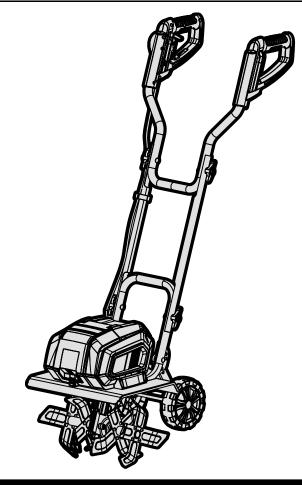


# MODEL 20724, 20724BT

# 20V MAX 14-INCH CORDLESS BRUSHLESS TILLER

**Instruction Manual** 



# NEED HELP? CONTACT US!

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

🗘 1-847-429-9263 (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

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### To purchase accessories and replacement parts for your tool, visit WENPRODUCTS.COM

20V 2.0Ah Max Battery (Model 20202, 20202B, 20202D) 20V 4.0Ah Max Battery (Model 20204, 20204B, and 20204D) 20V 5.0Ah Max Battery (Model 20205) 20V 2A Charger (Model 20200C) 20V 2A Dual Port Charger (Model 20200D) 20V 5A Quick Charger (Model 20201Q)

WEN plans to continue to add more items to our 20V line. For an up-to-date list of the 20V cordless tools compatible with the included battery and charger, visit **wenproducts.com** and search model number 20202 (2Ah), 20204 (4Ah), or 20205 (5Ah). In the battery's description, there will be a list of current products that this battery can be used with.

**NOTE:** For the best results with this product, we recommend using a battery with a capacity of 4Ah or higher.

# INTRODUCTION

Thanks for purchasing the WEN Tiller. 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.

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 **1-847-429-9263**.

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	20724, 20724BT
Included Battery*	4.0Ah Battery (2) (Model 20204D)*
Included Charger*	20V, 2A DC (Model 20200D)*
No Load Speed	175 RPM
Working Width	14.2 Inches
Blade Diameter	8.1 Inches
Working Depth	8.7 Inches
Product Weight	23.2 Pounds (Without Batteries and Charger)
Product Dimensions	44.9 in. x 14.4 in. x 37.0 in.

Battery Models	All WEN 20V MAX Batteries**
Charger Models	All WEN 20V MAX Chargers

**NOTE:** For the best results with this product, we recommend using a battery with a capacity of 4Ah or higher.

**\*NOTE:** Battery and charger only included with model 20724. 20724BT does not include a battery or charger.

\*\*NOTE: Some tools may not be compatible with WEN 20V MAX 1.5Ah Batteries, model 49120B. Contact WEN customer service at 1-847-429-9263, M-F with questions.

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

### **TILLER SAFETY**

**1. TURN OFF AND REMOVE THE BATTERY** from the unit when not in use or when servicing or cleaning. Do not leave unattended.

**2. ONLY USE THE TOOL FOR ITS INTENDED PURPOSE** - Do not use this product for any job except that for which it is intended.

**3. DO NOT OVERREACH** - Guide the tiller at a walking pace only. Keep proper footing and balance at all times.

**4. LIGHTING** - Only operate your tiller in daylight or good artificial light.

**5. STORE IDLE UNIT INDOORS** - When not in use, the tiller should be stored indoors, in a dry area, and out of the reach of children.

**6. MAINTAIN UNIT WITH CARE** - Keep clean for best performance and to reduce the risk of injury. Keep handles dry, clean, and free from oil.

7. Do not operate the tiller on a slope that is too steep for safe operation. When on slopes, slow down and make sure you have stable footing.

8. Before starting the tiller make sure the tines are not touching any object and are free to move.

9. Grip the guide bar firmly with both hands. Never operate the tiller with one hand.

**10. STAY ALERT** - Watch what you are doing. Use common sense. Do not operate the tiller when you are tired or under the influence of drugs, alcohol, or medication

11. If the tiller strikes a foreign object, turn it off immediately, wait for the tines to stop, and check for damage. If necessary, repair before restarting.

12. If the tiller starts to vibrate abnormally, turn it off immediately and check for the cause. Excessive vibration is generally a sign of a malfunction or damaged parts.

13. Before carrying out any maintenance or repairs, always turn the tiller OFF, remove the battery from the unit, and wait until the tines come to a complete stop.

**14. KEEP AWAY FROM WATER** - Do not expose the tiller to wet or rainy conditions. Never operate the tiller with wet hands. Both can increase the risk of shock, personal injury, or tool damage.

**CAUTION!** Tines do not stop immediately after the tiller is turned off.

**CAUTION!** The tiller may bounce upward or jump forward if the tines strike extremely hard packed soil, frozen ground, or buried obstacles such as large stones, roots or stumps.

WARNING! Do not operate the tiller near underground electrical cables, telephone lines, pipes or hoses.

**DANGER!** RISK OF CUT - Wear gloves and use caution when cleaning or performing maintenance on the tiller.

**CAUTION!** Risk of injury. Do not put hands, feet, or any body part or clothing near the rotating tines.

WARNING! Some dust and debris created by the use of this tool could contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:

- Chemicals in fertilizers.
- Compounds in insecticides and pesticides.
- Arsenic & chromium from treated lumber

To reduce your risk of exposure, work in a well-ventilated area and wear approved safety equipment.

# ELECTRICAL INFORMATION (CHARGER)

#### **DOUBLE-INSULATED CHARGER**

The charger's electrical system is double-insulated where two systems of insulation are provided. This eliminates the need for the usual three-wire grounded power cord. Double-insulated tools do not need to be grounded, nor should a means for grounding be added to the product. All exposed metal parts are isolated from the internal metal components with protecting insulation.



**IMPORTANT:** Servicing a double-insulated product requires extreme care and knowledge of the system, and should be done only by qualified service personnel using identical replacement parts. Always use original factory replacement parts when servicing.

**1. Polarized Plugs.** To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a proper outlet. Do not modify the machine plug or the extension cord in any way.

**2. Ground fault circuit interrupter protection** (GFCI) should be provided on the circuit or outlet used for this power tool to reduce the risk of electric shock.

**3.** Service and repair. To avoid danger, electrical appliances must only be repaired by a qualified service technician using original replacement parts.

### **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				
AIMFENAUE	25 ft.	50 ft.	100 ft.	150 ft.	
2A	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.

# **BATTERY & CHARGER SAFETY WARNINGS**

Despite all of the safety precautions, caution must always be taken when handling batteries. The following points must be obeyed at all times to ensure safe use. Safe use can only be guaranteed if undamaged cells are used. Incorrect handling of the battery pack can cause cell damage.

• Avoid dangerous environments – Do not charge the battery pack in rain, snow or in damp or wet locations. Do not use the battery pack or charger in the presence of explosive atmospheres (gaseous fumes, dust or flammable materials) because sparks may be generated when inserting or removing the battery pack, which could lead to a fire.

• Charge in a well-ventilated area – Do not block the charger vents. Keep them clear to allow for proper ventilation. Do not allow smoking or open flames near a charging battery pack. Vented gases may explode.

**NOTE:** The safe temperature range for the battery charging is 41°F to 104°F. Do not charge the battery outside in freezing weather; charge it at room temperature.

• Maintain charger cord – When unplugging the charger, pull the plug, not the cord, from the receptacle to reduce the risk of damage to the electrical plug and cord. Never carry the charger by its cord or yank it by the cord to disconnect it from the receptacle. Keep the cord away from heat, oil and sharp edges. Make sure the cord will not be stepped on, tripped over or subjected to damage or stress when the charger is in use. Do not use the charger with a damaged cord or plug. Replace a damaged charger immediately.

• Do not use an extension cord unless it is absolutely necessary – Using the wrong, damaged or improperly wired extension cord poses a risk of fire and electric shock. If an extension cord must be used, plug the charger into a properly wired 16 gauge or larger extension cord with the female plug matching the male plug on the charger. Make sure that the extension cord is in good electrical condition.

• Charger is rated for 120 volt AC only – The charger must be plugged into an appropriate receptacle.

• Use only recommended attachments – Use of an attachment not recommended or sold by WEN Products may result in risk of fire, electric shock or personal injury.

• Unplug charger when not in use – Make sure to remove battery packs from unplugged chargers.

WARNING! To reduce the risk of electric shock, always unplug the charger before performing any cleaning or maintenance. Do not allow water to flow into the charger. Use a Ground Fault Circuit Interrupter (GFCI) to reduce shock hazards.

• **Do not burn or incinerate battery packs** – Battery packs may explode, causing personal injury or damage. Toxic fumes and materials are created when battery packs are burned.

• **Do not crush, drop or damage battery packs** – Do not use the battery pack or charger if they have sustained a sharp blow, been dropped, run over or have been damaged in any way (i.e. pierced with a nail, hit with a hammer, stepped on, etc.).

• **Do not disassemble** – Incorrect reassembly may pose a serious risk of electric shock, fire or exposure to toxic battery chemicals. If the battery or charger are damaged, call WEN customer service at **1-847-429-9263** for assistance.

• **Battery chemicals cause serious burns** – Never let a damaged battery pack contact the skin, eyes or mouth. If a damaged battery pack leaks battery chemicals, use rubber or neoprene gloves to safely dispose of it. If skin is exposed to battery fluids, wash the affected area with soap and water and rinse with vinegar. If eyes are exposed to battery chemicals, immediately flush with water for 20 minutes and seek medical attention. Remove and dispose of contaminated clothing.

• Store your battery pack and charger in a cool, dry place – Do not store the battery pack or charger where temperatures may exceed 104 °F, such as in direct sunlight or inside a vehicle or metal building during the summer.

• **Do not short circuit** – A battery pack will short circuit if a metal object makes a connection between the positive and negative contacts on the battery pack. Do not place a battery pack near anything that may cause a short circuit, such as paper clips, coins, keys, screws, nails and other metallic objects. A short-circuited battery pack poses a risk of fire and severe personal injury.

# **BATTERY & CHARGER SAFETY WARNINGS**

### **ABOUT THE BATTERY**

1. The battery pack has to be charged completely before you use the tool for the first time.

2. For optimum battery performance, avoid low discharge cycles by charging the battery pack frequently.

3. Lithium-ion batteries are subject to a natural aging process. The battery pack must be replaced at the latest when its capacity falls to just 80% of its capacity when new. Weakened cells in an aged battery pack are no longer capable of meeting the high power requirements needed for the proper operation of your tool, and therefore pose a safety risk.

4. Do not throw battery packs into an open fire as this poses a risk of explosion. Do not ignite the battery pack or expose it to fire.

5. Do not exhaustively discharge batteries. Exhaustive discharge will damage the battery cells. The most common cause of exhaustive discharge is lengthy storage or non-use of partially discharged batteries. Stop working as soon as the performance of the battery falls noticeably or the electronic protection system triggers. Place the battery pack in storage only after it has been fully charged.

6. Protect batteries and the tool from overloads. Overloads will quickly result in overheating and cell damage inside the battery housing even if this overheating is not apparent externally.

7. Avoid damage and shocks. Immediately replace batteries that have been dropped from a height of more than one meter or those that have been exposed to violent shocks, even if the housing of the battery pack appears to be undamaged. The battery cells inside the battery may have suffered serious damage. In such instances, please read the waste disposal information for proper battery disposal.

8. If the battery pack suffers overloading and overheating, the integrated protective cutoff will switch off the equipment for safety reasons.

9. Use only original battery packs. The use of other batteries poses a fire risk and may result in injuries or an explosion.

### **ABOUT THE CHARGER**

Protect battery charger and cord from damage. Keep the charger and its cord away from heat, oil and sharp edges.

Electrical plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded appliances. Unmodified plugs and matching outlets will reduce the risk of electric shock.

Keep the battery charger, battery pack(s), and the cordless tool out of the reach of children.

Do not use the supplied battery charger to charge other cordless tools.

During periods of heavy use, the battery pack will become warm. Allow the battery pack to cool to room temperature before inserting it into the charger to recharge.

Do not overcharge batteries. Do not exceed the maximum charging times. These charging times only apply to discharged batteries. Frequent insertion of a charged or partially charged battery pack will result in overcharging and cell damage. Do not leave battery in the charger for days on end.

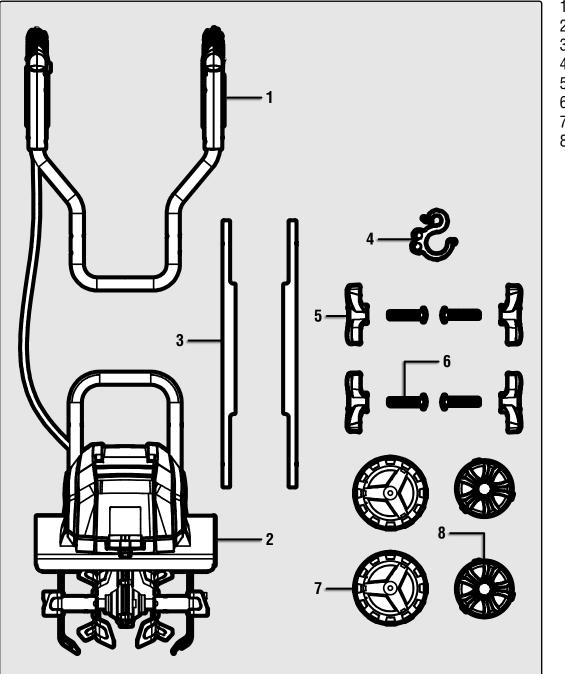
Never use or charge a battery if you suspect that it has been more than 12 months since last time they were charged. There is a high probability that the battery pack has already suffered dangerous damage (exhaustive discharge).

Do not use batteries that have been exposed to heat during the charging process, as the battery cells may have suffered dangerous damage.

Do not use batteries that have suffered curvature or deformation during the charging process or those that exhibit other atypical symptoms (gassing, hissing, cracking, etc.)

#### UNPACKING

With the help of a friend or trustworthy foe, such as one of your in-laws, carefully remove the tiller 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 **1-847-429-9263** (M-F 8-5 CST), or email **techsupport@wenproducts.com**.

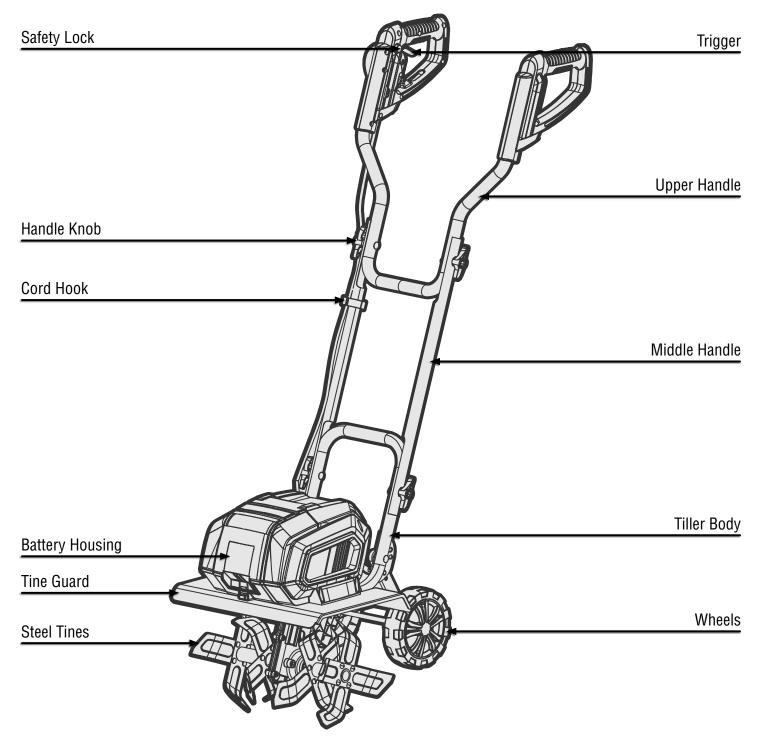


- 1. Upper Handle (1)
- 2. Tiller Body (1)
- 3. Middle Handles (2)
- 4. Cable Clip (1)
- 5. Handle Knobs (4)
- 6. Handle Bolts (4)
- 7. Wheel Assemblies (2)
- 8. Wheel Caps (2)

# KNOW YOUR TILLER

### **TOOL PURPOSE**

Tackle the toughest of yards and gardens with your WEN Electric Tiller. Refer to the following diagrams to become familiarized with all the parts and controls of your tiller. The components will be referred to later in the manual for assembly and operation instructions.



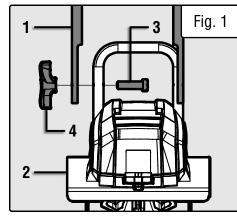
# **ASSEMBLY & ADJUSTMENTS**

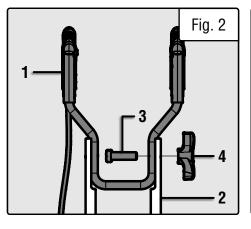
#### **ASSEMBLING THE HANDLE**

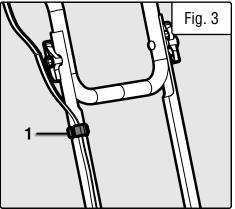
1. Attach the middle handles (Fig. 1 - 1) to the tiller body (Fig. 1 - 2) with two bolts (Fig. 1 - 3) and two handle knobs (Fig. 1 - 4).

2. Fasten the upper handle (Fig. 2 - 1) to the middle handles (Fig. 2 - 2) using two bolts (Fig. 2 - 3) and two handle knobs (Fig. 2 - 4).

3. Secure the cable along the handle with the supplied cable clip (Fig. 3 - 1).







#### **ASSEMBLING THE WHEELS**

1. Remove the cotter pin (Fig. 4 - 1) and washer (Fig. 4 - 2) from each side of the wheel axle. Slide a wheel (Fig. 4 - 3) onto the axle and replace the washer on top. Slide the cotter pin back through the axle hole and bend one prong back so it sits securely in the hole. Repeat for the other wheel.

2. Press the two wheel caps (Fig. 4 - 4) into each of the two wheels.

3. Pull the wheel support bracket release pin (Fig. 5 - 1), then swing the wheel bracket (Fig. 5 - 2) down. Release the pin, and make sure it clicks into place in the lower hole in the wheel support bracket. Wiggle the bracket to be sure it is securely locked in place before moving the tiller.

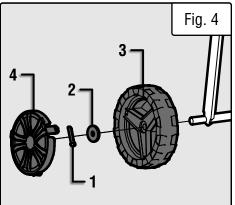
#### **BEFORE EACH USE:**

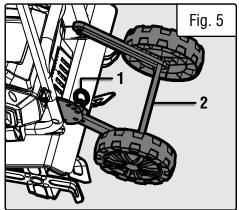
1. Check the product, its battery terminal, and any other accessories for damage. Do not use the product if it is damaged or shows wear.

2. Double check that the accessories and attachments are properly fitted.

3. Ensure that the handles are dry to ensure a secure grip. Always hold the product by its handles.

4. Ensure that the air vents are always unobstructed and clear. Blocked air vents may lead to overheating and damage the product.





# **ASSEMBLY & ADJUSTMENTS**

WARNING! To avoid injury from accidental startups, make sure that the tool is OFF and the battery is removed from the drywall sander.

#### **CHARGING THE BATTERY PACKS**

The 20V battery packs for this tool are supplied in a low charge condition to prevent possible problems, and must be charged completely before you use the tool for the first time.

**NOTE:** The battery packs and charger are not included with model 20724BT.

1. Connect charger to a 120V, 60Hz AC outlet. The green lights on the charger will illuminate, indicating that the charger is powered.

2. Slide the battery all the way into one of the charger ports until it clicks. The red light on the corresponding charger port will illuminate, indicating that the battery is charging.

#### **Charging Indication:**

- Solid Green: Ready to Charge
- Solid Red: Charging
- Solid Green: Charged

3. When the battery is charged, the red light will turn off and the green light will turn on. Remove the battery from the charger and unplug the charger from the power supply.

**NOTE:** Battery will not reach full charge the first time it is charged. Allow several cycles for the battery to fully charge. The battery pack may become warm while charging; this is normal. If the battery is hot after continuous use in the tool, allow it to cool to room temperature before charging. This will prolong the life of your battery.

The battery pack is equipped with three LED battery life indication lights. Press and hold the power button on the front or rear of the battery to check the battery's charge status.

#### **Battery Life Indication:**

- Three Lights: The battery is fully charged.
- Two Lights: The battery is about 60% charged.
- One Light: The battery is almost out of power and needs to be charged.

#### **INSERTING AND REMOVING THE BATTERIES**

**NOTE:** The tiller requires 2 batteries to operate. You may use batteries of two different capacities (e.g. 2Ah and 4Ah), but the tiller's runtime depends on the lower-capacity battery. For best results, we recommend using at least 4Ah batteries.

1. To install the battery, slide the battery pack into the battery port. Make sure the release latch on the rear side of the battery pack snaps into place and the battery is secure before beginning operation.

2. To remove the battery pack, press the battery release latch on the front of the battery and pull the battery pack out.

# **OPERATION**

### **POWERING ON & OFF**

WARNING! Rotating tines may cause serious injury. The tines will continue to turn for a few seconds after the tool has been switched OFF. Do not touch the rotating tines. Contact with hot components (i.e. motor housing, gear box, etc.) on the machine may cause burns. Allow the machine to cool before handling.

1. Press the release button (Fig. 6 - 1) to open the battery housing on the front of the tiller body. Install the batteries (Fig. 6 - 2) and connect the safety key (Fig. 6 - 3). **NOTE:** The tiller will not start if the safety key is not connected.

2. To turn the tool ON, push and hold the safety lock button (Fig. 7 - 1) with your thumb and then squeeze the trigger switch (Fig. 7 - 2) with your fingers. Once the tool is running, release the safety lock button.

3. To switch OFF, release the trigger switch (Fig. 7 - 2) and wait for the tines to come to a complete stop. Remove the batteries and the safety key from their terminals once you've completed operation.

#### TILLING

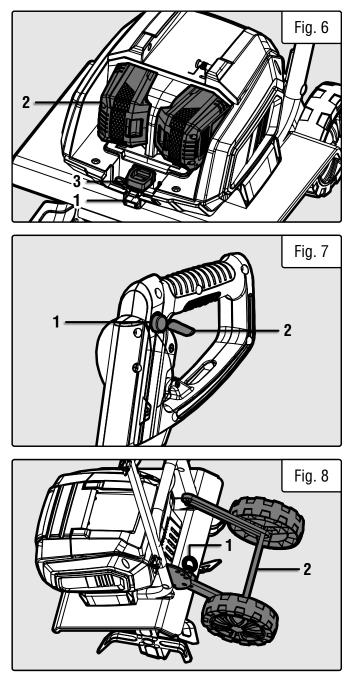
1. Move tiller to desired work area prior to starting motor.

2. Pull the wheel support bracket release pin (Fig. 8 - 1), then swing the wheel bracket up and out of the way. Release the pin, and make sure it clicks into place in the upper hole in the wheel support bracket. Wiggle the bracket to be sure it is securely locked in place before beginning to till.

3. Install the batteries and safety key. Hold the tiller firmly when starting. The tines will pull the tiller forward during operation (Fig. 9).

4. To start the tiller, press the safety lock button (Fig. 7 - 1) and then pull the trigger lever (Fig. 7 - 2) up and against the handle bar. The motor will start and the tines will begin to rotate.

5. When finished tilling, remove the safety key and batteries. Pull the wheel support bracket release pin (Fig. 8 - 1), then swing the wheel bracket down. Release the pin, and make sure it clicks into place in the lower hole in the wheel support bracket. Wiggle the bracket to be sure it is securely locked in place before moving the tiller.



**NOTE:** For breaking sod or deep tilling, allow the tines to pull the tiller forward to the end of your arm's reach, then firmly pull it back towards yourself. Best results will be achieved by repeatedly allowing the tiller to move forward and pulling it back.

**NOTE:** If tiller digs deep enough that is gets stuck, gently rock from side to side until it starts to move forward again.

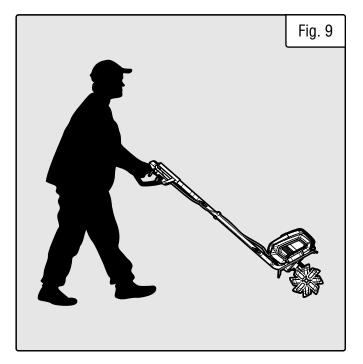
# **OPERATION**

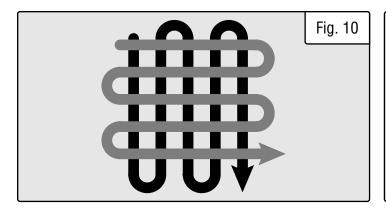
## TILLING (CONT.)

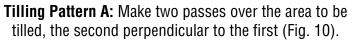
**CAUTION!** Take extra precautions when moving backwards and when pulling the tiller back towards yourself to avoid tripping.

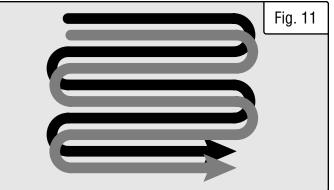
**CAUTION!** When working on inclines, always stand diagonally to the incline to retain a firm, safe footing. Do not work on extremely steep slopes.

For preparing seed beds, we recommend using one of the following tilling patterns:









**Tilling Pattern B:** Make two passes over the area to be tilled, the second overlapping the first (Fig. 11).

**CAUTION!** Before moving the tiller from one area to another, switch off the motor and wait for the tines to come to a complete stop. Be careful not to let the tines touch the ground while moving the tiller. The tines, as well as the unit itself, may be damaged even if the motor is switched off.

### **CLEARING FOREIGN OBJECTS**

During operation, a stone or root could become lodged in the tines, or tall plants may become wrapped around the tine shaft.

To clear the tines or tine shaft, release the trigger lever, wait for the tines to come to a complete stop, and remove the safety key and batteries from their terminals before cleaning. Carefully dislodge or remove the foreign matter from the tines or tine shaft. To simplify removal of tall grass or weeds from the tine shaft, remove one or more of the tines.

**NOTE:** Always wear gloves when clearing the tines or tine shaft.

# MAINTENANCE

### **ROUTINE INSPECTION**

Before each use, inspect the tool. If any of these following conditions exist, do not use until parts are replaced.

#### Check for:

- Loose hardware or improper mounting
- Misalignment
- Cracked or broken parts
- Any other condition that may affect its safe operation

Once per season, lubricate the tines and shaft. At the end of the season, check the tiller for damage prior to storing. Repair or replace damaged or broken parts.

### CLEANING

**CAUTION!** Always clean the tiller after each use. Failure to carry out proper cleaning can result in damage to the tiller or result in poor performance.

**CAUTION!** Never use a water hose to clean the tiller.

Remove the safety key and batteries from their terminals before cleaning.

Clean the underside of the tine guard and motor housing around the tines using a scrubbing brush and a soft cloth dampened with a mild soap and water mixture.

To remove soil and debris from the transmission and tines, use a stiff brush or a dampened cloth.

Clean the vents on the motor housing and remove any remaining grass or dirt.

Once cleaned, wipe the tines and shaft dry and apply a light coat of oil to prevent rust.

### TINES REMOVAL AND INSTALLATION

Worn tines result in poor performance and can overload the motor.

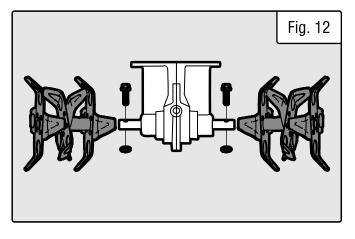
**WARNING!** Injury can occur while working on the tines. Always wear protective gloves.

### TINES REMOVAL AND INSTALLATION

Worn tines result in poor performance and can overload the motor.

Check tines before each use. Sharpen or replace the tine assemblies with new ones when necessary. Remove the batteries before doing so.

To remove complete tine assembly from the shaft, remove the M8x40 hex bolt from the shaft. Pull off the tine assembly from the shaft. Follow the above steps in reverse to install tines (Fig. 12).



# MAINTENANCE

### STORAGE

Store this tool carefully in a secure, dry place, out of reach of children. Remove the safety key and the batteries from their terminals. Charge the batteries fully and store them in a cool, dry place, out of the reach of children.

During extended periods of storage, ensure that the tool is protected against corrosion and frost.

At the end of the season, or if the tool is not being used for longer than a month, wipe over metal surfaces with an oil covered cloth or spray a fine coat of oil to protect the tiller from corrosion.

Fold the handle bar down and store the tool in a suitable place, out of the reach of children.

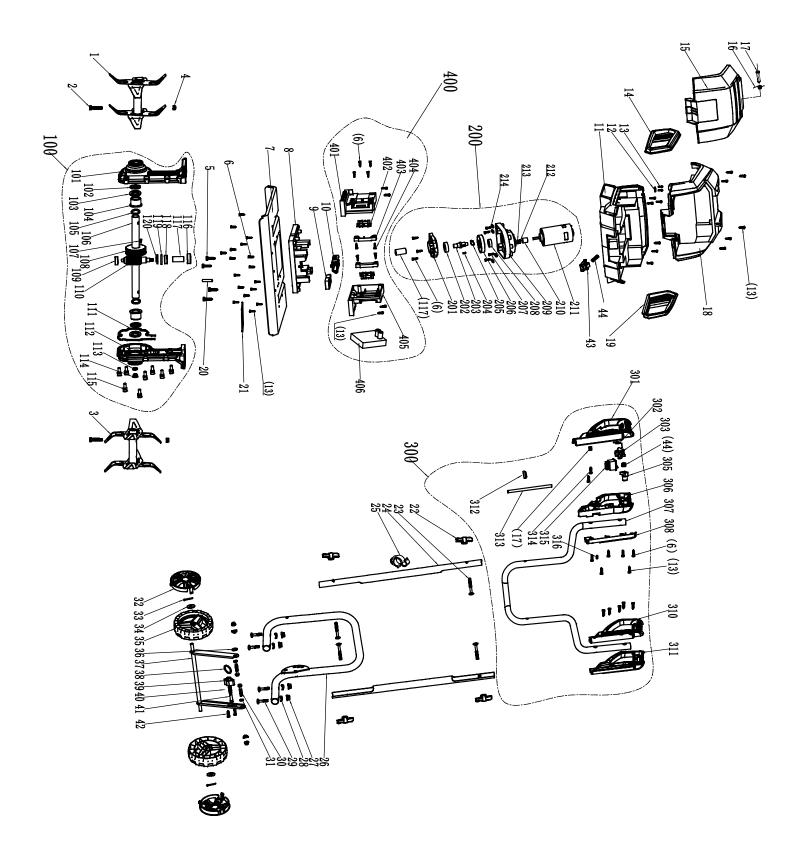
#### **PRODUCT DISPOSAL**

Used power tools should not be disposed of together with household waste. If the product contains electrical components they 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.

# **EXPLODED VIEW & PARTS LIST**



# **EXPLODED VIEW & PARTS LIST**

NO.	PART NO.	DESCRIPTION	QTY.	NO.	PART NO.	DESCRIPTION	QTY.
1	TC1014-001	Blade Subassembly	1	34	TC1014-405	Flat Washer, 10mm	2
	101014-001	(Left)	I	35	TC0714-080	Wheel	2
2	TC1014-002	Hex Bolt, M8x40	2	36	20724-036	Washer, 6mm	1
3	TC1014-003	Blade Subassembly	1	37	20724-037	Wheel Bracket	1
		(Right)				Assembly	
4	TC1014-004	Lock Nut, M8	2	38	20724-038	Release Ring	1
5	20724-005	Self-tapping Screw, ST6x25	4	39	20724-039	Wheel Adjustment Knob	1
6	20724-006	Self-tapping Screw, ST4x16	2	40	20724-040	Wheel Adjustment Spring	1
7	20724-007	Blade Guard	1	41	20724-041	Wheel Adjustment	1
8	20724-008	Housing Base	1	41	20724-041	Shaft	
9	20724-009ASM	Safety Key and Lock	1	42	20724-042	Self-tapping Screw,	2
10	20724-010	Safety Lock Insert	1		20124 042	ST4x16	
		Assembly		43	20724-043	Battery Cover Release	1
11	20724-011	Battery Housing Base	1			Button	
12	20724-012	Cable Clamp	1	44	20724-044	Battery Cover Release Spring	1
13	20724-013	Self-tapping Screw, ST4x20	25	100	20724-100ASM	Gearbox Assembly	1
14	20724-014	Housing Cover, Right	1	101	20724-101	Gearbox Housing, Right	1
15	20724-014	Battery Cover	1	102	20724-102	Sealing Ring Baffle	2
16	20724-016	Battery Cover Spring	1	103	20724-103	Sealing Ring	2
17	20724-010	Battery Cover Pin	1	104	20724-104	Oil Bearing	2
18	20724-018	Battery Housing	1	105	20724-105	Washer	2
19	20724-019	Housing Cover, Left	1	106	20724-106	Worm Gear Shaft	1
20	20724-020	Connecting Shaft	1	107	20724-107	Flat Key, 4x4x16mm	1
21	20724-021	Filter Sponge	1	108	20724-108	Worm Gear 1	1
22	TC0714-048	Frame Knob	4	109	20724-109	Ball Bearing, 608Z	1
23	TC0714-043	Carriage Bolt, M6x45	4	110	20724-110	Worm Gear 2	1
24	20724-024	Middle Handle Frame	2	111	20724-111	Gearbox Gasket	1
25	TC1014-017	Cord Clamp	1	112	20724-112	Gearbox Housing, Left	1
26	20724-026	Lower Handle Frame	1	113	20724-113	O-ring, 8mm	1
27	20724-027	Lock Nut, M6	6	114	20724-114	Grease Port Screw,	1
28	20724-028	Wavy Washer, 6mm	6	114	20724-114	M10x10	
29	20724-029	Carriage Bolt, M6x35	4	115	20724-115	Socket Head Cap Screw	8
30	20724-030	Hex-head Flanged Bolt, M6x35	2	116	20724-116	with Washer, M6x18 Sealing Ring	1
21	20724 021		2	117	20724-117	Splined Hub	1
31	20724-031	Wheel Bracket Bushing		118	20724-118	Bearing, 6000Z	1
32	TC1014-403	Wheel Cover	2	119	20724-119	Thrust Bearing, 1226	1
33	TC1014-404	R-clip	2				

# **EXPLODED VIEW & PARTS LIST**

NO.	PART NO.	DESCRIPTION	QTY.	NO.	PART NO.	DESCRIPTION	QTY.
120	20724-120	Axle Sleeve	1	308	20724-308	Handle Pressure Plate	1
200	20724-200ASM	Motor Assembly	1	6	20724-006	Self-tapping Screw,	20
117	20724-117	Splined Hub	1		20721000	ST4x16	20
201	20724-201	Gearbox Cover	1	13	20724-013	Self-tapping Screw, ST4x20	2
202	20724-202	Bearing, 6001Z	1	010	00704 010	Right Handle Cover,	4
203	20724-203	Gear Shaft	1	310	20724-310	Left	1
204	20724-204	Flat Key, 3x3x10	1	311	20724-311	Right Handle Cover, Right	1
205	20724-205	Spring Washer, 12mm	1	312	20724-312	Plug	1
206	20724-206	Motor Gear	1		20724-312	ū	
207	20724-207	Screw, M5x16	4	313		Connecting Power Cord	1
208	20724-208	Bearing, 608Z	1	17	20724-017	Cable Clamp	1
209	20724-209	Gear Housing	1	314	20724-314	Self-tapping Screw, ST4x16	2
210	20724-210	Pinion	1	315	20724-315	Power Switch	1
211	20724-211	Brushless Motor	1	316	20724-316	Self-tapping Screw,	1
212	20724-212	Gasket	1			ST3x12	
213	20724-213	Shaft Retaining Ring, 6mm	1	400	20724-400ASM	Battery Terminal Assembly	1
214	20724-214	Elastic Washer, 5mm	4	401	20724-401	Battery Terminal, Left	1
300	20724-300ASM	Upper Handle Assembly	1	6	20724-006	Self-tapping Screw, ST4x16	4
301	20724-301	Left Handle Cover, Left	1	402	20724-402	Terminal Insert	2
302	20724-302	Trigger Spring	1	403	20724-403	Pressure Plate	2
303	20724-303	Trigger	1			Self-tapping Screw,	
44	20724-044	Handle Button Spring	1	404	20724-404	ST4x12	4
305	20724-305	Switch Button	1	405	20724-405	Battery Terminal, Right	1
306	20724-306	Left Handle Cover, Right	1	406	20724-406	PCB	1
307	20724-307	Upper Handle	1	13	20724-013	Self-tapping Screw, ST4x20	4

**NOTE:** Not all parts may be available for purchase. Parts and accessories that wear down over the course of normal use are not covered under the 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 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 1-847-429-9263 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, IN-CLUDING BELTS, BRUSHES, BLADES, BATTERIES, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURA-TION 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 IN-CIDENTAL 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.

# NOTES


# NOTES

