

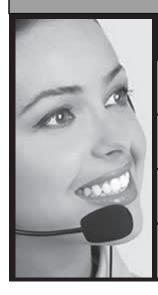
# Variable Speed Rotary Tool



Model # 2307 bit.ly/WENvideo

# **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 intended purpose, you will enjoy years of safe, reliable service.



# **NEED HELP? CONTACT US!**

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



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



techsupport@wenproducts.com



WENPRODUCTS.COM

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# **Product Specifications**

Model Number: 2307

Motor: 120 V AC, 60 Hz, 1A, AC only

Motor Speed: 8000-30000 RPM

Collet Size: Supplied with 3/32" & 1/8" Collets

Weight: 1.9 lbs

#### GENERAL SAFETY RULES

You know the drill. The purpose of the following safety symbols is to attract your attention to possible dangers. We don't want any of our beloved WEN customers accidentally injuring themselves. The safety symbols and the explanations with them deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. These instructions and warnings are not substitutes for proper accident prevention measures.

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

**NOTE:** Advising you of information or instructions is vital to the operation and maintenance of the equipment.

**IMPORTANT:** Servicing requires extreme care and knowledge and should be performed only by a qualified service technician.



**WARNING:** Do not attempt to operate this tool until you have thoroughly read and understood all instructions, safety rules, etc...contained in this manual. Failure to comply can result in accidents involving fire, electric shock, or serious personal injury.

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, knowing how your item works, and not doing dumb stuff on purpose. **SAVE THESE SAFETY INSTRUCTIONS.** 



**WARNING:** To avoid mistakes and serious injury, do not plug the battery of your tool until the following steps have been read and understood.

- 1. READ and become familiar with this entire instruction manual. LEARN the tool's applications, limitations, and possible hazards.
- 2. AVOID DANGEROUS CONDITIONS. Do not use power tools in wet or damp areas or expose them to rain. Keep work areas well lit.
- 3. DO NOT use power tools in the presence of flammable liquids or gases.
- 4. ALWAYS keep your work area clean, uncluttered, and well lit. DO NOT work on floor surfaces that are slippery with sawdust or wax.
- 5. KEEP BYSTANDERS AT A SAFE DISTANCE from the work area, especially when the tool is operating. NEVER allow children or pets near the tool.
- 6. DO NOT FORCE THE TOOL to do a job for which it was not designed.
- 7. DRESS FOR SAFETY. Do not wear loose clothing, gloves, neckties, or jewelry (rings, watches, etc.) when operating the tool. Inappropriate clothing and items can get caught in moving parts and draw you in. ALWAYS wear non-slip footwear and tie back long hair.

## GENERAL SAFETY RULES

8. WEAR A FACE MASK OR DUST MASK to fight the dust produced during operation.



**WARNING:** Dust generated from certain materials can be hazardous to your health. Always operate the tool in a well-ventilated area and provide for proper dust removal. Use dust collection systems whenever possible.

- 9. ALWAYS remove the power cord plug from the electrical outlet when making adjustments, changing parts, cleaning, or working on the tool.
- 10. KEEP GUARDS IN PLACE AND IN WORKING ORDER.
- 11. AVOID ACCIDENTAL START-UPS.
- 12. REMOVE ADJUSTMENT TOOLS. Always make sure all adjustment tools are removed from the drill before turning it on.
- 13. NEVER LEAVE A RUNNING TOOL UNATTENDED. Turn the power switch to OFF. Do not leave the tool until it has come to a complete stop.
- 14. NEVER STAND ON A TOOL. Serious injury could result if the tool tips or is accidentally hit. DO NOT store anything above or near the tool.
- 15. DO NOT OVERREACH. Keep proper footing and balance at all times. Wear oil-resistant rubber-soled footwear. Keep the floor clear of oil, scrap, and other debris.
- 16. MAINTAIN TOOLS PROPERLY. ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.
- 17. CHECK FOR DAMAGED PARTS. 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.
- 18. MAKE THE WORKSHOP CHILDPROOF. Use padlocks and master switches and ALWAYS remove starter keys.
- 19. DO NOT operate the tool if you are under the influence of drugs, alcohol, or medication that may affect your ability to properly use the tool.
- 20. USE SAFETY GOGGLES AT ALL TIMES that comply with ANSI Z87.1. Normal safety glasses only have impact resistant lenses and are not designed for safety. Wear a face or dust mask when working in a dusty environment. Use ear protection such as plugs or muffs during extended periods of operation.

## ROTARY TOOL SAFETY

- 1. CHECK THE WORKPIECE for any cracks, bumps, nails or obstructions before commencing operation.
- 2. NEVER press in the locking pin when the rotary tool is running.
- 3. DO NOT cut any workpiece larger than the rotary tool's capacity. Always maintain a firm grip on the rotary tool.
- 4. SECURE THE WORKPIECE whenever possible to prevent wobble, damage to the workpiece, and personal injury.
- 5. ALWAYS USE safety goggles, a dust mask and hearing protection when using the rotary tool.
- 6. BEFORE TURNING ON THE ROTARY TOOL, ensure that it is completely clear of the workpiece.
- 7. NEVER touch any moving parts by hand.
- 8. CHECK THE POSITION of all electrical wiring and plumbing equipment when drilling into walls, floors or ceilings.
- 9. DO NOT remove the attachment from the tool until it has completely stopped rotating.
- 10. DO NOT touch the attachment after operation, as it may be very hot. Allow time for the attachment to cool before removing it.
- 11. DO NOT operate the tool in wet or damp conditions. Doing so significantly increases the risk of electrical shock and other hazards.
- 12. DO NOT USE the tool if the ON/OFF switch is faulty, the plug or cable is damaged, or the tool produces sparks, smoke, or unpleasant odors.

## **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.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

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.

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

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.



**WARNING:** This tool is for indoor use only. Do not expose to rain or use in damp locations. Guidelines for using extension cords

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. The table below shows the correct size to be used according to cord length and nameplate ampere rating. When in doubt, use a heavier cord. The smaller the gauge number, the heavier the cord.

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.

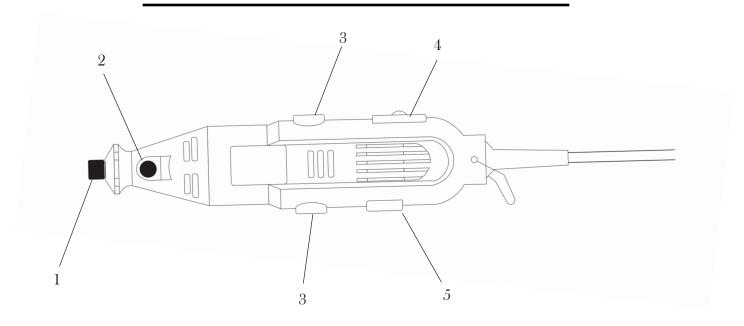
Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A 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.



**WARNING:** This tool must be grounded while in use to protect the operator from electric shock.

# KNOW YOUR ROTARY TOOL



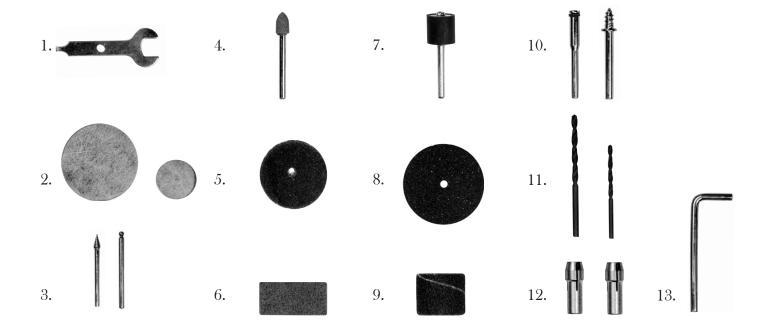
#### **COMPONENTS**

- 1. Collet Nut
- 2. Collet Lock
- 3. Brush Cover (2)
- 4. Speed Dial
- 5. Power Switch

#### 100-PIECE ACCESSORY KIT

- 1. Bit Changing Spanner Wrench
- 2. Felt Polishing Wheels (2)
- 3. High Speed Cutters (2)
- 4. Grinding Stones (10)
- 5. Sanding Discs (54)
- 6. Dressing Stone

- 7. Dum Sander
- 8. Cut-off Wheels (20)
- 9. Sander Bands (4)
- 10. Mandrels (2)
- 11. Drill Bits (2)
- 12. Collets (2)
- 13. Hex wrench



### **ASSEMBLY**

#### ATTACHING FLEX SHAFT:

**NOTE:** Flex Shaft attachment is not included for this model. If you would like to purchase the attachment, please visit www.wenproducts.com.

#### FOR VIDEO INSTRUCTIONS VISIT: http://bit.ly/wenflexshaft

- 1. Unscrew the black threaded collar at the end of the rotary tool.
- 2. Grab the flex shaft and slide the inner core out about 2-3".
- 3. Loosen the collet nut by pressing down on the collet lock button and unscrewing the collet nut.
- 4. Insert the inner core of the flex shaft to the collet nut, press down on the collet lock button, and tighten the collet nut. Use the included bit changing spanner wrench to ensure that the flex shaft is properly tightened and secured.
- 5. Now that the inner core is secured to the collet nut, slide down the shaft adapter, and then screw it in place onto the rotary tool.
- 6. Once secured, take the other end of the flex shaft and insert the hex tool into the hole on the side to prevent the collet from rotating.
- 7. Unscrew the collet until the end is loose enough for the bit to be attached.
- 8. Insert the bit and tighten the collet. Use the bit changing spanner wrench to ensure that the bit is properly tightened and secured to the collet. Make sure to remove the hex tool from the rotary tool before turning it on.

















#### **OPERATION**

Read and thoroughly understand all instructions and safety information before operating this rotary tool. Failure to do so may cause serious injury or death. Do not allow anyone to operate this tool who has not read this manual. As with all power equipment, a rotary tool can be dangerous if assembled or used improperly. Do not operate this power tool if you have doubts or questions concerning safe operation. Call our customer service department at 1-800-232-1195 to address these concerns.



**WARNING:** Always wear safety glasses, safety gloves, safety shoes and suitable work clothing when operating this rotary tool. Do not wear jewelry, neckties or other loose clothing which could get caught in moving parts.



**WARNING:** Keep hands and feet clear of the arbor and attachment at all times. Do not start or operate this machine in the presence of flammable liquids or gases.

Before operating, select a suitable work area.

Ensure you are wearing all appropriate safety equipment, including a face mask, safety goggles, and hearing protection. Inspect the tool for any damage before use. Immediately discard any accessories with bent shafts or other significant damage.

For milling and engraving operations, holding the rotary tool like a pen will yield better control. Be certain that the ventilation slots are not obstructed; failure to keep them clear may cause the tool to overheat.

For heavier work like drilling, holding the tool like a hammer will yield better results. Use the correct attachment for the job, and use the abrasive stone to sharpen or shape any attachments dulled by repeated use.

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 for the operation.

#### **OPERATION**

#### **OPERATING THE ON/OFF SWITCH:**

- 1. The power switch is located on the underside of the handle. It has O (OFF) and I (ON) settings. To switch on the tool, flip it to I (the ON position).
- 2. To switch off the tool, simply flip the switch to O (the OFF position). Be certain the tool is in the OFF position when not in use and during all maintenance activities.

#### ADJUST THE SPEED OF THE ROTARY TOOL:

Numbers on the rotational speed wheel (#1) are used to indicate the direction in which one should spin the adjustment wheel to achieve the desired RPM. To increase speed, turn the wheel right, in the direction of the MAX sign. To decrease speed, spin the wheel left toward the 1 sign.

Difficult workpieces and jobs (drilling, engraving glass, cutting metal, etc.) generally are performed more efficiently at higher RPMS. Other projects, such as thermoplastics, or delicate polishing require slow rotary speeds. As a general rule, larger attachments should be used at a lower speed. DO NOT use attachments larger than 1", as they may fly apart, causing injury.

#### FITTING THE ATTACHMENTS:

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

#### ATTACHING CUT-OFF WHEELS AND SANDING DISCS TO SMALL SCREW MANDREL:

Unscrew the top part of the small screw mandrel and expose the small screw with the two red rings attached. Slide one of the red rings off and insert the cut-off wheel or sanding disc onto the small screw. Make sure the rings are on both sides of the wheel/disc and then screw it back onto the mandrel. Now that the bit is all set up, it is ready to be attached to the rotary tool and ready to be used.

#### INSERTING OR REPLACING A TOOL OR COLLET:

1. Press the collet lock button and hold it down.

2. Rotate the collet nut until the lock engages.

3. Loosen the collet nut using the bit-changing spanner wrench and remove it from the tool. Once it has been removed, you may release the collet lock.

Suggested Speed	Materials		
1 to 3	Plastics and Low-Melting Point Materials		
4 to 5	Stone and ceramics		
5	Softwood and metals		
6 to 7	Hardwood		
Max	Steel		

- 4. Insert the tool of your choice through the center of the collet nut before inserting it into the collet that matches the bit's diameter.
- 5. Press the collet lock again. Insert the collet into the end of the rotary tool. Hold it in place by tightening the collet nut using the bit-changing spanner wrench.

# **OPERATION**

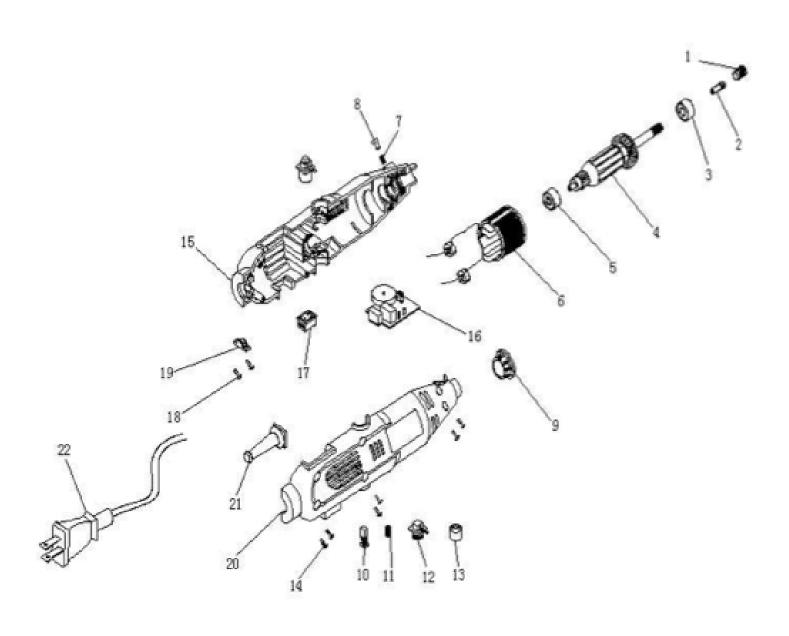
ACCESSORY	EXPLANATION	APPLICATION	
Felt Polishing Wheel	Finishing processes for smoothing a workpiece's surface.	Cleans, polishes & buffs metal, wood, and plastic. Attached to screw mandrel.	
High Speed Cutter	Fast, lightweight cuts for carving and engraving.	Carves, cuts, and slots in wood, plastics and soft metals such as aluminum, copper, and brass.	
Grinding Stone	Stone composed of an abrasive compound and used for various grinding (abrasive cutting) and abrasive machining operations.	Grinds, polishes, and deburrs ferrous metals such as Iron.	
Sanding Disc	Abrasive grain adhered onto the surface of a cloth.	Material removal and resurfacing. Attached to small screw mandrel	
Dressing Stone	A solid block of extremely hard abrasive.	Brings new life back into old worn out grinding stones by using the bit against it.	
Drum Sander	Reduces the tedium of hand sanding, speeds up the sanding process, and produces more consistent results.	Fine surfacing or sanding wood.	
Cut-Off Wheel	Self-sharpening wheels that are thin in width and often have radial fibers reinforcing them.	Fast and comfortable cut used ideally in metal fabrication, matienence repair, and general industrial applications. Attached to small screw mandrel	
Sander Band	Band that is used with the Drum Sander and slides over the top of the bit.	Remvoes rust fom metal; shapes rubber surfaces, and smooths wood and fiber glass. Attached to Drum Sander.	
Mandrels	A mandrel is a shank with a threaded or screw head, which are required when you use polishing accessories, cutting wheels, sanding discs, and polishing points.	Allows for more durability when polishing accessories, cutting wheels, sanding discs, and polishing points.	
Drill Bits	Cutting tools used to remove material to create holes, almost always of circular cross-section.	Drill metal, hardwood, and most other materials.	
Collet	Holds a workpiece or tool in place.	Holds bits in place for rotary tool.	

# **MAINTENANCE**



WARNING: Remove the plug from the socket before carrying out any adjustments, service or maintenance.

- 1. NEVER use water or other liquids to clean the electrical portions of the tool.
- 2. ALWAYS clean the tool and bits after use.
- 3. ENSURE that the ventilation slots are not blocked to prevent overheating.
- 4. REMOVE AND DISPOSE of damaged attachments.
- 5. CHECK that the locking jaw is correctly aligned before use.



# EXPLODED VIEW AND PARTS LIST

No.	Part No.	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 building 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, 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. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 to make arrangements for repairs and transportation.

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 warranty card and/or 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.

THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC.

ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS 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 PNEUMATIC 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 LINE.