



## User Manual

Read and understand this manual before using machine.

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# DELUXE AIR FILTER – 3 SPEED



**Model Number  
65120**



**STEEL CITY TOOL WORKS**  
VER. 3.08

Manual Part No. OR74185



**THANK YOU** for purchasing your new Steel City Air Filter. This air filter has been designed, tested, and inspected with you, the customer, in mind. When properly used and maintained, your air filter will provide you with years of trouble free service, which is why it is backed by one of the longest machinery warranties in the business.

This air filter is just one of many products in the Steel City's family of woodworking machinery and is proof of our commitment to total customer satisfaction.

At Steel City we continue to strive for excellence each and every day and value the opinion of you, our customer. For comments about your air filter or Steel City Tool Works, please visit our web site at [www.steelcitytoolworks.com](http://www.steelcitytoolworks.com)

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## INTRODUCTION

This user manual is intended for use by anyone working with this machine. It should be kept available for immediate reference so that all operations can be performed with maximum efficiency and safety. Do not attempt to perform maintenance or operate this machine until you have read and understand the information contained in this manual.

This Air Filter is intended to filter dry airborne wood dust only. It must be limited to non-explosive, non-metallic atmosphere. This machine is not to be modified for any reasons.

The drawings, illustrations, photographs, and specifications in this user manual represent your machine at time of print. However, changes may be made to your machine or this manual at any time with no obligation to Steel City Tool Works.

# WARRANTY

## 2 YEAR LIMITED WARRANTY

Steel City Tool Works, LLC (SCTW) warrants this SCTW machinery to be free of defects in workmanship and materials for a period of 2 years from the date of the original retail purchase by the original owner for domestic use. Granite components are warranted for 2 years based on normal use and is void if non SCTW accessories are used that cause the break or chip. Customer must advise SCTW within 30 days for any damage or defect found upon receipt of the product to qualify for the warranty on granite.

The warranty does not cover any product used for professional or commercial production purpose nor for industrial or educational applications. Such cases are covered by our 1 year Limited Warranty with the Conditions and Exceptions listed below.

Conditions and exception:

Warranty applies to the original buyer only and may not be transferred. Original proof of purchase is required.

Warranty does not include failures, breakage or defects deemed after inspection by an Authorized Service Center, (ASC) or agent of, have been directly or indirectly caused by or resulting from improper use, lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any part or component.

Additionally, warranty is void if repairs or alterations are made to the machine by an unauthorized service center without the direct consent of SCTW

Consumables such as blades, knives, bits and sandpaper are not covered.  
Wear items such as drive belt, bearings, switch, are covered for 1 year.

To file a claim of warranty or to find a service center, call toll free 877-724-8665 or email [customercare@steelcitytoolworks.net](mailto:customercare@steelcitytoolworks.net) and you must be able to present the original or photo copy of the sales receipt including the serial number from the machine and/or carton.

SCTW will inspect, repair or replace, at its expense and its option, any part that has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a designated ASC and provides SCTW with a reasonable opportunity to verify the alleged defect by inspection. SCTW will return the product or replacement at our expense unless it is determined by us that there is no defect or that the defect resulted from causes not within the scope of our *warranty in which case we will, at your direction, dispose of or return the product.* In the event you choose to have the product returned, you will be responsible for the handling and shipping costs of the return.

SCTW furnishes the above warranties in lieu of all other warranties, express or implied. SCTW shall not be liable for any special, indirect, incidental, punitive or consequential damages, including without limitation loss of profits arising from or related to the warranty, the breach of any agreement or warranty, or the operation or use of its machinery, including without limitation damages arising from damage to fixtures, tools, equipment, parts or materials, direct or indirect loss caused by and other part, loss of revenue or profits, financing or interest charges, and claims by and third person, whether or not notice of such possible damages has been given to SCTW. Damages or any kind for any delay by or failure of SCTW to perform its obligations under this agreement or claims made a subject of a legal proceeding against SCTW more than one (1) year after such cause of action first arose.

The validity, construction and performance of this Warranty and any sale of machinery by SCTW shall be governed by the law of the Commonwealth of Pennsylvania, without regard to conflicts of law's provisions of any jurisdiction. Any action related in any way to any alleged or actual offer, acceptance or sale by SCTW or any claim related to the performance of and agreement including without limitation this Warranty, shall take place in the federal or state courts in Allegheny County, Pennsylvania.

Warranty registration card must be submitted to SCTW for purpose of proof within 90 days of purchase with a copy of the sales receipt. Failure to do so will, revert the 2 year warranty to 1 year as in the terms stated above. This registration is also needed to facilitate contact in case of a safety recall.

This warranty gives you specific legal rights and you may have other rights which vary in certain States or Provinces.

### Note to user

This instruction manual is meant to serve as a guide only. Specification and references are subject to change without prior notice. Check the website [www.steelcitytoolworks.com](http://www.steelcitytoolworks.com) for updated manuals with reference to the VER# located on the front page.

### **LIMITED WARRANTY – ACCU-SHOP line of bench top tools**

Steel City Tool Works, LLC (SCTW) warrants this SCTW ACCU-SHOP machinery to be free of defects in workmanship and materials for a period of 2 years from the date of the original retail purchase by the original owner for domestic use.

Consumables such as blades, knives, bits and sandpaper are not covered.  
Wear items such as drive belt, bearings, switch, are covered for 1 year.

The warranty does not cover any product used for professional or commercial production purpose nor for industrial or educational applications. Such cases are covered by our 30 days Limited Warranty with the Conditions and Exceptions listed previously.

# WARRANTY CARD

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 Apt. No. \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone Number \_\_\_\_\_  
 E-Mail \_\_\_\_\_

Product Description: \_\_\_\_\_  
 Model No.: \_\_\_\_\_  
 Serial No. \_\_\_\_\_

***The following information is given on a voluntary basis and is strictly confidential.***

1. Where did you purchase your STEEL CITY machine?  
 Store: \_\_\_\_\_  
 City: \_\_\_\_\_

2. How did you first learn of Steel City Tool Works?  
 Advertisement       Mail Order Catalog  
 Web Site             Friend  
 Local Store          Other \_\_\_\_\_

3. Which of the following magazines do you subscribe to?  
 American Woodworker       American How-To  
 Cabinetmaker                 Family Handyman  
 Fine Homebuilding          Fine Woodworking  
 Journal of Light Construction    Old House Journal  
 Popular Mechanics          Popular Science  
 Popular Woodworking        Today's Homeowner  
 WOOD                          Woodcraft  
 WOODEN Boat                Woodshop News  
 Woodsmith                   Woodwork  
 Woodworker                  Woodworker's Journal  
 Workbench                   Other \_\_\_\_\_

4. Which of the following woodworking / remodeling shows do you watch?  
 Backyard America       The American Woodworker  
 Home Time                 The New Yankee Workshop  
 This Old House          Woodwright's Shop  
 Other \_\_\_\_\_

5. What is your annual household income?  
 \$20,000 to \$29,999       \$30,000 to \$39,999  
 \$40,000 to \$49,999       \$50,000 to \$59,999  
 \$60,000 to \$69,999       70,000 to \$79,999  
 \$80,000 to \$89,999       \$90,000 +

6. What is your age group?  
 20 to 29 years             30 to 39 years  
 40 to 49 years             50 to 59 years  
 60 to 69 years             70 + years

7. How long have you been a woodworker?  
 0 to 2 years                 2 to 8 years  
 8 to 20 years               over 20 years

8. How would you rank your woodworking skills?  
 Simple                       Intermediate  
 Advance                     Master Craftsman

9. How many Steel City machines do you own? \_\_\_\_\_

10. What stationary woodworking tools do you own?  
*Check all that apply.*  
 Air Compressor             Band Saw  
 Drill Press                   Drum Sander  
 Dust Collection             Horizontal Boring Machine  
 Jointer                       Lathe  
 Mortiser                     Panel Saw  
 Planer                        Power Feeder  
 Radial Arm Saw             Shaper  
 Spindle Sander             Table Saw  
 Vacuum Veneer Press     Wide Belt Sander  
 Other \_\_\_\_\_

11. Which benchtop tools do you own? *Check all that apply.*  
 Belt Sander                 Belt / Disc Sander  
 Drill Press                  Band Saw  
 Grinder                     Mini Jointer  
 Mini Lathe                  Scroll Saw  
 Spindle / Belt Sander     Other \_\_\_\_\_

12. Which portable / hand held power tools do you own?  
*Check all that apply.*  
 Belt Sander                 Biscuit Jointer  
 Dust Collector             Circular Saw  
 Detail Sander              Drill / Driver  
 Miter Saw                  Orbital Sander  
 Palm Sander                Portable Thickness Planer  
 Saber Saw                  Reciprocating Saw  
 Router                       Other \_\_\_\_\_

13. What machines / accessories would you like to see added to the STEEL CITY line?  
 \_\_\_\_\_  
 \_\_\_\_\_

14. What new accessories would you like to see added?  
 \_\_\_\_\_  
 \_\_\_\_\_

15. Do you think your purchase represents good value?  
 Yes                         No

16. Would you recommend STEEL CITY products to a friend?  
 Yes                         No

17. Comments:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CUT HERE

FOLD ON DOTTED LINE

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PLACE  
STAMP  
HERE

**SteelCityToolWorks**  
**#4 Northpoint Court**  
**Bolingbrook, IL 60440**

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FOLD ON DOTTED LINE

# PRODUCT SPECIFICATIONS

## Motor Specifications:

Type	Industrial, ball bearing
Continuous Duty	1/5
Horsepower	
Amps	2.0 / 2.6 / 6.0
Voltage	120
Phase	single
Hertz	60
RPM	850 / 1050 / 1200 (no load)

## Product Specifications :

Noise Level (Decibel)	68dB
CFM	540 / 730 / 1250
Outer Filter	5-micron, electristatic
Inner Filter	1 micron
Filter Cycle (20' x 20' x 8')	10 / 14 / 22 times per hour

## Product Dimensions :

Footprint	28" x 24" (71cm x 61cm)
Length	28" (71cm)
Width	24" (61cm)
Height	12" (30.5cm)
Weight	59Lbs.(27Kg)

## Shipping Dimensions :

Carton Type	Cardboard
Length	30-3/8" (77cm)
Width	26" (66cm)
Height	14.2" (36cm)
Gross Weight	73Lbs. (33Kg)

# ACCESSORIES AND ATTACHMENTS

## WARNING

Use only accessories recommended for this machine. Using other accessories may cause serious injury and cause damage to the machine.

Contact your local Steel City dealer for accessories, or visit our website at : [www.steelcitytoolworks.com](http://www.steelcitytoolworks.com).

# DEFINITION OF TERMS

Below are some terms that will help you to understand and setup your Air Filter and design your own Air Filter System.

**Air Filter or Ambient Air Filter** - A machine used to filter dry airborne wood dust.

**Dust Collector** - A machine used to collect fine wood dust and chips.

**Dust Collection System** - A dust collector connected to multiple woodworking machine utilizing various types of hose/pipe and fittings.

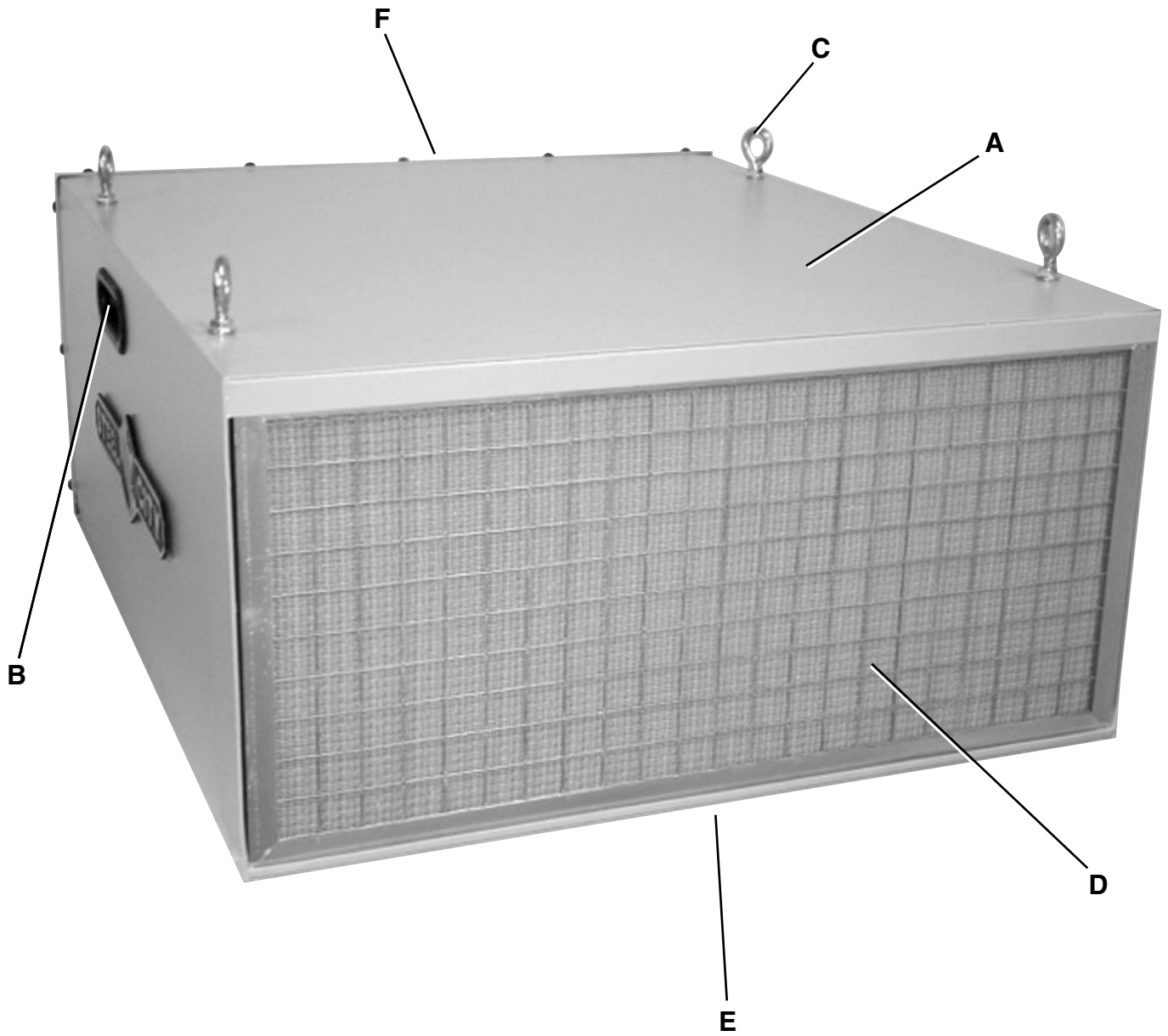
**C.F.M.**=Cubic Feet/Minute - A measurement of the amount of air volume that can move through a dust collector in one minute.

**Static Pressure** - A measurement of the amount of the resistance to airflow in a dust collection sstem.

**One Micron** - One micron is equal to one millionth of a meter.

# FEATURE IDENTIFICATION

Fig. 1-1



- A. Air Filter
- B. Handle
- C. Eye-bolt
- D. Outer Electrostatic Pre-Filter
- E. Intake Side
- F. Exhaust Side



# GENERAL SAFETY

## **⚠ WARNING**

**TO AVOID** serious injury and damage to the machine, read and follow all Safety and Operating Instructions before assembling and operating this machine.

This manual is not totally comprehensive. It does not and can not convey every possible safety and operational problem which may arise while using this machine. The manual will cover many of the basic and specific safety procedures needed in an industrial environment.

All federal and state laws and any regulations having jurisdiction covering the safety requirements for use of this machine take precedence over the statements in this manual. Users of this machine must adhere to all such regulations.

Below is a list of symbols that are used to attract your attention to possible dangerous conditions.



This is the international safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

## **⚠ DANGER**

Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

## **⚠ WARNING**

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

## **⚠ CAUTION**

Indicates a potentially hazardous situation, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

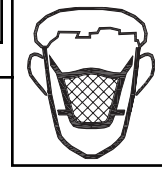
## **CAUTION**

**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

## **NOTICE**

This symbol is used to alert the user to useful information about proper operation of the machine.

## **⚠ WARNING**



Exposure to the dust created by power sanding, sawing, grinding, drilling and other construction activities may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. The dust may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

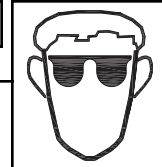
Some examples of these chemicals are:

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

Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system along with an air filtration system whenever possible. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

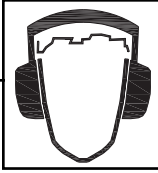
1. To avoid serious injury and damage to the machine, read the entire User Manual before assembly and operation of this machine.

## **⚠ WARNING**



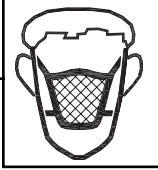
2. **ALWAYS** wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are NOT safety glasses. **ALWAYS** wear Safety Goggles (that comply with ANSI standard Z87.1) when operating power tools.

**▲ WARNING**



3. **ALWAYS** wear hearing protection. Plain cotton is not an acceptable protective device. Hearing equipment should comply with ANSI S3.19 Standards.

**▲ WARNING**



4. **ALWAYS** wear a NIOSH/OSHA approved dust mask to prevent inhaling dangerous dust or airborne particles.

5. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an area that has slippery floor surfaces from debris, grease, and wax.
6. **ALWAYS** unplug the machine from the electrical receptacle before making adjustments, changing parts or performing any maintenance.
7. **DO NOT** leave the air filter plugged into the electrical outlet. Unplug air filter from the outlet when not in use and before servicing, changing filters, unclogging and cleaning.
8. **DO NOT** use this unit to filter metal dust. Combining wood and metal dust can create an explosion or fire hazard. This air filter is intended for use where only dry airborne dust is present. Its use should be limited to non-explosive, non-metallic atmospheres.
9. **DO NOT** use this machine to dissipate fumes or smoke; fire or explosions can result.

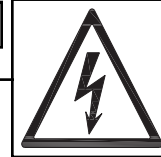
10. **SECURELY** anchor this unit into a supporting structure when suspending it from the ceiling. Always keep a minimum of 7 feet between the bottom of the unit and the floor surface to allow for sufficient head clearance. Use only a chain rated for a minimum of 150 lb. working load to adequately hold the unit. Use steel S-hooks that are at least 1/4" in diameter to suspend the unit from the ceiling. Lag-type bolts used to suspend the unit from the ceiling must be threaded at least 1-1/2" into the supporting structural members.

11. **SUPPORT** this unit or securely clamp it to the work surface when it is used in a portable application to eliminate potential movement and/or damage from falling.

12. **DO NOT** operate this unit without the filters in place.

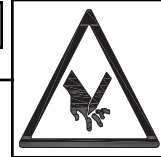
13. **MAKE CERTAIN** that the intake and exhaust areas are clean prior to starting the unit. A clogged intake or exhaust can cause a fire and/or explosion.

**▲ WARNING**



14. **KEEP** all fingers, arms, and hands away from the fan. Avoid all exposure to rotating parts to prevent injury.

**▲ WARNING**

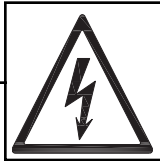


15. **DO NOT** handle the plug or air filter with wet hands.
16. **DO NOT** pull the air filter by the power cord. **NEVER** allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.

# PRODUCT SAFETY

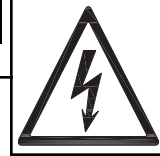
1. Serious personal injury may occur if normal safety precautions are overlooked or ignored. Accidents are frequently caused by lack of familiarity or failure to pay attention. Obtain advice from supervisor, instructor, or another qualified individual who is familiar with this machine and its operations.
2. Every work area is different. Always consider safety first, as it applies to your work area. Use this machine with respect and caution. Failure to do so could result in serious personal injury and damage to the machine.
3. Prevent electrical shock. Follow all electrical and safety codes, including the National Electrical Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

## ⚠ WARNING



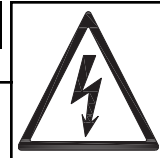
4. **TO REDUCE** the risk of electrical shock. **DO NOT** use this machine outdoors. **DO NOT** expose to rain. Store indoors in a dry area.
5. **STOP** using this machine, if at any time you experience difficulties in performing any operation. Contact your supervisor, instructor or machine service center immediately.
6. Safety decals are on this machine to warn and direct you to how to protect yourself or visitors from personal injury. These decals **MUST** be maintained so that they are legible. **REPLACE** decals that are not legible.
7. **DO NOT** leave the air filter plugged into the electrical outlet. Unplug air filter from the outlet when not in use and before servicing, changing bags, unclogging and cleaning.
8. **ALWAYS** turn the power switch "OFF" before unplugging the air filter.

## ⚠ WARNING



9. **DO NOT** handle the plug or air filter with wet hands.
10. **NEVER** use the air filter near any flammable or combustible liquids.
11. **NEVER** use the air filter to dissipate fumes or smoke. **NEVER** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
12. **USE** only as described in this manual. **USE** accessories only recommended by Steel City.
13. **DO NOT** pull the air filter by the power cord. **NEVER** allow the power cord to come in contact with sharp edges, hot surfaces, oil or grease.
14. **REPLACE** a damaged cord immediately. **DO NOT** use a damaged cord or plug. If the air filter is not operating properly, or has been damaged, left outdoors or has been in contact with water.
15. **DO NOT** use the air filter as a toy. **DO NOT** use near or around children.
16. **DO NOT** insert fingers or foreign objects into the dust intake port. Keep hair, loose clothing, fingers, and all body parts away from openings and moving parts of the air filter.
17. **PERIODICALLY INSPECT** filter for any cuts, rips or tears. **NEVER** operate the air filter with a damaged filter.
18. The air filter is designed for home use or light commercial duty **ONLY**.
19. **CONNECT** air filter to a properly grounded outlet only. See grounding instructions.

## ⚠ WARNING



# ELECTRICAL REQUIREMENTS

## **⚠ WARNING**

**TO PREVENT** electrical shock, follow all electrical and safety codes, including the National Electrical Code (NEC) and the Occupational Safety and Health Regulations (OSHA). All electrical connections and wiring should be made by qualified personnel only.

**TO REDUCE** the risk of electrical shock, **DO NOT** use machine outdoors. **DO NOT** expose to rain. Store indoors in a dry area.

**DO NOT** connect the machine to the power source before you have completed the set up process. **DO NOT** connect the machine to the power source until instructed to do so.

# GROUNDING INSTRUCTIONS

## **⚠ WARNING**



This machine **MUST BE GROUNDED** while in use to protect the operator from electric shock.

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

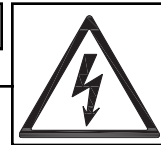
If a plug is provided with your machine **DO NOT** modify the plug. If it will not fit your electrical receptacle, have a qualified electrician install the proper connections to meet all electrical codes local and state. All connections must also adhere to all of OSHA mandates.

**IMPROPER ELECTRICAL CONNECTION** of the equipment-grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment-grounding conductor. **DO NOT** connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

## PLUGS/RECEPTACLES

### **⚠ WARNING**

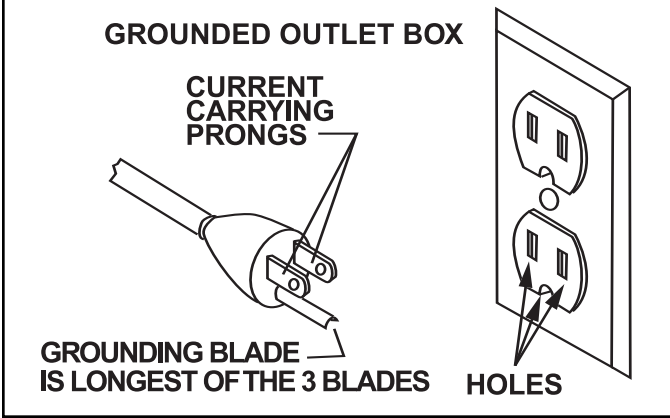


- Electrocutation or fire could result if this machine is not grounded properly or if the electrical configuration does not comply with local and state electrical codes.
- **MAKE CERTAIN** the machine is disconnected from power source before starting any electrical work.
- **MAKE SURE** the circuit breaker does not exceed the rating of the plug and receptacle.

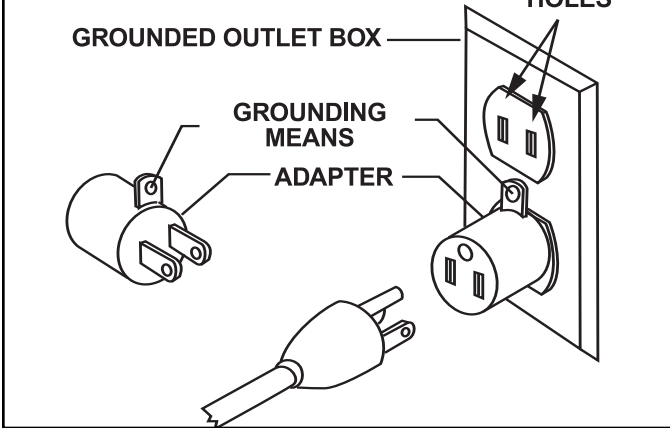
The motor supplied with your machine is a 120 volt, alternating current, 60 hertz, single phase motor. It is shipped wired for 120 volt application. Never connect the green or ground wire to a live terminal.

This tool is intended for use on a circuit that has an electrical receptacle as shown in Figure 1-1. Figure 1-1 shows a NEMA approved 3-wire, 15 amp electrical plug and receptacle that have a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown in Figure 1-2 can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**

**Fig. 1-1**

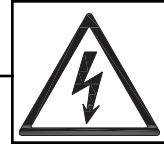


**Fig. 1-2**



## EXTENSION CORDS

### **⚠ WARNING**



To reduce the risk of fire or electrical shock, use the proper gauge of extension cord. When using an extension cord, be sure to use one heavy enough to carry the current your machine will draw.

The smaller the gauge-number, the larger the diameter of the extension cord is. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.

### **⚠ CAUTION**

**USE ONLY** a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the machine's plug.

If you are using an extension cord outdoors, be sure it is marked with the suffix "W-A" ("W" in Canada) to indicate that it is acceptable for outdoor use.

Make certain the extension cord is properly sized, and in good electrical condition. Always replace a worn or damaged extension cord immediately or have it repaired by a qualified person before using it.

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

#### MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

120 VOLT OPERATION ONLY			
	25' LONG	50' LONG	100' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG
6 to 10 Amps	18 AWG	16 AWG	16 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG

# UNPACKING & INVENTORY

This Air Filter will require a minimal amount of assembly.

Remove all of the parts from the shipping box and lay them on a clean work surface. Compare the items to figures 1-2 and 1-3, verify that all items are accounted for before discarding the shipping box.

## **⚠ WARNING**

If any parts are missing, do not attempt to plug in the power cord and turn "ON" the Air Filter. The Air

Filter should only be turned "ON" after all the parts have been obtained and installed correctly. For missing parts, contact Steel City at 1-877-SC4-TOOL.

**CAUTION:** Make certain shipping blocks have been removed from between cabinet and blower assembly, before unit is turned on. You will have to remove the filters to remove the shipping blocks.

The following items are to be provided in the shipping box:

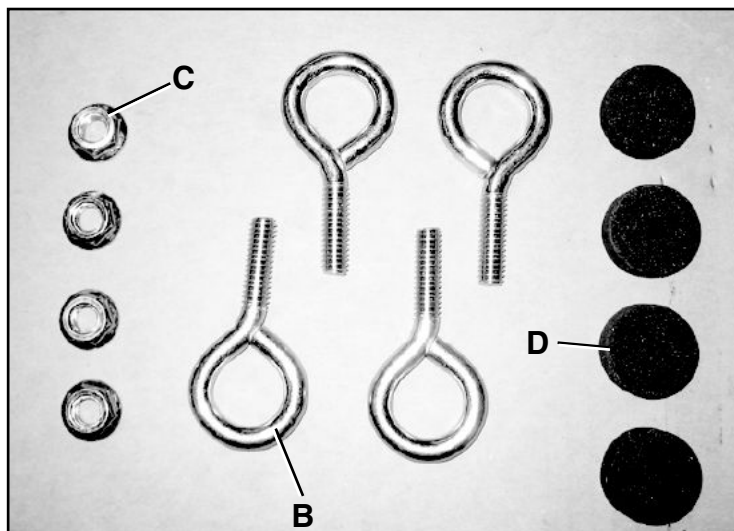
**Fig. 1-1**

A. Air Filter



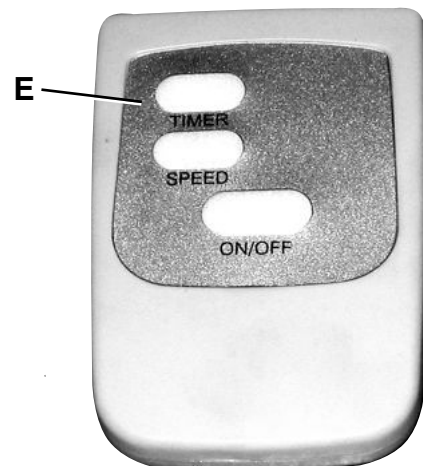
**Fig. 1-2**

- B. Eye-bolt 5/16-18 x 1-1/2" (4)
- C. Flange nut 5/16-18 (4)
- D. Rubber Pad (4)



**Fig. 1-3**

- E. Remote Control Unit (Batteries not included)



# INSTRUCTION FOR REMOVING SHIPPING BLOCKS

1. Remove the Electrostatic per filter P/N54 and the three pocket inner filter P/N 53.

2. Using a screw driver, remove the two screws on either side of the inlet guard screen. SEE FIG. 1-4

**Fig.1-4**



3. Pull inlet guard screen to one side and remove shipping blocks from top and bottom of housing. SEE FIG. 1-5

**Fig.1-5**



4. Replace inlet guard screen and install and tighten the two screws removed in step#2.

5. Replace the three pocket inner bag filter and the electrostatic per filter. Plug unit in and turn on.

## ASSEMBLY

### **WARNING**

1. **DO NOT** assemble the Air Filter until you are sure the tool **IS NOT** plugged in.
2. **DO NOT** assemble the Air Filter until you are sure the power switch is in the "OFF" position.
3. For your own safety, **DO NOT** connect the machine to the power source until the machine is completely assembled and you read and understand the entire Owner's Manual.

The Air Filter can be used as a portable or stationary unit. As a portable unit it can be moved and placed near the work to be done. As a stationary unit it can be hung overhead in the shop. Determine which type of use is best fitted for your applications and proceed to that section in the assembly instructions.

### PORTABLE UNIT ASSEMBLY

### **WARNING**

**MAKE CERTAIN THE AIR FILTER DISCONNECTED FROM THE POWER SOURCE.**

1. Place the Air Filter on its side. Locate the self-adhesive rubber pads supplied with the unit. Carefully place one rubber pad on each bottom corner of the Air Filter. The rubber pads will help eliminate vibration and noise.

**CAUTION:** For operator safety, we suggest that the unit be clamped down when used on a workbench or positioned on sawhorses.

2. There are two lifting handles located on each side of the air filter. These handles should be used to carry the Air Filter from place to place. To avoid damage to the air filters, carry the air filter with the filters positioned away from your body.

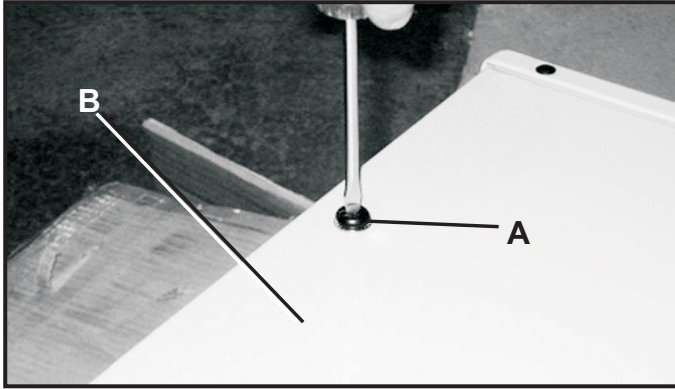
**CAUTION:** This Air Filter weighs approximately 55 pounds.

### STATIONARY UNIT ASSEMBLY

**THIS TOOL WEIGHS APPROXIMATELY 55 POUNDS. MAKE CERTAIN THE UNIT IS SECURELY SUPPORTED WHEN MOUNTING TO A CEILING OR OVERHEAD SUPPORT.**

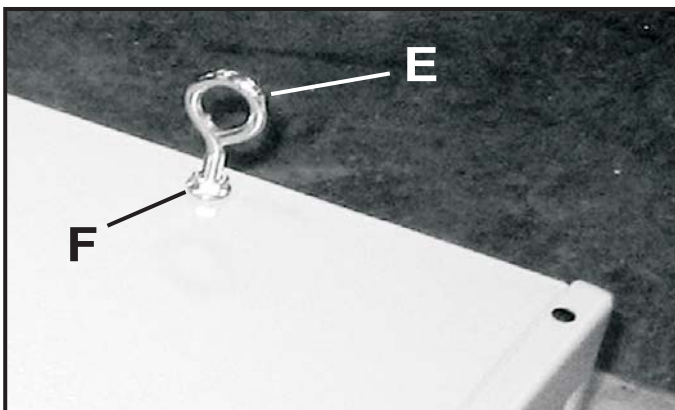
1. Remove four screws from the top of Air Filter (B); one of the screws is shown at (A). **SEE FIG 2-1.**
2. Thread each of the provided No. 5/16-18 flange nut approximately half way onto the provided No. 5/16-18 x 2" eye-bolts.
3. Thread each eye-bolt/flange nut assembly into the holes where the screws were removed in STEP 1.

**Fig.2-1**



4. **Figure 2-2** shows one of the four eye-bolts (E) assembled to the top of the Air Filter. **NOTE** : To adjust the height of the Air Filter, loosen flange nuts (F) and rotate eye-bolts as necessary. **IMPORTANT** : For safety reasons, eye-bolts must be threaded at least eight complete turns into tapped hole in top of Air Filter. Make certain the flange nuts are tightened down against the surface of the Air Filter after height adjustments are made.

**Fig.2-2**



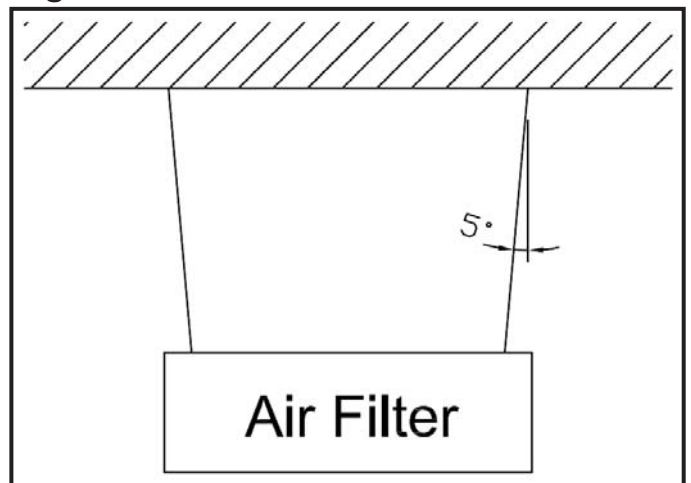
1. The Air Filter must be supported by wood or concrete structural member able to hold a minimum of 150 pounds working load per support.
2. When Supported by Wood structural member:
  - The minimum recommended Lag eye-bolt size is 5/16-18 x 2".
  - Pre-drilled 1/4" pilot holes are recommended to help guide the lag eye-bolts.
  - Ensure the lag eye-bolts penetrate at least 1-1/2" into the wood structural member.
3. When supported by Concrete structural member:
  - The minimum recommended Expansion eye-bolt size is 5/16-18 x 2".
  - Pre-drill 5/16" pilot holes into concrete structure and press the Expansion eye-bolt into hole and tighten the bolt until it is securely held to the ceiling.
4. Measure the desired length of chain and cut four chains of the same length. Attach a connecting link of similar strength to each end of the chain. Hang the chains with the connecting links to the Lag or Expansion eye-bolts in the ceiling.
5. Raise and secure the Air Filter eye-bolts to the four hanging chains with connecting links.

**Note:** For the safety requirement, We recommend the hanging angle between the chains and ceiling perpendicularity within 5 degrees. **SEE FIG 2-3.**

**⚠ WARNING**

- **Do not** fasten onto sheet rock or dry wall, drop ceiling tile/frame or non structural members.
- **Do not** use a rope or power cord to suspend the unit.
- **Do not** locate the unit in a corner or near any heating or cooling vents to keep the Air Filter operating efficiently.
- Do use chain rated for a minimum of 150 pounds working load for each support.
- Do keep hanging angle between the chain and the ceiling perpendicular.
- Do keep minimum seven feet clearance between bottom of Air Filter and the floor.

**Fig. 2-3**





# OPERATIONS

**CAUTION:** Make certain shipping blocks have been removed from between cabinet and blower assembly, before unit is turned on.

## FUNCTION

This Air Filter is furnished with two filters: an outer pre-filter which filters particles that are five microns and larger, and a secondary disposable three-pocket inner filter that captures 91% of the dust particles that are one micron and larger (one micron = one millionth of a meter). The Air Filter will filter the air in a room measuring 20" x 20" x 8" up to twenty-two times an hour. If desired, multiple units can be used to filter larger areas.

## CONNECTING TOOL TO POWER SOURCE

A separate electrical circuit should be used for your tools. This circuit should not be less than #14 A.W.G. wire and should be protected with a 15-amp time lag fuse. Have a qualified electrician repair or replace damaged or worn cord immediately. Before connecting the motor to the power line, make certain the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as stamped on the motor nameplate. All line connections should make good contact. Running on low voltage will damage the motor.

## ON/OFF SWITCH

The Air Filter is supplied with an in-line rocker switch located on the power cord. To START or STOP the unit, press downward on the rocker switch.

**NOTE:** The ON/OFF Switch must be turned ON before using the remote control feature.

## REMOTE CONTROL UNIT

### ▲WARNING

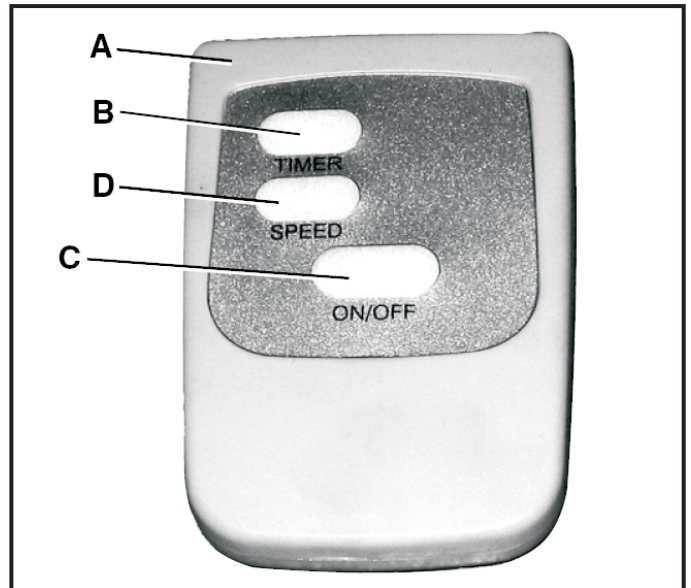


To reduce the risk of fire or electric shock, do not use this unit with any solid-state speed control device. The remote control unit (A) provided with this unit is not considered a solid-state device.

**NOTE:** The remote control unit requires two (2) AAA batteries (not included). The battery housing is located underneath the back cover of the remote.

Notice that the remote control has three control buttons: TIME (B), ON/OFF (C), and SPEED (D). These buttons correspond to the LED sensor panel on the rear of the machine.

Fig.3



1. To activate the blower unit, first turn on the ON/OFF Switch on the power cord.
- 16 2. Press the "ON/OFF" button (C) on the remote. The air filter will begin in the default speed of Low or "L" on the sensor panel.
3. Press the SPEED button (D) once, and the air filter will run at the medium or "M" level.
4. Press the SPEED button again, and the air filter will run at the high or "H" level.
5. Press the SPEED button a third time and the air filter will return to the low or "L" level.
6. To turn the machine off, press the "ON/OFF" button on the remote.

This air filter has a timer that can be set by remote control.

1. When the "TIME" button (B) on the remote control is pressed, the blower will run for 1/2 hour. An LED light will show up on the sensor panel.
2. Pressing the "TIME" button again will set the blower to run for one hour. Notice that the light on the sensor panel has now moved to the one hour location.
3. When the "TIME" button is pressed a third time, the blower will run for two hours. At this point, the green light will show up under the two hour location.

- When you press the "TIME" button the fourth time, the blower will run for four hours. Notice that the indicator light glows at the four hour location.
- All of these functions can be manually controlled by using the two buttons on the sensor panel.

### **⚠ WARNING**

**DO NOT USE THIS UNIT TO FILTER METAL DUST.** Combining wood and metal dust can create an explosion or fire hazard. This Air Filter is intended for use where only dry airborne dust is present. Its use should be limited to non-explosive, non-metallic atmospheres.

### **⚠ WARNING**

**NEVER SECURE MOUNTING HARDWARE TO DRYWALL, DROP CEILING TILE/FRAME OR NON-STRUCTURAL MEMBERS.**

### **⚠ WARNING**

**KEEP A MINIMUM OF SEVEN FEET BETWEEN BOTTOM OF AIR FILTER AND THE FLOOR.**

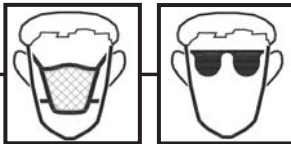
### **⚠ WARNING**

**DO NOT** operate this unit without the filters in place.  
**NOTE:** The Air Filter may produce a slight odor for the first couple hours of operation due to the protective coating which is applied to internal components. This odor will dissipate and should be disregarded.

## MAINTENANCE

### CHANGING AND CLEANING FILTERS

#### **⚠ WARNING**



- ALWAYS** wear eye protection. Any machine can throw debris into the eyes during operations, which could cause severe and permanent eye damage. Everyday eyeglasses are **NOT** safety glasses.
- ALWAYS** use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

- Turn the air filter OFF and let the blower come to a complete stop before proceeding.

#### **⚠ WARNING**

Compressed air can be dangerous. For operator safety, **DO NOT EXCEED** an air pressure of 30 PSI or point air nozzle toward anyone or aim nozzle at your own body.

- Lift up and pull out on the bottom of the outer pre-filter. The outer pre-filter can be cleaned in one of three methods. Method one is using a shop vacuum to remove the dust. Method two is by using compressed air to blow the dust out of the filter. Method three is by washing with soap and water.

**NOTE:** The three-pocket inner filter cannot be cleaned and must be replaced when worn.

- To replace the inner filter, lift and pull out on the bottom of the filter.

- Install the new inner filter by placing the top of the filter in first and allowing the bottom to sit on the air filter.

**NOTE:** Make certain if there is an AIRFLOW ARROW on either filter, that the arrow points inward toward the blower of the air filter.

- Replace the outer pre-filter, by placing the top of the filter in first and allowing the bottom to sit on the air filter. Make sure it is sitting inside of the bottom lip of the air filter.

### LUBRICATION

The Air Filter has sealed lubricated bearings in the motor housing that do not require any additional lubrication from the operator.

**CAUTION: DO NOT USE FLAMMABLE MATERIALS** to clean Air Filter.

#### **⚠ WARNING**

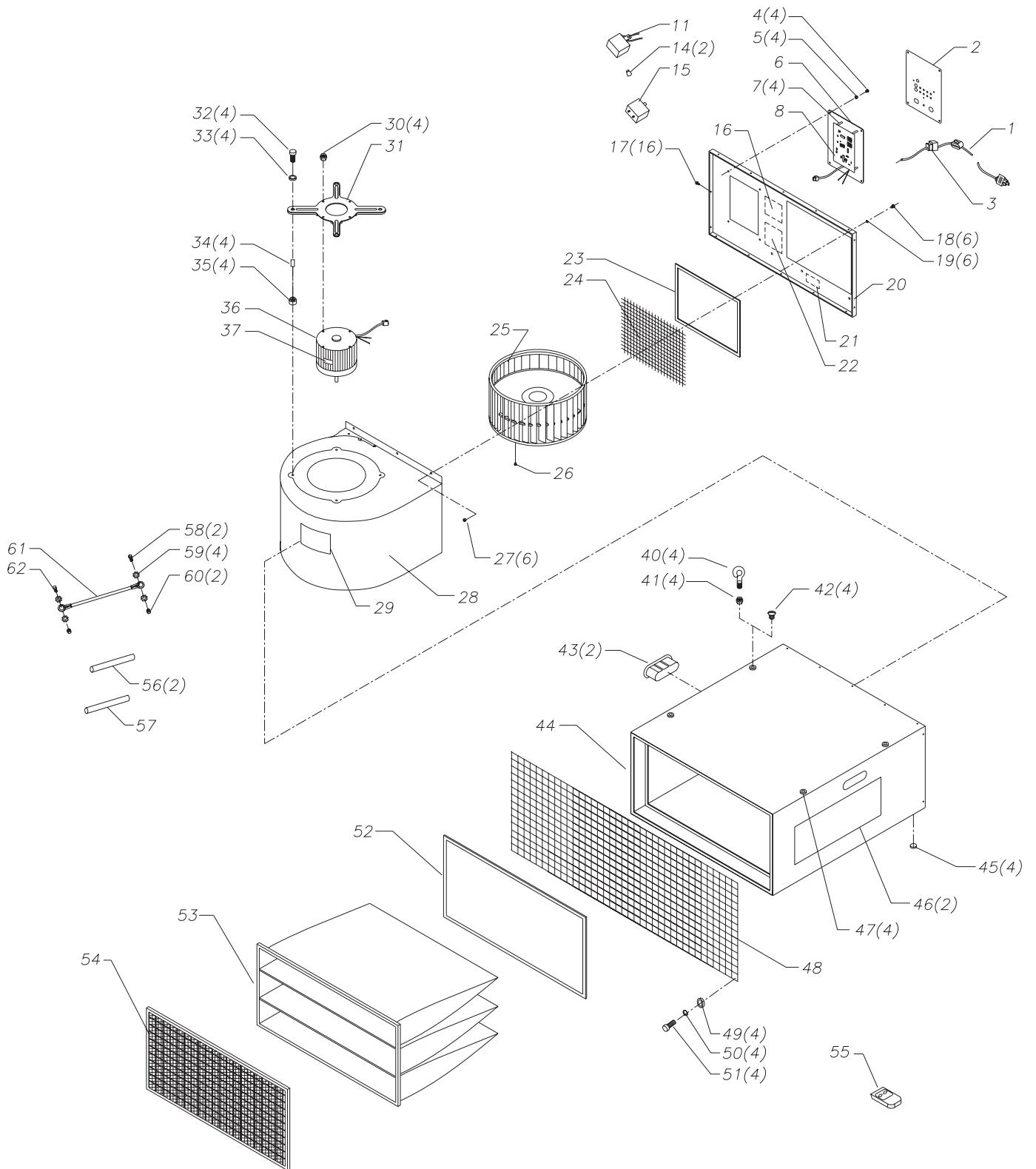
Repairs to the Air Filter should be performed by trained personnel only. Contact your nearest Steel City Authorized Service Center for authorized service. Unauthorized repairs or replacement with non-factory parts could cause serious injury to the operator and damage to the Air Filter.

# TROUBLESHOOTING GUIDE

**TO PREVENT INJURY TO YOURSELF** or damage to the Air Filter, turn the switch to the “OFF” position and unplug the power cord from the electrical receptacle before making any adjustments.

PROBLEM	LIKELY CAUSE(S)	SOLUTION
Motor does not start	<ol style="list-style-type: none"> <li>1. Switch not pressed in far enough or switch in the “OFF” position.</li> <li>2. Defective switch</li> <li>3. Low line voltage</li> <li>4. Defective motor</li> <li>5. Power cord switch not turned ON.</li> </ol>	<ol style="list-style-type: none"> <li>1. Depress switch in or make sure switch is in the “On” position</li> <li>2. Have switch replaced</li> <li>3. Correct low line voltage condition.</li> <li>4. Have motor replace/repared</li> <li>5. Turn switch to ON position</li> </ol> <p>NOTE: 2, 3 and 4 must be done by a qualified service technician.</p>
Motor stalls (resulting in blown fuses or tripped circuit breakers)	<ol style="list-style-type: none"> <li>1. Circuit overload</li> <li>2. Low line voltage</li> <li>3. Incorrect fuses on circuit breakers</li> <li>4. Short circuit in motor; loose connections or worn insulation on lead wires</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce circuit load</li> <li>2. Correct low line voltage condition</li> <li>3. Have correct fuses on circuit breakers installed</li> <li>4. Inspect terminals in motor for damaged insulation and shorted wires and have them replaced.</li> </ol>
Motor starts slowly or falls to come to full speed	<ol style="list-style-type: none"> <li>1. Defective motor windings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Have motor replaced/repared</li> </ol>
Motor running too hot	<ol style="list-style-type: none"> <li>1. Restricted air circulation due to dust accumulation</li> </ol>	<ol style="list-style-type: none"> <li>1A. Clean dust and restore normal air circulation.</li> <li>1B. Clean filters.</li> </ol>
Frequent blowing of fuse or circuit breakers	<ol style="list-style-type: none"> <li>1. Fuse or circuit breakers do not have sufficient capacity</li> <li>2. Circuit overloaded.</li> </ol>	<ol style="list-style-type: none"> <li>1. Have correct fuses or circuit breakers installed.</li> <li>2. Reduce circuit load (turn off other appliances)</li> </ol>

# PARTS



# PARTS LIST

KEY				KEY			
NO.	PART NO.	DESCRIPTION	QTY	NO.	PART NO.	DESCRIPTION	QTY
1	OR70284	POWER/SWITCH CORD	1	31	OR91332	MOTOR BASE	1
2	OR70272	CONTROL PANEL LABEL	1	32	OR91330	1/4-20 x 1" HEX HD SCREW	4
3	OR91323	BUSHING	1	33	OR90144	M6 FLAT WASHER	4
4	SC80401	#10-24 x 5/8" PAN HD SCREW	4	34	SC10004	BUSHING	4
5	OR90053	#10 EXT TOOTH WASHER	4	35	OR91347	SPACER	4
6	OR70273	CONTROL PANEL BOX	1	36	OR70408	MOTOR ASSEMBLY, 1/5 HP, 3-SPEED	1
7	SC10001	BRASS NUT	4	37	OR70357	MOTOR SPEC LABEL	1
8	SC10002	CIRCUITRY PLANK	1	40	OR91335	5/16-18 x 1-1/2" EYE BOLT	4
11	OR70275	CAPACITOR	1	41	OR91336	5/16-18 HEX FLANGE NUT	4
14	SC71001	WIRE NUT CE-2	2	42	OR91337	5/16-18 x 3/4" ROUND HD SCREW	4
15	SC72001	PROTECTOR, 4AMP	1	43	OR91339	HANDLE	2
16	OR90601	INTAKE WARNING LABEL	1	44	OR70253	CABINET ASSEMBLY	1
17	SC80402	M4 x 12mm PAN HEAD TAP SCREW	16	45	OR91341	PAD	4
18	OR91324	1/4-20 x 5/8" HEX HEAD SCREW	6	46	OR70003	STEEL CITY LABEL	2
19	OR90502	M6 LOCK WASHER	6	47	SC81601	5/16-18 RIVET NUT	4
20	OR70274	HOUSING END CAP	1	48	SC10005	INLET GUARD	1
21	OR91326	SPEC LABEL	1	49	OR90144	M6 FLAT WASHER	4
22	SC76001	SPEC LABEL	1	50	OR90509	M6 LOCK WASHER	4
23	OR91345	SEAL	1	51	OR90505	M5 x 12mm PAN HD SCREW	4
24	OR91327	OUTLET GUARD	1	52	OR91345	SEAL	1
25	OR91333	FAN ASSEMBLY <sub>j</sub>	1	53	OR91342	THREE-POCKET INNER FILTER	1
26	SC80101	M8 x 16mm HEX HD NYLOK SCREW	1	54	OR70282	ELECTROSTATIC FILTER	1
27	OR91328	1/4"-20 HEX FLANGE NUT	6	55	OR70283	REMOTE CONTROL	1
28	OR91329	BLOWER	1	56	SC10006	Ø8 SILICON SLEEVE	1
29	OR90601	INTAKE WARNING LABEL	1	57	SC10007	Ø5 SILICON SLEEVE	1
30	OR91346	M5 HEX FLANGE NUT	4	58	OR90505	M5 x 12mm PAN HD SCREW	2
				59	OR90362	M5 EXT TOOTH WASHER	4
				60	OR90381	M5 HEX NUT	2
				61	SC71002	LEAD WIRE	1
				62	OR90507	M5 x 8mm PAN HD SCREW	1

# ◆ NOTES ◆



# **STEEL CITY TOOL WORKS**

**[www.steelcitytoolworks.com](http://www.steelcitytoolworks.com)**

**1-877-SC4-TOOL**  
**(1-877-724-8665)**

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*2 Year Warranty*

