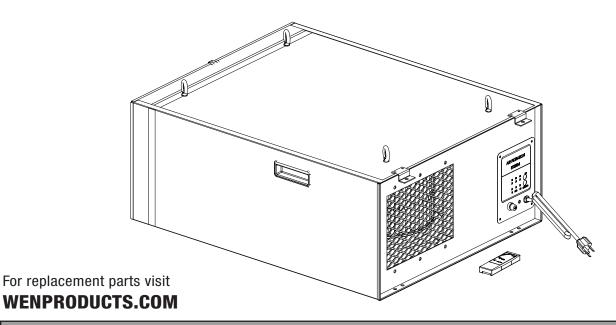




# HEAVY DUTY AIR FILTRATION SYSTEM





## **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.



# **NEED HELP? CONTACT US!**

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



800-232-1195 (M-F 8am-5pm CST)



techsupport@wenproducts.com



WENPRODUCTS.COM

**NOTICE:** Please refer to wenproducts.com for the most up-to-date instruction manual.

# **TABLE OF CONTENTS**

Technical Data	2
General Safety Rules	3
Safety Rules For Air Filtration Systems	5
Electrical Information	6
Unpacking	7
Know Your Air Filtration System	7
Assembly and Adjustments	8
Operation	10
Maintenance	12
Warranty Statement	13
Exploded View & Parts List	14

# **SPECIFICATIONS**

Model Number	3417
Model	AC 110-120V, 60Hz, 3A
Air Flow	556 CFM (Low Speed)
	702 CFM (Medium Speed)
	1044 CFM (High Speed)
Air Filters	5-Micron Outer Air Filter - Model 3415AF5
	1-Micron Inner Air Filter - Model 3415AF1
Sound Output	63 to 68 dB
Remote Control Distance	Maximum 26 feet
Assembled Dimensions	30.3 x 24 x 12.2 in. (770 x 610 x 310 mm)
Product Net Weight	55 lbs

# **GENERAL SAFETY RULES**

Safety is a combination of common sense, staying alert and knowing how your item works.

SAVE THESE SAFETY INSTRUCTIONS.

**WARNING:** To avoid mistakes and serious injury, do not plug in your tool until the entire instruction manual and all labels affixed to the tool have been read and understood.

#### **WORK AREA SAFETY**

- 1. Keep work area clean and well lit. Cluttered or dark areas can cause accidents. Do not work on floor surfaces that are slippery with sawdust or wax.
- 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 bystanders at a safe distance from the work area. Never allow children or pets near the tool.

#### **ELECTRICAL SAFETY**

- 1. Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock. If using 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.
- 2. Power tool plugs must match the outlet. Never modify the plug in any way. Modified plugs with unmatching outlets will increase the risk of electric shock.
- 3. 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.
- 4. 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.

#### **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 safety goggles at all times that comply with ANSI Z87.1. Use ear protection such as plugs or muffs during extended periods of operation. Wear a face mask or dust mask to fight the dust produced by sanding operations.
- 3. Do not wear loose clothing, gloves, neckties, or jewelry (rings, watches, etc.) when operating the tool. Inappropriate clothing and items can get caught in moving parts and draw you in. Always wear non-slip footwear and tie back long hair.
- 4. Do not overreach. Keep proper footing and balance at all times.

# **GENERAL SAFETY RULES**

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

- 1. Avoid accidental start-ups. Make sure the power switch is in the OFF position before connecting to power source, picking up or carrying the tool.
- 2. Check power tool for damaged parts. Check for misalignment of moving parts, jamming, breakage, improper mounting, or any other conditions that may affect the tool's operation. Do not use the power tool if the switch does not turn ON/OFF. Any part that is damaged should be properly repaired or replaced before use.
- 3. Do not force the tool to do a job for which it was not designed. Use the correct power tool and accessories and follow the instructions for your application to prevent hazardous situations.
- 4. Remove adjustment tools. Always make sure all adjustment tools or wrenches are removed from the tool before turning on the power tool.
- 5. Keep guards in place and in working order before operating the tool.
- 6. Use dust extraction. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection is highly recommended to reduce dust-related hazards.
- 7. Never leave a running tool unattended. Do not leave the tool until it has come to a complete stop.
- 8. Disconnect the plug from the power source. ALWAYS remove the power cord plug from the electrical outlet when making adjustments, changing parts, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- 9. Maintain power tools properly. Safely store power tools out of the reach of children. Always keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.

#### 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.

# **SAFETY RULES FOR AIR FILTRATION SYSTEMS**

**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.

- 1. To reduce the risk of injury and electric shock hazards, disconnect the air filtration system from the power source before making adjustments, servicing or changing filters.
- 2. If mounting the air filtration system to the ceiling, make sure the following requirements are met:
- The bottom of the air filtration system should be at least 7 feet above the floor level.
- Anchor the air filtration system only to building structures capable of holding at least 100 lbs.
- Do not anchor the filtration system to non-structural components such as drywall, false ceiling panels, etc.
- 3. Position the air filtration system so that it is at least 3 feet away from any corner or from any heating, cooling, or air circulation vents.
- 4. This filtration system is only designed to filter dust, small particles, etc. Do not use the air filtration system in environments that have poisonous gases, fumes, noxious smoke, or other chemical risks.
- 5. Do not expose the air filtration system to water. Do not use in wet or damp environments. Failure to comply with this instruction may cause damage to the unit and electric shock or other injury to the user.
- 6. Do not connect a power tool that expels waste or dust directly into the air filtration system. Doing so may damage the unit.
- 7. This filtration system is designed to filter many airborne contaminants that may damage the human respiratory system. However, the use of this system does NOT mean that other safety measures such as dust masks can be ignored. Seek medical attention immediately if you experience any worrying respiratory symptoms.

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

# **ELECTRICAL INFORMATION**

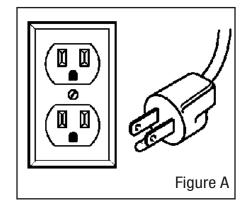
#### GROUNDING INSTRUCTIONS

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.

USE ONLY THREE-WIRE EXTENSION CORDS that have three-pronged plugs and outlets that accept the tool's plug as shown in Figure A. Repair or replace a damaged or worn cord immediately.

DO NOT MODIFY THE PLUG PROVIDED. If it will not fit the outlet, have the proper outlet installed by a licensed electrician. CHECK with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

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.



**CAUTION:** In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet

#### **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.

AMDEDACE	REQUIRED GAUGE FOR EXTENSION CORDS			
AMPERAGE	25 ft.	50 ft.	100 ft.	150 ft.
3.0 A	18 gauge	16 gauge	16 gauge	14 gauge

Make sure your extension cord is properly wired and in good condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it. Protect your extension cords from sharp objects, excessive heat and damp/wet areas.

Use a separate electrical circuit for your tools. This circuit must not be less than a #12 wire and should be protected with a 15 A time-delayed fuse. Before connecting the motor to the power line, make sure the switch is in the OFF position and the electric current is rated the same as the current stamped on the motor nameplate. Running at a lower voltage will damage the motor.

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

## **UNPACKING**

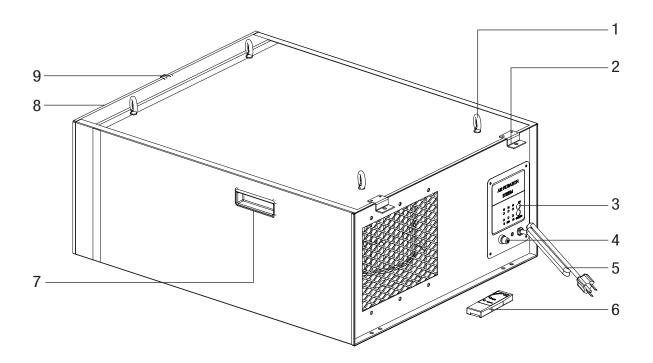
Carefully unpack the air filtration system and all its parts. Check all components and compare against the list below. Do not discard the packaging until the air filtration system is completely assembled. If any part is damaged or missing, please contact our customer service at (800) 232-1195, M-F 8-5 CST or email techsupport@wenproducts.com.

- Air Filtration System with Inner and Outer Filters Installed
- Mounting Hangers (4)
- Mounting Brackets (4)
- Hex Wrenches (2)
- M6 X 4.8 Bolts (8)

- M6 Flat Washers (8)
- M6 Lock Washers (8)
- Rubber Feet (4)
- Remote Control
- AAA Batteries (2)
- Instruction Manual

## **KNOW YOUR AIR FILTRATION SYSTEM**

Use the illustration below to become familiar with the components of your air filtration system.



- 1. Mounting Hangers (4)
- 2. Mounting Brackets (4)
- 3. Control Panel/Receiver
- 4. Fuse
- 5. Power Cord
- 6. Remote Control

- 7. Carrying Handle (2)
- 8. Outer Filter
- 9. Filter Lock Clip (2)
- 10. NOT SHOWN:
  Inner Filter (Installed on the inside of the machine)

## **ASSEMBLY & INSTALLATION**

**WARNING:** To prevent serious injury from accidental operation, make sure the power cord is disconnected from the power source and the tool is switch to OFF before assembly or making any adjustments.

The air filtration system is designed to circulate air and filter wood and other non-metallic dust. To achieve the best performance possible, it is important to consider how and where to place the unit. When selecting a site, make sure there is a suitable power source nearby. The use of an extension cord is NOT recommended with the air filtration system.

## **REMOVE THE STYROFOAM BLOCKS (FIG. 1 & 2)**

**IMPORTANT:** Styrofoam blocks (Fig. 1) are installed around the motor to protect it from shipping damage. They MUST be removed before operation.

- 1. Lift up the filter lock clips on the back of the machine to remove the outer filter and inner filter.
- 2. Remove the inner grating (Fig. 2 1) by unscrewing the six Phillips head screws.
- 3. Remove the styrofoam blocks.
- 4. Replace the inner grating. Replace the inner and outer filters and close the lock clips (see instructions on page 11).

#### ATTACHING THE RUBBER FEET

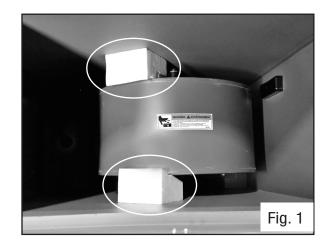
The four rubber feet can be attached onto the base of the unit if the machine will be placed on a benchtop.

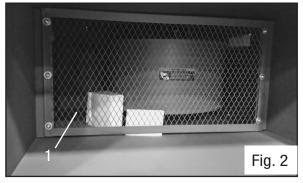
## **INSTALLING THE HANGERS (FIG. 3)**

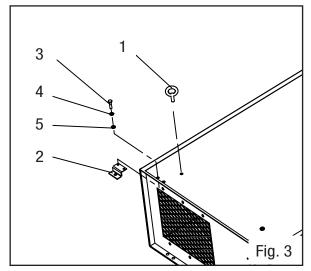
- 1. Thread a mounting hanger (Fig. 3 1) into the mounting hole on the top of the air filter cabinet.
- 2. Rotate the hanger clockwise to fully tighten it into the hole. Repeat for all four hangers.

## **INSTALLING THE BRACKETS (FIG. 3)**

- 1. Attach the mounting bracket (Fig. 3 2) using two M6x12 bolts (Fig. 3 3), two M6 lock washers (Fig. 3 4) and two M6 flat washers (Fig. 3 5).
- 2. Tighten bolts securely using a socket or wrench (not included). Repeat for all four mounting brackets.







# **ASSEMBLY & INSTALLATION**

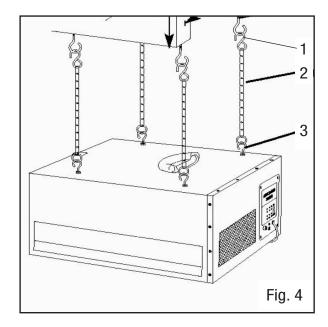
## **CEILING MOUNTING (FIG. 3)**

WARNING: Only anchor the air filtration system to building structures capable of holding AT LEAST 100 lbs. Do not mount the air filtration system to non-structural surfaces such as dry wall or false ceiling grids. The unit must be situated at least 7 feet above the floor and at least 3 feet (1 m) away from any heating, cooling, or air circulation vents.

1. Install the wood screw hooks (Fig. 4 - 1) into the building support structure.

**NOTE:** Make sure to use chain and hooks that are properly rated for hanging this unit. Wood screw hooks and chains used for ceiling mounting are not included.

- 2. Place a chain (Fig. 4 2) on each wood screw hook.
- 3. Attach the chain onto the mounting hangers (Fig. 4 3). The four mounting brackets can also be used for mounting the unit onto the ceiling or wall.
- 4. Make sure the unit is horizontally level, and is at least 7 feet above the floor. If it is not, remove the unit and adjust the length of the chain as needed. Then remount the unit.



## **OPERATION**

#### TURNING ON/OFF AND SETTING THE SPEED (FIG. 5 & 6)

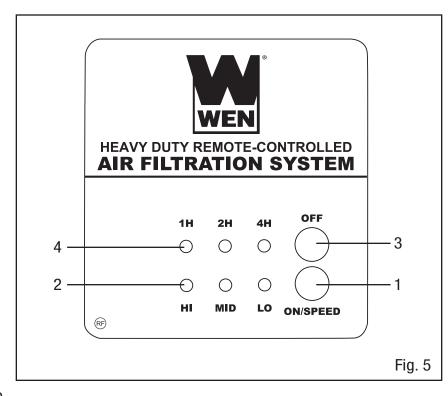
The air filtration system can be operated using the control panel or with the remote control.

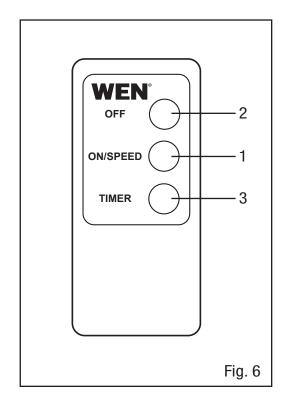
- 1. Plug the power cord into an appropriate power source.
- 2. Press the ON/SPEED button on the control panel (Fig. 5 1) or the remote control (Fig. 6 1) to power on the air filtration system. The air filtration system will start running at low speed. The "LO" LED will light up on the panel, indicating that the unit is operating at low speed.
- 3. The ON/SPEED button also controls the three different settings of the unit. Press the button to change the speed. The LED lights (Fig. 5 2) on the control panel will light up to indicate the selected speed low speed (LO), medium speed (MID) or high speed (HI).
- 4. Press the OFF button on the control panel (Fig. 5 3) or the remote control (Fig. 6 2) to turn off the unit.

## **SETTING THE TIMER (FIG. 5 & 6)**

The timer function allows you to set the length of time (1, 2 or 4 hours) that the air filtration system will operate before shutting itself off automatically. The timer can ONLY be set using the remote control.

- 1. Press the TIMER button (Fig. 6 3) on the remote control to start the timer. The cycle is 1 hour, 2 hours, 4 hours and clear the timer.
- 2. The LED lights (Fig. 5 4) on the control panel will indicate the amount of time selected. The unit will shut off automatically after the selected time interval elapses. When you clear the timer (no timer lights are showing), the air filtration system will keep running until it is turned off manually by pressing the OFF button.





## **MAINTENANCE**

## **CHANGING THE FILTERS (FIG. 7, 8, 9)**

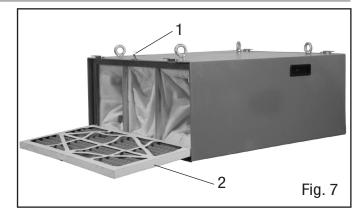
Check the inner and outer filters periodically, depending on the amount of use and the environment of the shop. Change the filters when needed. Clogged filters will reduce the amount of air circulating through the filter and possibly overload the unit.

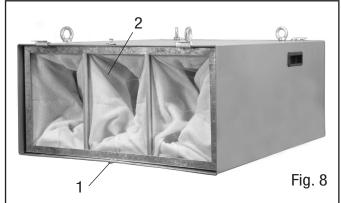
Replacement filters for this unit are available in two packs at **wenproducts.com** and all online retailers where this unit is sold:

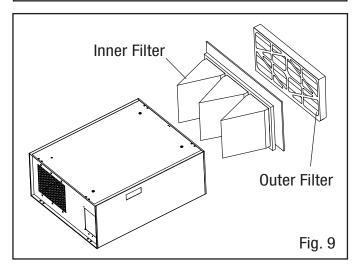
- 5-Micron Outer Air Filter Model 3415AF5
- 1-Micron Inner Air Filter Model 3415AF1

#### To change the filters:

- 1. Lift up the upper and lower filter lock clips (Fig. 7 1 and Fig. 8 1) on the back of the air filter cabinet.
- 2. Remove the outer filter (Fig. 7 2) from the cabinet housing.
- 3. Carefully pull the inner filter (Fig. 8 2) out of the cabinet.
- 4. Install a new inner filter (Model 3415AF1) into the cabinet and install a new outer filter (Model 3415AF5) on the back of the machine in the configuration as shown in Fig. 9.
- 5. Close the upper and lower lock clips to secure the outer filter in place.







# **MAINTENANCE**

#### REPLACING THE REMOTE CONTROL BATTERIES

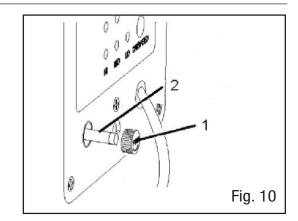
- 1. Open the remote control battery compartment on the back of the remove control.
- 2. Replace the used batteries with 2 new AAA batteries.
- 3. Close the battery compartment.

## **CHECKING AND REPLACING THE FUSE (FIG. 10)**

If the unit is overloaded, the line inside the fuse will break to cut the circuit and protect the unit.

#### To replace the fuse:

- 1. Turn the fuse cap (Fig. 10 1) counterclockwise to loosen and pull the fuse (Fig. 10 2) out of the control panel.
- 2. If the fuse is damaged, insert a new fuse (Part No. 3417-009, 4 Amps) into the fuse cap and insert it into position. Tighten the fuse cap.



#### **PRODUCT DISPOSAL**

Do not dispose of used power tools with your household waste. This product contains electrical or electronic components that should be recycled. Please take this product to your local recycling facility for responsible disposal to minimize its environmental impact.

# **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 CONSUMER POWER TOOLS PRODUCTS FOR HOME USE

GREAT LAKES TECHNOLOGIES, LLC ("Seller") warrants to the original purchaser only, that all WEN consumer power tools will be free from defects in material or workmanship for a period of two (2) years from date of purchase. Ninety days for all WEN products if the tool is used for professional or commercial use.

SELLER'S SOLE OBLIGATION AND YOUR EXCLUSIVE REMEDY under this Limited Warranty and, to the extent permitted by law, any warranty or condition implied by law, shall be the repair or replacement of parts, without charge, which are defective in material or workmanship and which have not been misused, carelessly handled, or misrepaired by persons other than Seller or Authorized Service Center. To make a claim under this Limited Warranty, you must make sure to keep a copy of your proof of purchase that clearly defines the Date of Purchase (month and year) and the Place of Purchase. Place of purchase must be a direct vendor of Great Lakes Technologies, LLC. Third party vendors such as garage sales, pawn shops, resale shops, or any other secondhand merchant void the warranty included with this product. Contact techsupport@wenproducts.com or 1-800-232-1195 to make arrangements for repairs and transportation.

When returning a product for warranty service, the shipping charges must be prepaid by the purchaser. The product must be shipped in its original container (or an equivalent), properly packed to withstand the hazards of shipment. The product must be fully insured with a copy of the warranty card and/or the proof of purchase enclosed. There must also be a description of the problem in order to help our repairs department diagnose and fix the issue. Repairs will be made and the product will be returned and shipped back to the purchaser at no charge.

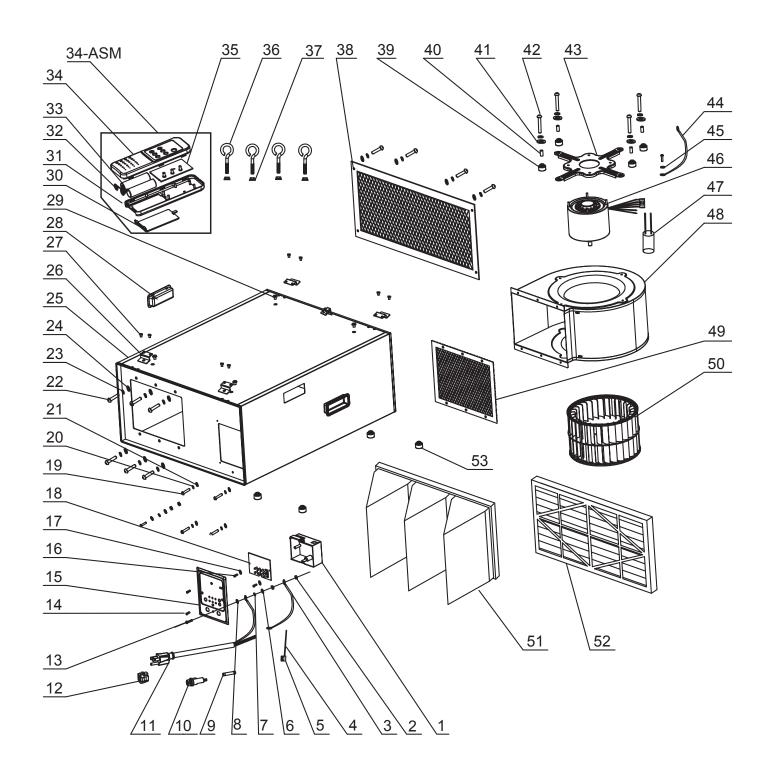
THIS LIMITED WARRANTY DOES NOT APPLY TO ACCESSORY ITEMS THAT WEAR OUT FROM REGULAR USAGE OVER TIME INCLUDING BELTS, BRUSHES, BLADES, ETC. ANY IMPLIED WARRANTIES SHALL BE LIMITED IN DURATION TO TWO (2) YEARS FROM DATE OF PURCHASE. SOME STATES IN THE U.S., SOME CANADIAN PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

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

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

THIS LIMITED WARRANTY APPLIES ONLY TO PORTABLE ELECTRIC TOOLS, BENCH POWER TOOLS, OUTDOOR POWER EQUIPMENT AND PNEUMATIC TOOLS SOLD WITHIN THE UNITED STATES OF AMERICA, CANADA AND THE COMMONWEALTH OF PUERTO RICO. FOR WARRANTY COVERAGE WITHIN OTHER COUNTRIES, CONTACT THE WEN CUSTOMER SUPPORT LINE.

# **EXPLODED VIEW & PARTS LIST**



# **EXPLODED VIEW & PARTS LIST**

No.	Part No.	Description	Qty.
1	3417-001	PCB box	1
2	3417-002	Nut M5	4
3	3417-003	Ground Wire	1
4	3417-004	Connector Wire 18AWG	1
5	3417-005	Wire Nut	1
6	3417-006	Flat Washer 5mm	2
7	3417-007	Spring Washer 5mm	2
8	3417-008	Lock Washer 5mm	2
9	3417-009	Fuse	1
10	3417-010	Fuse Box	1
11	3417-011	Power Cord	1
12	3417-012	Strain Relief	1
13	3417-013	Screw M5X20	2
14	3417-014	Screw ST3X18	2
15	3417-015	Switch Plate	1
16	3417-016	Screw ST4X14	2
17	3417-017	Plastic Washer	2
18	3417-018	PCB Board	1
19	3417-019	Screw M4X12	7
20	3417-020	Spring Washer 4mm	7
21	3417-021	Flat Washer 4mm	7
22	3417-022	Screw M6X25	10
23	3417-023	Spring Washer 6mm	14
24	3417-024	Flat Washer 6mm	10
25	3417-025	Housing	1
26	3417-026	Mounting Bracket	4
27	3417-027	Hex Head Bolt M6X12	8

No.	Part No.	Description	Qty.
28	3417-028	Handle	2
29	3417-029	Flange Nut	4
30	3417-030	Remote Box Cover	1
31	3417-031	Remote Box-Down	1
32	3417-032	Batter Spring	1
33	3417-033	AA Battery	2
34	3417-034	Remote Box-UP	1
34-ASM	3417-034ASM	Remote Control Assembly	1
35	3417-035	PCB Board	1
36	3417-036	Mounting Hook	4
37	3417-037	Flange Nut	4
38	3417-038	Internal Grating	1
39	3417-039	Rubber Spacer	4
40	3417-040	Sleeve	4
41	3417-041	Flat Washer	4
42	3417-042	Screw M6X30	4
43	3417-043	Motor Bracket 2.5mm	1
44	3417-044	Ground Wire	1
45	3417-045	Tooth Washer	1
46	3417-046	Motor	1
47	3417-047	Capacitor	1
48	3417-048	Fan Housing	1
49	3417-049	Fan Grating	1
50	3417-050	Fan	1
51	3415AF1	Inner filter	4
52	3415AF5	Outer Filter	1
53	3417-053	Rubber Foot	1

