rain. Keep work area well lighted.

- Keep children and visitors away. All visitors should wear ANSI-Z87.1 approved safety glasses and be kept a safe distance from work area.
- Make workshop childproof with padlocks, master switches, or by removing starter keys.
- Don't force the tool. It will do the job better and safer at the rate for which it was designed.
- Use the right tool. Do not force the tool or attachment to do a job for which it was not designed.
- Wear proper apparel. Do not wear loose clothing, neckties, or jewelry that can get caught in the tool's moving parts and cause personal injury. Non-slip footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
- Always wear ANSI-Z87.1 approved safety glasses with side shields. Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses.
- Secure work. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate the tool.
- Do not overreach. Keep proper footing and balance at all times.
- Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- Disconnect all tools. When not in use, before servicing, or when changing attachments, blades, bits, cutters, etc..., all tools should be disconnected from power source.
- Reduce the risk of unintentional starting. Be sure switch is off when plugging in.
- Use recommended accessories. Consult the operator's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- Never stand on tool. Serious injury could occur if the tool is tipped or if the blade is unintentionally contacted.
- Direction of feed. Feed work into a blade or cutter against the direction or rotation of the blade or cutter only
- Never leave tool running unattended. Turn power off. Don't leave tool until it comes to a complete stop.
- Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding or moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged must be properly repaired or replaced by an authorized service center to avoid risk of personal injury.
- Protect your hearing. Wear hearing protection during extended periods of operation.
- Keep tools dry, clean, and free from oil and grease. Always use a clean cloth when cleaning. Never use brake fluids, gasoline, petroleum-based products, or any solvents to clean tool.
- PROTECT YOUR LUNGS. Wear a face or dust mask if the operation is dusty.



**WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and 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, and work with approved safety equipment, such as those dust mask that are specially designed to filter out microscopic particles.

- Guard against electrical shock by preventing body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
- Inspect tool cords and extension cords periodically and, if damaged, have repaired by a qualified service technician. Stay constantly aware of cord location and keep it away from the rotating wheel.
- Never use in an explosive atmosphere. Normal sparking of the motor could ignite fumes.
- Use only outdoor extension cords with approved ground connection that are intended for use outdoors and so marked.
- Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the blade. ALWAYS make sure you have good balance.
- Allow the motor to come up to full speed before working.
- Do not use tool if switch does not turn it on and off. Have defective switches replaced by an authorized service center.
- Replacement parts. All repairs, whether electrical or mechanical, should be made by a qualified service technician at an authorized service center.



**WARNING:** when servicing use only identical WEN<sup>®</sup> replacement parts. Use of any other parts may create a hazard or cause product damage



**DO NOT OPERATE THIS TOOL WHILE UNDER THE INFLUENCE OF DRUGS, ALCOHOL OR ANY MEDICATION THAT MAY IMPAIR YOUR JUDGMENT OR CONTROL!**

- Stay alert and exercise control. Watch what you are doing and use common sense. DO NOT operate tool when you are tired. DO NOT RUSH!
- Make sure work area has ample lighting to see the work and that no obstructions will interfere with safe operation BEFORE performing any work using your saw.
- Save these instructions. Refer to them frequently and use them to instruct other users. If you loan someone this tool, loan them these instructions also.
- Use the proper extension cord. Make sure your extension cord is in good condition. 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. A wire gauge size (A.W.G.) of at least 16 is recommended for an extension cord 25 feet or less in length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
- Don't abuse cord. Never carry tool by the cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.

## **EXTENSION CORDS**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current and reduces the risk of electrical shock. Tools equipped with an electrical cord having an equipment-grounding conductor must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided in any way. If the plug does not fit the outlet, have the proper outlet installed by a qualified electrician.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out; use the table below to determine the minimum wire size (A.W.G.) extension cord.

Use only three (3) wire extension cords that have three (3) prong grounding plugs, and three (3) pole receptacles that accept the tool's plug.

<b>AMERICAN WIRE GAUGE RATING CHART</b>								
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EXTENSION CORD LENGTH (FEET)	25	50	75	100	125	150	175	200
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AMPS	AWG							
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0 to 10.0	18	18	16	16	14	14	12	12
10.1 to 13.0	16	16	14	14	14	12	12	12
13.1 to 15	14	12	12	12	12	12	12	NA
15 to 18	14	12	12	12	12	12	NA	NA

Class II construction double insulated. This product must not be connected to earth.

### **SPECIFIC SAFETY RULES FOR ROTARY TOOL KIT**

1. Check the work piece for any cracks, knots, nails or other obstructions before commencing operation.
2. Never press the locking pin when the rotary tool is running.
3. Do not cut any size work piece that is beyond the tool's capacity.
4. Always grip the tool firmly.
5. Always secure the work piece wherever possible.
6. Always use safety spectacles, a face mask and hearing protection.
7. Ensure the tool is clear of the work piece before turning on.
8. Never touch the moving parts by hand.
9. Check the position of power cables when drilling into walls or floors.
10. Do not remove the attachment from the tool until it has completely stopped.
11. Do not touch the attachment after operation, it will be very hot. Allow it to cool down before removing it.
12. Do not operate the tool in wet or damp conditions.
13. Do not use the tool if
  - : The on/off switch is faulty.
  - : The plug or cable is damaged.
  - : There is excessive sparking through the brush or spark bridges in the collector.
  - : Smoke or bad odours is produced, caused by burnt insulating materials.

## LIST OF ACCESSORIES (100 pieces)

- Bit changing spanner wrench
- 2 felt polishing wheels
- 2 high speed cutters
- 10 grinding stones
- 54 sanding discs
- 1 dressing stone
- 20 cut-off wheels
- 4 sander bands
- 1 drum sander
- 2 mandrels
- 2 drill bits
- 2 collets

## GETTING TO KNOW THE ROTARY TOOL KIT

The rotary tool can be used for drilling, milling, grinding and polishing. In addition, it can be used for engraving, cutting and removing rust. It can be used on most metals, glass, wood and ceramics.

### **Operating the ON/OFF Switch**

1. The ON/OFF switch is located on the underside of the handle. It has two setting “O” (OFF) and “I” (On).
2. To switch on the tool, press the switch into “I” (ON) position. There is no need to hold it down as it will automatically lock in position.
3. To switch the tool off, simply press the switch back into the “O” (OFF) position.
4. Always ensure that the switch is in the OFF position before connecting the tool to the mains. Always disconnect the tool from the mains when not in use.

### **Adjusting the Speed**

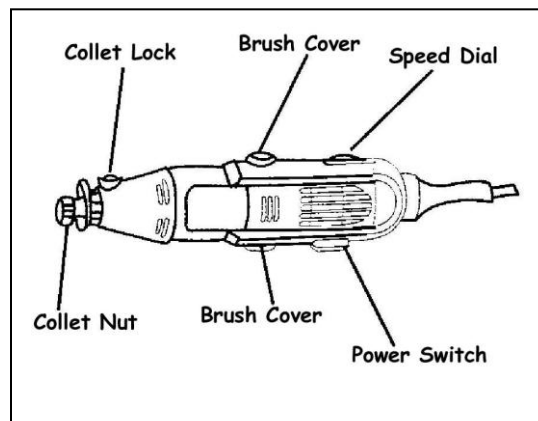
1. The tool has a range of speed settings from 8,000 to 30,000 rpm. The speed can be adjusted using the speed control wheel located on the top of the handle.
2. There are some signs, ‘1’ ‘2’ ‘3’- ‘6’ and ‘MAX’ marked on the wheel. To increase speed, turn the wheel towards the ‘MAX’ sign. To reduce speed, turn the wheel towards the ‘1’ sign.
3. As a guide, use low speed for larger attachments and higher speed for small attachments.
4. Do not force the tool. Best performance is achieved by an even speed, not high pressure.

- **High Speed Uses:**

Higher speeds are better for carving, cutting, routing shaping. Hardwoods, metals and glass require high speed operation and drilling should also be done at high speeds.



Warning: Do not use grinding wheels over 1” in diameter. The tool’s high speed can cause larger wheels to fly apart and could cause injury.



- Low Speed uses:

Certain materials (some plastics) require a relatively slow speed because at high speed the friction of the tool generates heat and causes the plastic to melt. Slow speeds usually are best for polishing operations employing the felt polishing accessories. They may also be for working on delicate projects.

**Fitting the Attachments**

1. Before fitting the attachments, ensure that the tool is unplugged from the mains.
2. Turn the clamping jaw nut slowly, whilst pressing the locking pin located in the jaw end of the tool.
3. The locking pin will engage, and prevent the jaw from turning.
4. Keeping the locking pin depressed, turn the clamping jaw nut to open the clamping jaw.
5. Insert the required tool into the jaw.
6. Clamp all attachments as short as possible. Shafts that stick out too far may bend or cause the tool to vibrate.
7. Tighten the clamping jaw nut again depressing the locking pin. Ensure that the attachment is firmly secured in the jaws.

**Changing the Collet**

1. Before changing the collet, ensure that the tool is unplugged from the mains.
2. Turn the clamping jaw nut slowly, whilst pressing the locking pin located in the jaw end of the tool.
3. The locking pin will engage, and prevent the jaw from turning.
4. Keeping the locking pin depressed, turn the clamping jaw nut continuously until the nut is completely unscrewed and detaches from the jaw.
5. Remove the collet from the holder, and replace it with the new collet. Dispose of the old collet if it is broken or damaged.
6. Replace the clamping jaw nut and retighten.

**USING THE ATTACHMENTS**

There are a variety of attachments supplied with this tool. Some of these come ready to use and can be fitted to the tool without any further assembly. However, others require fitting to an arbor before they can be used.

Attachment	Arbor Required?	Uses
Drill Bits-3/32" & 1/8"	None	Drilling
Assorted Grinding Bits	None	Grinding, Milling
Engraving Bit	None	Engraving
Burr Bau Bit	None	Engraving
Abrasive Cutting Discs	Sanding Disc Arbor	Cutting
Sanding Drums-1/2" diameter	Sanding Disc Arbor	Sanding
Sanding Discs-7/8" diameter	Sanding Disc Arbor	Sanding
Polishing Wheels-1/2" & 1"	Polishing Wheel Arbor	Polishing

The attachments supplied may vary from those listed above.



### **Sanding Disc Arbor**

1. To fit a disc to the Sanding Disc Arbor, unscrew the fitting screw.
2. Remove the screw and washer.
3. Place the required disc over the end of the arbor.
4. Replace the washer and screw.
5. Tighten the screw until the disc is firmly secured.
6. Fit the arbor to the tool as described in “Fitting the Attachments”.

### **Sanding Drum Arbor**

1. To fit a disc to the Sanding Drum Arbor, unscrew the fitting screw.
2. Remove the screw, washer and rubber drum holder.
3. Push the required Sanding Drum on to the rubber drum holder.
4. Ensure that the drum is completely pushed on to the holder so that edges of the drum and holder are aligned.
5. Replace the drum holder on the arbor.
6. Replace the washer and screw.
7. Tighten the screw until the disc is firmly secured.
8. Fit the arbor to the tool as described in “Fitting the Attachments”.

### **Polishing Wheel Arbor**

1. Push the threaded point of the Polishing Wheel Arbor into the required polishing wheel.
2. Twist the arbor anticlockwise to secure the polishing wheel firmly on to the arbor.
3. Fit the arbor to the tool as described in “Fitting the Attachments”.
4. Occasionally check the wheel during use to ensure it is still secure.

## **USING THE ROTARY TOOL KIT**

1. Always wear face mask, safety spectacles and hearing protection when using the tool.
2. Always inspect the tool and attachments for damage before use. Never use broken grinding discs or attachments with bent shafts – Discard immediately.
3. For milling or engraving, hold the tool like a pen to allow better control. Ensure the ventilation slots are kept clear to prevent overheating.
4. For heavier work such as drilling, hold the tool like a hammer.
5. Use the correct attachment for the job.
6. The abrasive stone supplied can be used to sharpen the engraving bit, if required.
7. This tool is supplied with a 1/8" collet (fitted already on the tool) and a 3/32" spare collet. Always select the correct size of collet.

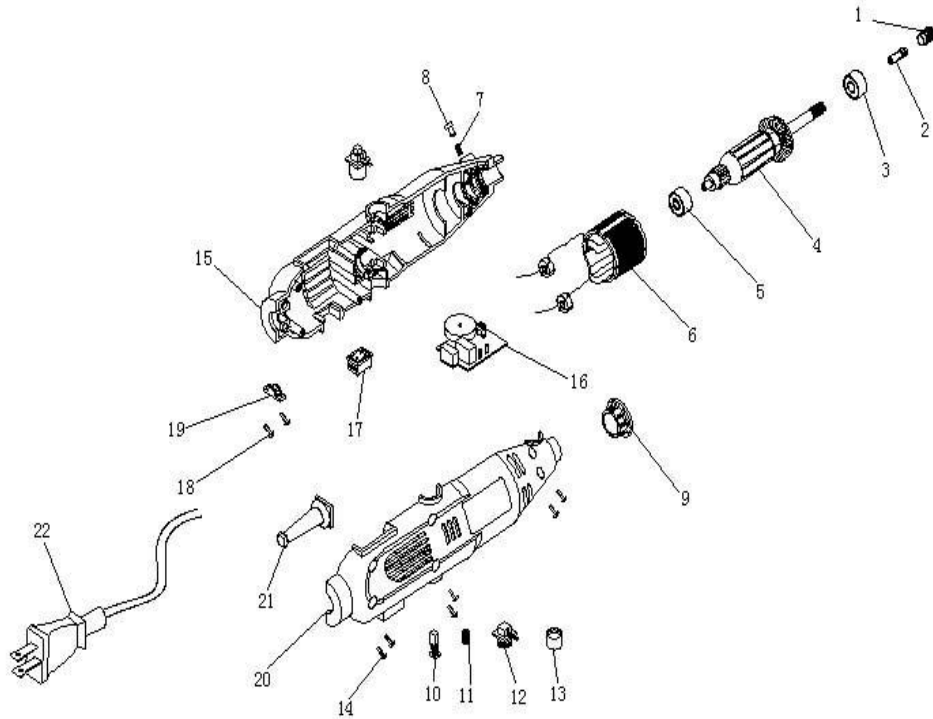
## **MAINTENANCE**



**Warning:** Remove the plug from the socket before carrying out any adjustments, servicing or maintenance.

- Never use water or other liquids to clean the electrical parts of the tool.
- Always clean the tool after use.
- Ensure that the ventilation slots do not become blocked to prevent overheating.
- Remove the dispose of damaged attachments.
- Check that the locking jaw is correctly aligned.

# EXPLODED VIEW AND PARTS LIST



Part#	Stock #	Description	Qty
1	2307-001	COLLET NUT	1
2	2307-002	BRASS COLLET	1
3	2307-003	BEARING 626zz	1
4	2307-004	ROTOR	1
5	2307-005	BEARING 698zz	1
6	2307-006	STATOR	1
7	2307-007	PREVENT SPRING	1
8	2307-008	SPINDLE LOCK BUTTON	1
9	2307-009	LOCKING SLEEVE	1
10	2307-010	BRUSH	2
11	2307-011	BRUSH SPRING	2
12	2307-012	BRUSH BASE	2
13	2307-013	BRUSH CAP	2
14	2307-014	SCREW	6
15	2307-015	RIGHT HOUSING	1
16	2307-016	CIRCUIT BOARD	1
17	2307-017	SWITCH	1
18	2307-018	SCREW	2
19	2307-019	PLACE BOARD	1
20	2307-020	LEFT HOUSING	1
21	2307-021	CORD SLEEVE	1
22	2307-022	POWER CORD	1

## **LIMITED ONE YEAR WARRANTY**

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

LIMITED WARRANTY OF WEN CONSUMER POWER TOOLS 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 for a period of one (1) year from date of purchase. Ninety days for all WEN products, if the tool is used for professional use.

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 repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, please contact us at 1-800-232-1195 or write to us at WEN Products, 501 Davis Road, Elgin, IL 60123. To acquire service, you will have to provide proof of purchase and may be asked to ship the tool back to us freight prepaid.

THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS SUCH AS CIRCULAR SAW BLADES, DRILL BITS, ROUTER BITS, JIGSAW BLADES, SANDING BELTS, GRINDING WHEELS AND OTHER RELATED ITEMS.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE. SOME STATES IN THE U.S., 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 PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNUMATIC TOOLS 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.