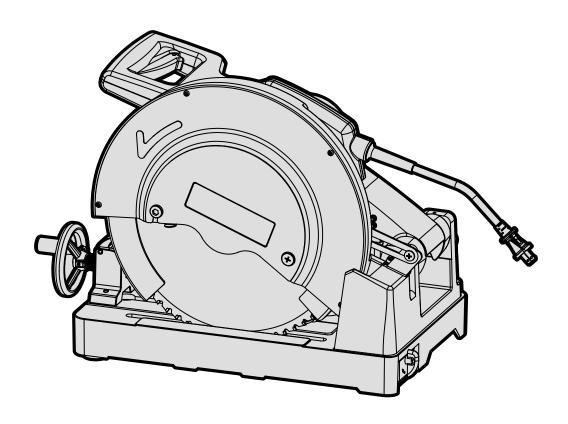


**MODEL CM1452** 

# 14-INCH CHOP SAW

**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.

## CONTENTS

| WELCOME                    | 3  |
|----------------------------|----|
| Introduction               |    |
| Specifications             | 3  |
|                            |    |
| SAFETY                     | 4  |
| General Safety Rules       |    |
| Chop Saw Safety Warnings   | 6  |
| Electrical Information     | 8  |
| BEFORE OPERATING           | 9  |
| Unpacking & Packing List   |    |
| Know Your Chop Saw         | 10 |
| Assembly & Adjustments     | 11 |
| OPERATION & MAINTENANCE    | 15 |
| Operation                  | 15 |
| Maintenance                |    |
| Troubleshooting Guide      | 18 |
| Exploded View & Parts List | 20 |
| Warranty Statement         | 23 |

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

Professional Metal Saw Blade (Model BL1466)
Replacement Carbon Brush (Part CM1452-035)

## INTRODUCTION

Thanks for purchasing the WEN Chop Saw. 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       | CM1452                                              |
|--------------------|-----------------------------------------------------|
| Motor              | 120V, 60 Hz, 15A                                    |
| No-Load Speed      | 1450 RPM                                            |
| Blade Part Number  | BL1466                                              |
| Blade Size         | 14 Inches (355mm) TCT                               |
| Arbor Size         | 1 Inch (25.4mm)                                     |
| Kerf               | 2.4 mm                                              |
| Teeth              | 66T                                                 |
| Miter Table Angles | 0° - 45°                                            |
| Cutting Capacity   | Full cutting capacity specs can be found on page 16 |
| Weight             | 50.5 lbs                                            |
| Product Dimensions | 20.5 in. x 13 in. x 16.75 in.                       |

## **GENERAL SAFETY RULES**

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

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

#### SAVE THESE SAFETY INSTRUCTIONS.

#### **WORK AREA SAFETY**

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

#### **ELECTRICAL SAFETY**

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

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

#### PERSONAL SAFETY

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

## **GENERAL SAFETY RULES**

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

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

#### SAVE THESE SAFETY INSTRUCTIONS.

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

#### **POWER TOOL USE AND CARE**

- 1. Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- 2. Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- 3. Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 4. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- 5. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **6. Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

- 7. Use the power tool, accessories and tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- **8.** Use clamps to secure your workpiece to a stable surface. Holding a workpiece by hand or using your body to support it may lead to loss of control.
- **9. KEEP GUARDS IN PLACE** and in working order.

#### SERVICE

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

#### CALIFORNIA PROPOSITION 65 WARNING

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

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

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

## **CHOP SAW SAFETY WARNINGS**

**WARNING!** Do not let comfort or familiarity with the product replace strict adherence to product safety rules. Failure to follow the safety instructions may result in serious personal injury.

#### **SAW BLADE SAFETY**

- 1. Always wear protective gloves when handling saw blades.
- 2. Only use blades with correct size and type for both your saw and your workpiece.
  - The rated diameter of the saw blade is 12" with a 1" arbor.
  - The no-load speed of the miter saw is 3800 RPM. The maximum permissible speed of your saw blade should always be higher than the no-load rotational speed of the saw.
- 3. Never use damaged or deformed saw blades. Only use sharp blades.
- 4. Install the saw blade in the correct orientation indicated in the instructions.
- 5. Keep hands out of path of saw blade. Never use your hands to remove sawdust, chips or workpiece near the saw blade or the cutting path of the saw.
- 6. Never reach around saw blade or reach in back of the saw blade.
- 7. Do not use blades made from high-speed steel, abrasive blades, metal-cutting blades or masonry-cutting blades. The guards of this saw are not designed to protect against the failure of such blades.
- 8. The use of accessories or attachments not recommended by the manufacturer may result in a risk of personal injury.

#### PERSONAL SAFETY

- 1. Operate in a well ventilated area. Keep the floor area around the saw level and free of slippery substances or other tripping hazards.
- 2. Wear ANSI-approved safety goggles to protect your eyes from sparks and saw dust. Use hearing protection to protect yourself from hearing loss.

- 3. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to pacemakers could cause pacemaker interference or pacemaker failure.
- 4. Wear work gloves when handling saw blades. DO NOT wear gloves while operating the saw.
- 5. Sawdust is harmful to your health. Use NIOSH-approved dust masks or other respiratory protection during operation and cleaning.
- 6. Always turn off and unplug the saw before making any adjustments or repair tasks. Never adjust the saw or the workpiece while the saw is running.
- 7. The lock down pin is to be used only to lock the head in place for carrying and storage. It is not to be used for any cutting operation.
- 8. Never use damaged or incorrect blade flanges or bolt. The blade flanges and bolt were specially designed for your saw, for optimum performance and safety of operation.
- 9. Do not use to cut metal, logs, tree limbs, or uneven lumber.
- 10. Wet lumber, green (unseasoned) lumber, and pressure treated lumber all have an increased potential for kickback and should only be cut with a blade specifically designed for that lumber type. Wear a NIOSH-approved respirator and have appropriate ventilation whenever cutting pressure treated lumber.

#### PREPARING THE CHOP SAW

- 1. When transporting the saw, carry it by either the carrying handle or the base. Never carry the device by its guards or its accessories. Make sure that the lower part of the saw blade is covered by the blade guard during transportation.
- 2. Securely bolt the saw onto a stand or a workbench before operating.

## **CHOP SAW SAFETY WARNINGS**

**WARNING!** Do not let comfort or familiarity with the product replace strict adherence to product safety rules. Failure to follow the safety instructions may result in serious personal injury.

3. Examine the saw for any damaged or missing parts. Replace or repair damaged parts before operation. Periodically check that all nuts, bolts and other fasteners are properly tightened.

#### **SECURE YOUR WORKPIECE**

- 1. Always position the workpiece on the table and firmly against the fence. Use the included hold-down clamp to secure the workpiece. Never perform any operation free-hand.
- 2. Use a clamp or other securing methods to support the workpiece whenever possible.
- 3. When cutting round workpieces, use clamps on both sides of the table to prevent the workpiece from turning. Position the convex (curved) side against the fence.
- 4. Always support long workpieces properly using stands or roller tables.
- 5. Never hand-hold a workpiece that is too small to be clamped, as it can be launched away and cause injury. Use proper support and guides to secure the small workpiece.

#### **DURING CUTTING OPERATIONS**

1. Make sure the path of the saw blade is clear of obstruction. Before turning on the saw, do a dry run and make sure that the saw blade does not touch anything other than the workpiece during its entire line of travel.

- 2. Always stand to one side when operating the saw. Never have any part of the body in line with the path of the saw.
- 3. Feed work into a blade against the direction of rotation of the blade only.
- 4. Do not use the saw unless all guards are in place. Do not operate with any guard disabled, damaged, or removed. Moving guards must move freely and close instantly.
- 5. Turn on the saw and let it reach full speed, then slowly lower the saw into the workpiece. This will help produce safer and cleaner cuts.
- 6. During slide cutting, always push the saw blade away from you. Do not pull the saw towards you.
- 7. Never cut more than one piece at a time. Do not stack workpieces together.
- 8. Turn off tool and wait for saw blade to stop before moving workpiece or changing settings. Do not slow or stop a blade with a piece of wood. Let the blade come to rest naturally. Do not attempt to free a jammed blade while the machine is still running.
- 9. To reduce risk of injury, return carriage to the full rear position after each crosscut operation.

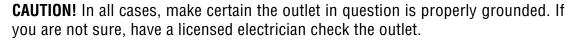
These safety instructions can't possibly warn of every scenario that may arise with this tool, always make sure to stay alert and use common sense during operation.

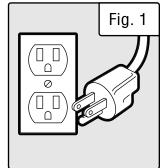
## **ELECTRICAL INFORMATION**

#### GROUNDING INSTRUCTIONS

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

- **1. Do not modify the plug provided.** If it will not fit the outlet, have the proper outlet installed by a licensed electrician.
- 2. Improper connection of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, DO NOT connect the equipment grounding conductor to a live terminal.
- **3. Check** with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.
- **4. Use only three-wire extension cords** that have three-pronged plugs and outlets that accept the tool's plug. Repair or replace a damaged or worn cord immediately.





#### **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.

| AMDEDAGE |          | REQUIRED GAU | GE FOR EXTENSION COR | RDS             |
|----------|----------|--------------|----------------------|-----------------|
| AMPERAGE | 25 ft.   | 50 ft.       | 100 ft.              | 150 ft.         |
| 15A      | 14 gauge | 12 gauge     | Not Recommended      | Not Recommended |

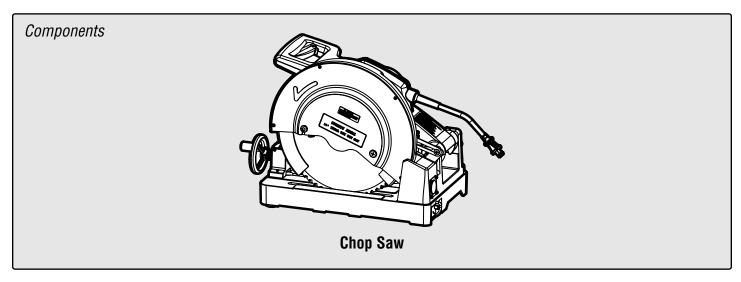
- **1. Examine extension cord before use.** Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- **2. Do not abuse extension cord.** Do not pull on cord to disconnect from receptacle; always disconnect by pulling on plug. Disconnect the extension cord from the receptacle before disconnecting the product from the extension cord. Protect your extension cords from sharp objects, excessive heat and damp/wet areas.
- **3.** Use a separate electrical circuit for your tool. This circuit must not be less than a 12-gauge wire and should be protected with a 15A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

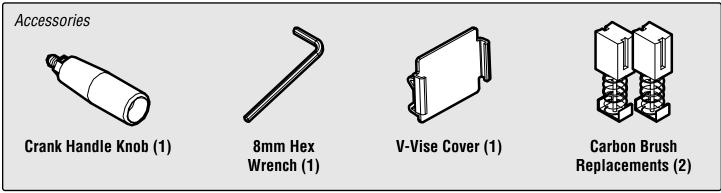
## **UNPACKING & PACKING LIST**

#### UNPACKING

With the help of a friend or trustworthy foe, such as one of your in-laws, carefully remove the chop saw 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**.

#### **PACKING LIST**



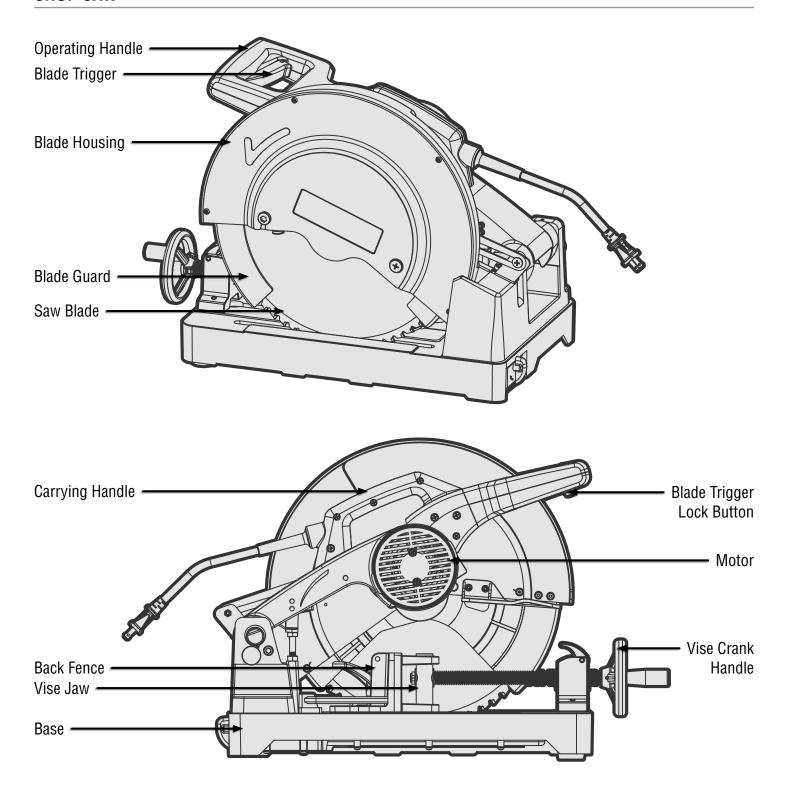


## KNOW YOUR CHOP SAW

### **TOOL PURPOSE**

Chop saws allow you to easily cut through metals and other various materials quick and easily. Refer to the following diagrams to become familiarized with all the parts and controls of your chop saw. The components will be referred to later in the manual for assembly and operation instructions.

### **CHOP SAW**



**WARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your chop saw. Failure to follow the safety instructions may result in serious personal injury.

#### **GUARD OPERATION**

**NOTE:** Keep hands clear of the blade when the operating handle (Fig. 2 - 1) is lowered. Do not interfere with the proper movement of the blade guard (Fig. 2 - 2).

When the handle is lowered, the blade guard raises automatically. When the handle is raised, the blade guard returns to its safety position, covering the blade.

#### PLUNGE LOCK

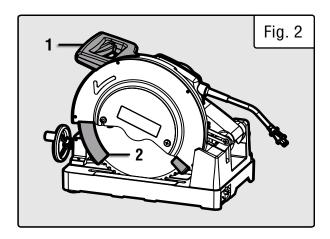
The saw arm needs to be raised up before operation and locked down for transporting and storing.

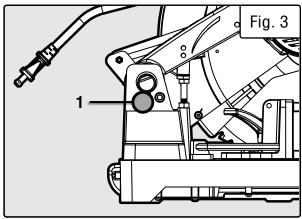
#### To raise saw arm from the lower position:

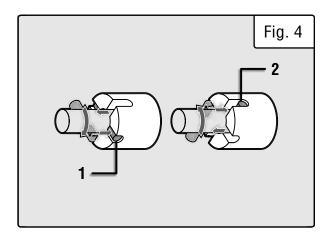
- 1. Holding the operating handle (Fig. 2 1), lightly press down on the saw arm and pull out the release knob (Fig. 3 1). Slowly raise the saw arm to the upper position.
- 2. Set the release knob pin into the the shallow groove (Fig. 4 1) to unlock the cutting head for a free range of movement.

#### To lock the saw arm in the lower position:

- 1. Holding the operating handle (Fig. 2 1), push the blade guard lever and pull out the release knob (Fig. 3 1).
- 2. Slowly lower the saw arm to the lower position and lock the release knob into the deep groove (Fig. 4 2).







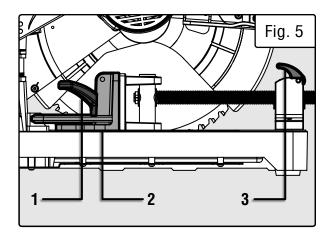
**WARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your chop saw. Failure to follow the safety instructions may result in serious personal injury.

#### ADJUSTING THE CUTTING ANGLE

The rear vise fence can be adjusted to allow for cutting larger work pieces or cutting at varied angles (between 0° and 45°).

#### To change the angle of the fence:

- 1. Loosen spring loaded locking handle (Fig. 5 1) securing the fence to the base.
- 2. Turn the fence (Fig. 5 2) to the desired angle. If it is difficult to turn the fence, loosen the M10 bolt next to the locking handle slightly as well.
- 3. Tighten the spring loaded locking handle and M10 bolt to lock the fence in place.



#### To reposition the fence:

1. Loosen and remove the M10 bolt and the spring loaded locking handle and all washers on these fasteners.

**NOTE:** To remove the spring loaded locking handle, pull the handle up to disengage it from the screw while using a flat head screwdriver to loosen the screw. Alternatively, the spring loaded locking handle can be removed by turning the handle and then re-positioning it as needed by pulling the handle upwards and adjusting it appropriately.

- 2. Reposition the rear vise fence in one of the available positions that best suits the size of the workpiece.
- 3. Replace the spring loaded locking handle and the M10 bolt into their new positions. Replace the washers in the same order as they were originally assembled. Ensure that the rear vise fence is secured to the base.

**WARNING!** Be sure the fence is securely in place before making any cuts with the saw. Failure to do so can cause the fence to move during the cut, which could result in serious personal injury.

#### **OUICK RELEASE VISE MECHANISM**

For convenience, this chop saw is equipped with a quick release mechanism (Fig. 5 - 3) on the work piece vise. To use this feature, follow the steps below:

- 1. Lift the quick release mechanism to quickly reposition the vise.
- 2. Slide the vise jaw to the desired position and push the quick release mechanism down. Make sure that the quick release mechanism engages fully with the vise screw.
- 3. Tighten the vise fully to secure the work piece.

**WARNING!** Always make sure the quick release mechanism is fully engaged with the vise screw before cutting the work piece. Using the chop saw with quick release vise not engaged with vise screw can be a dangerous operation and should never be performed. To help engage the quick release mechanism, it is recommended to pull back slightly on the vise handle once the quick release mechanism is rotated down. To further check that the quick release mechanism is engaged, push down on the quick release mechanism while turning the vise handle.

**WARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your chop saw. Failure to follow the safety instructions may result in serious personal injury.

#### **V-VISE ATTACHMENT**

Your chop saw comes with a V-vise attachment (Fig. 6 - 1) to help cut a wide range of materials safely. The V-vise should be used to get a better grip on round stock or to hold square tube in the proper cutting position. To assemble the V-vise, slide it over the vise jaw (Fig. 6 - 2).

**NOTE:** Refer to Fig. 12 for the proper cutting orientations for a variety of material shapes.



Your saw is equipped with a dust tray (Fig. 7 - 1). The dust tray should be checked and emptied at regular intervals. It is recommended that the tray never be more than 60% full.

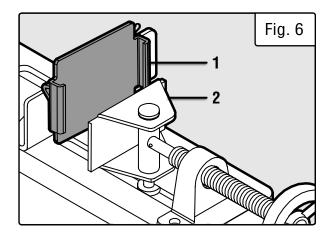
**NOTE**: It is recommended to use a proper dust mask when checking and emptying the contents of the dust tray.

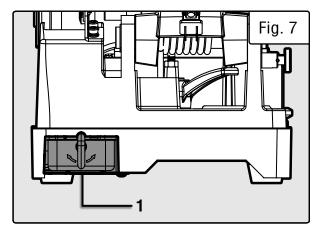
#### ADJUSTING THE CUTTING DEPTH

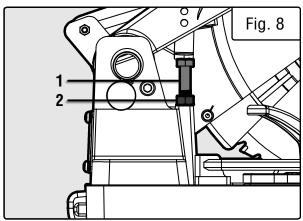
The saw cutting depth can be adjusted if you would like to perform a kerfing or rabbet cut that does not cut all the way through the workpiece.

**WARNING!** When adjusting the cutting depth, make sure that the blade does not interfere with the base of the unit before operating the tool or performing any cuts.

- 1. Unplug the tool from its power source and raise the saw head assembly.
- 2. Locate the depth stop screw (Fig. 8 1) on the left side of your saw.
- 3. Pull down on the saw head to check the current setting. To change the setting, continue to step 4.
- 4. Loosen the depth stop nut (Fig. 8 2) to allow the depth stop bolt to be adjusted. **To decrease the cutting depth**, turn the depth stop bolt counterclockwise. **To increase the cutting depth**, turn the depth stop bolt clockwise. Tighten the nut after adjustment.
- 5. Check the cutting depth setting by completing a test cut on a piece of scrap wood. Repeat steps 4-5 until the desired depth is achieved.







#### CHANGING THE SAW BLADE

**DANGER!** Never try to use a blade larger or thicker than the stated capacity of the saw. Check to make sure that your place is suitable for the intended cutting operation.

#### To remove the blade:

- 1. Unplug the tool from its power source.
- 2. Make sure that the saw blade is in its upper position.
- 3. Loosen the blade cover screw (Fig. 9 1) that secures the arbor cover plate and rotate the cover plate up and over to reveal the arbor bolt and outer flange.
- 4. Lock arbor by pushing down on the arbor lock (Fig. 10 1).
- 5. Use the included 8 mm hex wrench (Fig. 11 1) to loosen (turn counterclockwise) and remove the arbor screw, washer, and outer flange (Fig. 11 2).
- 6. Rotate and retract blade guard into blade housing by hand.
- 7. Carefully remove blade guard from the blade guard housing.

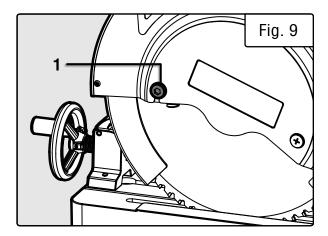
**NOTE:** The outer safety blade guard can also be completely removed for easier blade changing. If opting to completely remove the outer safety blade guard, be sure to completely fasten all screws when reassembling so that it is secured tightly onto the inner blade guard.

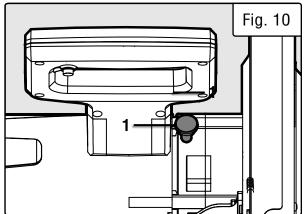
#### To install the blade:

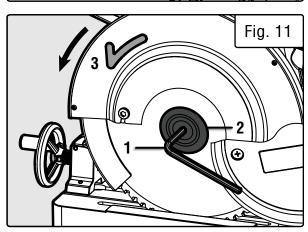
- 1. Check to make sure that all packaging is removed from new blade and blade housing is free of debris and cutting remnants.
- 2. Install blade on inner flange and arbor. Ensure that blade direction matches the direction on the blade housing (Fig. 11 3).
- 3. Lock the arbor by pushing down on the arbor lock.
- 4. Reassemble outer flange, washer, and arbor bolt. Tighten bolt with the 8 mm hex wrench. Turn the bolt clockwise to tighten.
- 5. Release the arbor lock and turn the blade gently to ensure that the arbor lock has been disengaged.
- 6. Rotate the arbor cover into place and tighten the cross head screw to secure the arbor cover.



WARNING! Run the saw for a few minutes after a new blade is installed before cutting any material. This will help to make sure that the blade is installed correctly and that there are no flaws in the blade.







## **OPERATION**

**WARNING!** Do not plug in or turn on the tool until it is fully assembled according to the instructions. Read through and become familiarized with the following procedures of handling and adjusting your miter saw. Failure to follow the safety instructions may result in serious personal injury.

#### 1. RAISE THE SAW ARM

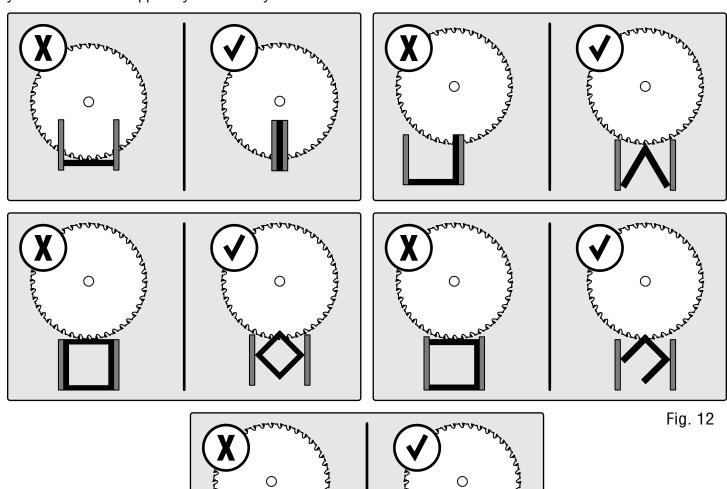
Before operation, raise the saw arm from the lower position. See section titled, "Guard Operation" on page 11.

#### 2. SET UP THE CUT ANGLE & DEPTH

The chop saw can be set up to create straight or angled cuts. To adjust the miter angle of the cut, refer to "Adjusting the Cutting Angle" on page 12. To adjust the cutting depth, refer to the section titled "Adjusting the Cutting Depth" on page 13.

#### 3. SET UP WORKPIECE

Place the work piece flat on the base with one edge securely against the back fence. If the work piece is especially long, be sure to use a roller stand or other work support system to support your work piece so it does not damage the blade or the saw. The WEN **MSA658** Multi-Purpose Rolling Tool Stand can be a great addition to your shop if you do not have a support system already.



### **OPERATION**

**WARNING!** Before operating the miter saw, make sure to equip yourself with a dust mask, ear protection, and safety glasses for protection from possible injuries. Tie back long hair and do not wear loose clothing or jewelry. Do not wear gloves while operating the saw.

| Material                                 | Cutting Capacity               |
|------------------------------------------|--------------------------------|
| Mild Steel Plate (Optimal Thickness)     | 0.25"                          |
| Mild Steel Plate (Max Cutting Thickness) | 0.5"                           |
| Square Tube at 90° (Mild Steel)          | 4.75" x 4.75"                  |
| Square Tube at 45° (Mild Steel)          | 3.5" x 3.5"                    |
| Rectangle Tube at 90° (Mild Steel)       | 3.75" x 7.25"                  |
| Rectangle Tube at 45° (Mild Steel)       | 3.125" x 4.375"                |
| Round Tube at 90° (Mild Steel)           | 5.125"                         |
| Round Tube at 45° (Mild Steel)           | 4.125"                         |
| Wood at 90° (Nominal Size)               | 4" x 8" (Actual: 3.5" x 7.25") |
| Wood at 45° (Nominal Size)               | 4" x 6" (Actual: 3.5" x 5.5")  |

#### 4. SECURE WORKPIECE

Secure the work piece with the vise whenever possible to prevent the material from moving during the cutting operation. Refer to Fig. 12 when deciding how to align your work piece for the cut.

#### 5. CHECK BEFORE OPERATION

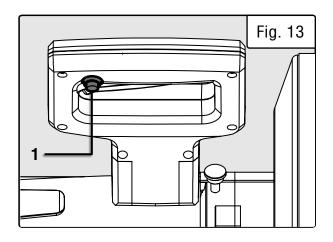
- Check that the workpiece is fully supported, against the fence and securely clamped.
- Check that you have the proper blade for the material you are cutting.
- Without turning on the saw, perform a dry run of cutting operation to check that nothing is obstructing the path of the saw.

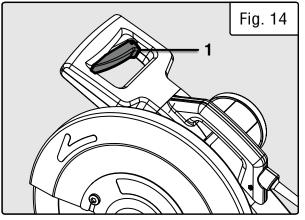
### 6. PERFORM THE CUT

1. Plug in the chop saw. Grip the operating handle firmly, press the blade trigger lock button (Fig. 13 - 1) with your thumb, and squeeze the power trigger (Fig. 14 - 1) to turn the saw ON.

**NOTE:** The trigger lock is a safety feature that prevents the power trigger from being pressed down to reduce the risk of accidentally starting the machine.

2. Allow the blade to reach full speed. Make sure the workpiece is held securely against the base and fence at all times. If the material binds to the blade, release the power trigger. Slowly lower the blade into and through the workpiece.





- 3. Once the work piece has been cut, allow the blade to raise to its upright position. Release the power trigger and wait until the blade fully stops before removing the work piece from the saw.
- 4. Unplug saw before leaving your work station. Clean your work station and store tools out of reach of children.

### MAINTENANCE

**WARNING!** To avoid accidents, turn OFF and unplug the tool from the electrical outlet before cleaning, adjusting, or performing any maintenance work.

**WARNING!** Any attempt to repair or replace electrical parts on this tool may be hazardous. Servicing of the tool must be performed by a qualified technician. When servicing, use only identical WEN replacement parts. Use of other parts may be hazardous or induce product failure.

#### **ROUTINE INSPECTION**

Before each use, inspect the general condition of the tool. If any of these following conditions exist, do not use until parts are replaced or the sharpener is properly repaired.

#### Check for:

- Loose hardware,
- Misalignment or binding of moving parts,
- Damaged cord/electrical wiring,
- Cracked or broken parts, and
- Any other condition that may affect its safe operation steady to hold the cutterhead in place.

#### **CLEANING & STORAGE**

- 1. Keep the ventilation openings free from dust and debris to prevent the motor from overheating.
- 2. Wipe the tool surfaces clean with a clean cloth. Make sure water does not get into the tool.
- 3. Store the tool in a clean and dry place away from the reach of children. Store in temperatures between 41° to 86°F.
- 4. Cover the miter saw in order to protect it from dust and moisture. It is preferable to store it in its original packaging with the instruction manual.

#### CARBON BRUSH REPLACEMENT

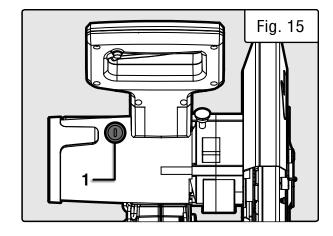
Replacement carbon brushes (Part No. CM1452-035) can be ordered at wenproducts.com. Only genuine WEN replacement brushes designed specifically for your tool should be used.

- 1. To access the carbon brushes, remove the carbon brush cap (Fig. 14 1) with a flat-head screwdriver (not included).
- 2. Carefully remove the old carbon brushes.
- 3. Install the new carbon brushes. Both carbon brushes should be replaced at the same time. Replace the carbon brush cap.

**NOTE:** New carbon brushes tend to spark for a few minutes during the first use as they wear down.

#### PRODUCT DISPOSAL

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



## TROUBLESHOOTING GUIDE

⚠ WARNING! Stop using the tool immediately if any of the following problems occur. Repairs and replacements should only be performed by an authorized technician. For any questions, please contact our customer service at 1-847-429-9263, M-F 8-5 CST or email us at techsupport@wenproducts.com.

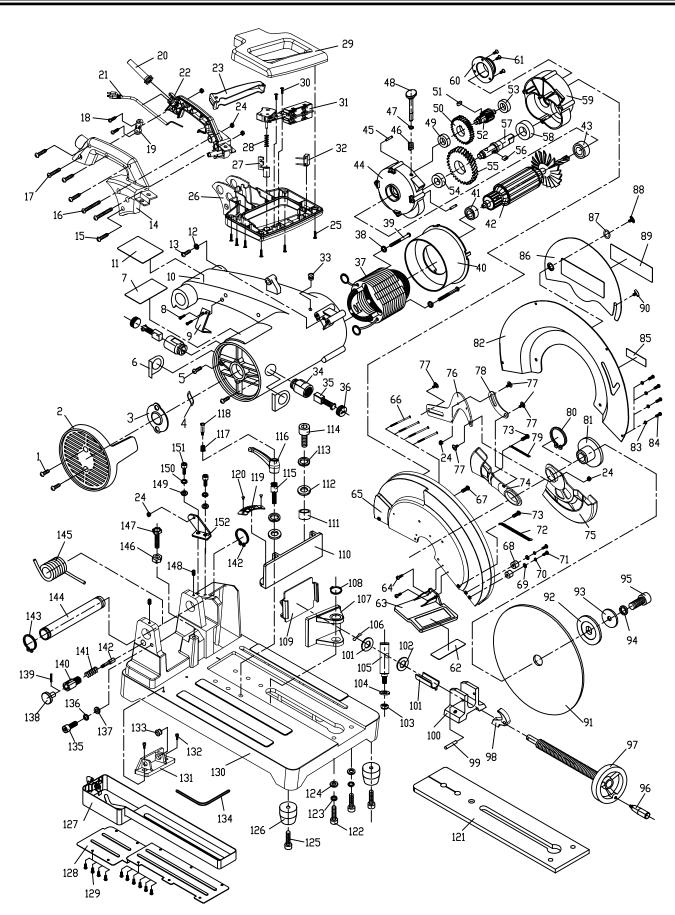
| PROBLEM                          | CAUSE                                               | SOLUTION                                                                                                                               |
|----------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|                                  | Blade is dull.                                      | Sharpen or replace blade.                                                                                                              |
|                                  | Blade is dirty.                                     | Remove the blade and clean the surface and cutting edge with steel wool and turpentine.                                                |
| Ineffective cutting performance. | The blade is not secure.                            | Make sure the blade flanges are flush against the blade and arbor bolt is tightened completely.                                        |
|                                  | Incorrect blade used for workpiece.                 | Ensure the blade is compatible with the material type and thickness being cut.                                                         |
|                                  | Blade mounted backwards.                            | Mount blade in correct orientation.                                                                                                    |
|                                  | Damaged saw blade.                                  | Replace blade.                                                                                                                         |
| Excessive noise or vibration.    | The blade is not secure.                            | Make sure the blade flanges are flush against the blade and arbor bolt is tightened completely.                                        |
| Blade will not turn.             | Excessive sawdust or chips between blade and frame. | Clean the space between the blade and frame with compressed air and ensure no chips are stuck within.                                  |
|                                  | Spindle lock is depressed.                          | Move the blade back and forth to unlock the spindle lock button.                                                                       |
|                                  | Power cord damaged or not properly plugged in.      | Check the power cord, extension cord, power plug and the power outlet. Do not use the tool if any cord is damaged.                     |
| Motor does not start.            | Defective power switch.                             | Stop using the tool and contact customer service at <b>1-847-429-9263</b> , M-F 8-5 CST for assistance.                                |
|                                  | Insufficient power from power outlet.               | Make sure the outlet is functional and is the right capacity for the tool.                                                             |
|                                  | Carbon brushes are worn                             | Inspect and replace carbon brushes as needed (see page 21) Replacement brushes (Model CM1452-035) can be ordered from wenproducts.com. |
|                                  | Defective motor or other internal problem           | Stop using the tool and contact customer service at <b>1-847-429-9263</b> , M-F 8-5 CST for assistance.                                |

## TROUBLESHOOTING GUIDE

⚠ WARNING! Stop using the tool immediately if any of the following problems occur. Repairs and replacements should only be performed by an authorized technician. For any questions, please contact our customer service at 1-847-429-9263, M-F 8-5 CST or email us at techsupport@wenproducts.com.

| PROBLEM        | CAUSE                                       | SOLUTION                                                                               |
|----------------|---------------------------------------------|----------------------------------------------------------------------------------------|
| Saw overheats. | Tool forced to work too fast.               | Do not force the tool and make sure the workpiece is compatible with the blade in use. |
|                | The extension cord is too long or too thin. | See page 8 for selecting the proper size of extension cord for your tool.              |
|                | Blocked motor housing vents.                | Blow dust out of the motor housing vents while wearing safety goggles and dust mask.   |

## **EXPLODED VIEW & PARTS LIST**



**NOTE:** Not all parts may be available for purchase.

## **EXPLODED VIEW & PARTS LIST**

| No. | Part No.   | Description           | Qty. |
|-----|------------|-----------------------|------|
| 1   | CM1452-001 | Screw M5x12           | 2    |
| 2   | CM1452-002 | Motor Cap             | 1    |
| 3   | CM1452-003 | Bearing Support Plate | 1    |
| 4   | CM1452-004 | Wave Washer           | 1    |
| 5   | CM1452-005 | Screw M5x10           | 2    |
| 6   | CM1452-006 | Red Gasket            | 2    |
| 7   | CM1452-007 | Motor Label           | 1    |
| 8   | CM1452-008 | Bolt M5x15            | 2    |
| 9   | CM1452-009 | Depth Stop            | 1    |
| 10  | CM1452-010 | Motor Housing         | 1    |
| 11  | CM1452-011 | Warning Label         | 1    |
| 12  | CM1452-012 | Washer 5 mm           | 1    |
| 13  | CM1452-013 | Screw M5x10           | 1    |
| 14  | CM1452-014 | Left Handle           | 1    |
| 15  | CM1452-015 | Screw ST4.2x25        | 1    |
| 16  | CM1452-016 | Screw M5x60           | 2    |
| 17  | CM1452-017 | Screw M5x30           | 1    |
| 18  | CM1452-018 | Screw ST4.2x13        | 2    |
| 19  | CM1452-019 | Cable Clamp           | 1    |
| 20  | CM1452-020 | Cable Sheath          | 1    |
| 21  | CM1452-021 | Power Cord            | 1    |
| 22  | CM1452-022 | Right Handle          | 1    |
| 23  | CM1452-023 | Switch Knob           | 1    |
| 24  | CM1452-024 | Nut M5                | 6    |
| 25  | CM1452-025 | Screw ST4.2x16        | 9    |
| 26  | CM1452-026 | Lower Handle          | 1    |
| 27  | CM1452-027 | Safety Button         | 1    |
| 28  | CM1452-028 | Switch Button Spring  | 1    |
| 29  | CM1452-029 | Upper Handle          | 1    |
| 30  | CM1452-030 | Screw ST4.2x13        | 2    |
| 31  | CM1452-031 | Switch                | 1    |
| 32  | CM1452-032 | Capacitor             | 1    |
| 33  | CM1452-033 | Protective Ring       | 1    |
| 34  | CM1452-034 | Brush Holder          | 2    |
| 35  | CM1452-035 | Carbon Brush          | 2    |
| 36  | CM1452-036 | Brush Cap             | 2    |
| 37  | CM1452-037 | Stator                | 1    |
| 38  | CM1452-038 | Spring Washer 5       | 2    |

| No. | Part No.   | Description          | Qty. |
|-----|------------|----------------------|------|
| 39  | CM1452-039 | Screw M5x80          | 2    |
| 40  | CM1452-040 | Air Baffle           | 1    |
| 41  | CM1452-041 | Bearing 6200         | 1    |
| 42  | CM1452-042 | Rotor                | 1    |
| 43  | CM1452-043 | Bearing 6202         | 1    |
| 44  | CM1452-044 | Inner Gearbox        | 1    |
| 45  | CM1452-045 | Locating Pin         | 2    |
| 46  | CM1452-046 | Stop Pin Spring      | 1    |
| 47  | CM1452-047 | Split Washer 8       | 1    |
| 48  | CM1452-048 | Arbor Lock           | 1    |
| 49  | CM1452-049 | Bearing 6000         | 1    |
| 50  | CM1452-050 | Gear                 | 1    |
| 51  | CM1452-051 | Flat Key 5x12        | 1    |
| 52  | CM1452-052 | Small Output Shaft   | 1    |
| 53  | CM1452-053 | Bearing 6200         | 1    |
| 54  | CM1452-054 | Bearing 6001         | 1    |
| 55  | CM1452-055 | Gear Big             | 1    |
| 56  | CM1452-056 | Flat Key 6x12        | 1    |
| 57  | CM1452-057 | Large Output Shaft   | 1    |
| 58  | CM1452-058 | Bearing 6204         | 1    |
| 59  | CM1452-059 | Outer Gearbox        | 1    |
| 60  | CM1452-060 | Gearshaft Cover      | 1    |
| 61  | CM1452-061 | Screw M4x12          | 3    |
| 62  | CM1452-062 | Safety Guard Label   | 1    |
| 63  | CM1452-063 | Plastic Safety Guard | 1    |
| 64  | CM1452-064 | Bolt M4x10           | 2    |
| 65  | CM1452-065 | Inner Guard Plate    | 1    |
| 66  | CM1452-066 | Screw M5x90          | 4    |
| 67  | CM1452-067 | Screw M5x12          | 1    |
| 68  | CM1452-068 | Rubber Ring          | 2    |
| 69  | CM1452-069 | Flat Washer 4        | 2    |
| 70  | CM1452-070 | Spring Washer 4      | 2    |
| 71  | CM1452-071 | Screw M4x10          | 2    |
| 72  | CM1452-072 | Tension Spring 2     | 1    |
| 73  | CM1452-073 | Screw M4x10          | 2    |
| 74  | CM1452-074 | Left Movable Cover   | 1    |
| 75  | CM1452-075 | Right Movable Cover  | 1    |
| 76  | CM1452-076 | Connection Rod 1     | 1    |

**NOTE:** Not all parts may be available for purchase.

## **EXPLODED VIEW & PARTS LIST**

| No. | Part No.   | Description          | Qty. |
|-----|------------|----------------------|------|
| 77  | CM1452-077 | Screw 4              | 4    |
| 78  | CM1452-078 | Connection Rod 2     | 1    |
| 79  | CM1452-079 | Tension Spring       | 1    |
| 80  | CM1452-080 | Circlip For Shaft    | 1    |
| 81  | CM1452-081 | Inner Flange         | 1    |
| 82  | CM1452-082 | Outer Safety Guard   | 1    |
| 83  | CM1452-083 | Spring Washer 4      | 4    |
| 84  | CM1452-084 | Screw M4x10          | 4    |
| 85  | CM1452-085 | Blade Guard Label    | 1    |
| 86  | CM1452-086 | Arbor Cover Plate    | 1    |
| 87  | CM1452-087 | Positioning Washer   | 1    |
| 88  | CM1452-088 | Set Screw            | 1    |
| 89  | CM1452-089 | Blade Cover Label    | 1    |
| 90  | CM1452-090 | Blade Cover Screw    | 1    |
| 91  | BL1466     | Blade                | 1    |
| 92  | CM1452-092 | Outer Flange         | 1    |
| 93  | CM1452-093 | Blade Washer         | 1    |
| 94  | CM1452-094 | Spring Washer 10     | 1    |
| 95  | CM1452-095 | Bolt M10x30          | 1    |
| 96  | CM1452-096 | Crank Handle Knob    | 1    |
| 97  | CM1452-097 | Vise Screw           | 1    |
| 98  | CM1452-098 | Quick Release        | 1    |
|     |            | Mechanism            | '    |
| 99  | CM1452-099 | Pin 6x35             | 1    |
| 100 | CM1452-100 | Vise Screw Support   | 1    |
| 101 | CM1452-101 | Vise Screw Washer    | 1    |
| 102 | CM1452-102 | Flat Washer 8        | 2    |
| 103 | CM1452-103 | Locking Nut 10       | 1    |
| 104 | CM1452-104 | Washer               | 1    |
| 105 | CM1452-105 | Jaw Connection Rod   | 1    |
| 106 | CM1452-106 | Cotter Pin 3x26      | 1    |
| 107 | CM1452-107 | Vise Jaw             | 1    |
| 108 | CM1452-108 | Circlip For Shaft 22 | 1    |
| 109 | CM1452-109 | V-Vise Cover         | 1    |
| 110 | CM1452-110 | Vise Fence           | 1    |
| 111 | CM1452-111 | Screw Washer         | 1    |
| 112 | CM1452-112 | Flat Washer 10       | 2    |
| 113 | CM1452-113 | Spring Washer 10     | 2    |
| 114 | CM1452-114 | Bolt M10x20          | 1    |

|     | ,          |                           |      |
|-----|------------|---------------------------|------|
| No. | Part No.   | Description               | Qty. |
| 115 | CM1452-115 | Screw                     | 1    |
| 116 | CM1452-116 | Fence Miter Handle        | 1    |
| 117 | CM1452-117 | Handle Spring             | 1    |
| 118 | CM1452-118 | Coupling Screw            | 1    |
| 119 | CM1452-119 | Miter Scale               | 1    |
| 120 | CM1452-120 | Rivet 3x18                | 2    |
| 121 | CM1452-121 | Kerf Panel                | 1    |
| 122 | CM1452-122 | Bolt M8x40                | 2    |
| 123 | CM1452-123 | Spring Washer 8           | 2    |
| 124 | CM1452-124 | Flat Washer 8             | 2    |
| 125 | CM1452-125 | Bolt M8x35                | 2    |
| 126 | CM1452-126 | Rubber Foot               | 2    |
| 127 | CM1452-127 | Dust Drawer               | 1    |
| 128 | CM1452-128 | Dust Drawer Base          | 1    |
| 129 | CM1452-129 | Screw M4x10               | 10   |
| 130 | CM1452-130 | Saw Base                  | 1    |
| 131 | CM1452-131 | Wrench Holder             | 1    |
| 132 | CM1452-132 | Screw M5x15               | 2    |
| 133 | CM1452-133 | Wrench Ring               | 1    |
| 134 | CM1452-134 | Hex Wrench 8mm            | 1    |
| 135 | CM1452-135 | Bolt M8x40                | 1    |
| 136 | CM1452-136 | Spring Washer 8           | 1    |
| 137 | CM1452-137 | Flat Washer 8             | 1    |
| 138 | CM1452-138 | Plunge Lock               | 1    |
| 139 | CM1452-139 | Pin 3x18                  | 1    |
| 140 | CM1452-140 | Plunge Lock Rod           | 1    |
| 141 | CM1452-141 | Plunge Lock Spring        | 1    |
| 142 | CM1452-142 | Plunge Lock Pin           | 1    |
| 143 | CM1452-143 | Circlip 24                | 2    |
| 144 | CM1452-144 | Axle                      | 1    |
| 145 | CM1452-145 | Torsion Spring            | 1    |
| 146 | CM1452-146 | Nut M6                    | 1    |
| 147 | CM1452-147 | Depth Stop Screw<br>M8x50 | 1    |
| 148 | CM1452-148 | Bolt M5x8                 | 2    |
| 149 | CM1452-149 | Flat Washer 6             | 2    |
| 150 | CM1452-150 | Spring Washer 6           | 2    |
| 151 | CM1452-151 | Bolt M6x20                | 2    |
| 152 | CM1452-152 | Connection Plate          | 1    |

## WARRANTY STATEMENT

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

#### LIMITED WARRANTY OF WEN PRODUCTS FOR HOME USE

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

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the replacement of parts, without charge, which are defective in material or workmanship and which have not been subjected to misuse, alteration, careless handling, misrepair, abuse, neglect, normal wear and tear, improper maintenance, or other conditions adversely affecting the Product or the component of the Product, whether by accident or intentionally, by persons other than Seller. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of Purchase must be a direct vendor of Great Lakes Technologies, LLC. Purchasing through third party vendors, including but not limited to garage sales, pawn shops, resale shops, or any other secondhand merchant, voids the warranty included with this product. Contact techsupport@wenproducts.com or 1-847-429-9263 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, INCLUDING BELTS, BRUSHES, BLADES, BATTERIES, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S. AND SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

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

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

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

