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POWERMATIC®

Operating Instructions and Parts Manual

Air Filtration System

Model PM1200



Powermatic
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Warranty and Service

Powermatic® warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period
The general warranty lasts for the time period specified in the literature included with your product or on the official Powermatic branded website.

- Powermatic products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered
This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered
This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. Powermatic woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations
Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support
Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. Powermatic has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the Powermatic website.

More Information
Powermatic is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the Powermatic website.

How State Law Applies
This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty
POWERMATIC LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. POWERMATIC SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Powermatic sells through distributors only. The specifications listed in Powermatic printed materials and on the official Powermatic website are given as general information and are not binding. Powermatic reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

Product Listing with Warranty Period

90 Days – Parts; Consumable items
1 Year – Motors, Machine Accessories
2 Year – Woodworking Machinery used for industrial or commercial purposes
5 Year – Woodworking Machinery

NOTE: Powermatic is a division of JPW Industries, Inc. References in this document to Powermatic also apply to JPW Industries, Inc., or any of its successors in interest to the Powermatic brand.

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Warnings

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace warning labels if they become obscured or removed.
4. Always wear approved safety glasses/face shields while using woodworking equipment. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
5. When using woodworking equipment, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended.
6. Wear ear protectors (plugs or muffs) during extended periods of operation.
7. Do not operate equipment while tired or under the influence of drugs, alcohol or any medication.
8. Make certain the machine is properly grounded.
9. Disconnect the filtration unit from the power source (unplug) before servicing or changing filters.
10. Form a habit of checking to see that adjusting wrenches, rags, etc. are removed from the machine before turning it on.
11. If ceiling mounted, bottom of filtration unit must be at least 7 feet from the floor.
12. If ceiling mounted, mounts must be anchored to building structure which will support a minimum of at least 100 pounds. Never mount to surfaces such as dry wall, false ceiling grids, etc.
13. Do not expose filtration unit to water or rain.
14. Never duct a machine directly into the air filtration unit.
15. Do not use this equipment to filter flammable vapors. This air filtration unit is designed and intended for the filtration of air borne wood dust only. It is neither designed nor intended for any other purpose whatsoever. If used for other purposes, Powermatic disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
16. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.
17. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. A guard or other part that is damaged should be properly repaired or replaced.
18. Keep the floor around the machine clean and free of scrap material, oil and grease.
19. Keep visitors a safe distance from the work area. **Keep children away.**
20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
21. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
22. Use recommended accessories; improper accessories may be hazardous.
23. Do not stand on the filtration unit. Serious injury could occur if the unit tips over.

⚠ **WARNING:** This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov.

⚠ **WARNING:** Drilling, sawing, sanding or machining wood products generates wood dust and other substances known to the State of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask or other safeguards for personal protection.

Wood products emit chemicals known to the State of California to cause birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov/wood.

Familiarize yourself with the following safety notices used in this manual:

⚠CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

⚠WARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

Introduction

This manual is provided by Powermatic covering the safe operation and maintenance procedures for a Powermatic Model PM1200 Air Filtration System. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide consistent, long-term operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or Powermatic. Powermatic can also be reached at our web site: www.powermatic.com.

Register your product using the mail-in card provided, or register online:

http://www.powermatic.com/us/en/service-and-support/product-registration/

Specifications

Model Number	PM1200
Stock Number	1791330
Efficiency of Outer Filter	99 % of 5 micron particles
Efficiency of Inner Filter	85 % of 1 micron particles
Remote Transmitter	radio frequency
Blower Speeds	3
Timer Settings (hours)	1 to 9
Cabinet Material	20 gauge steel
Overall Dimensions (L x W x H)(in.)	33 x 25 x 13
Sound Rating @ 3.28 feet:	
High Speed	65 dB
Medium Speed	58 dB
Low Speed	52 dB
Air Flow, filtered:	
High Speed	1196 CFM
Medium Speed	706 CFM
Low Speed	547 CFM
Motor	1/4HP, 1 PH, 115V only
Amps	3.5 / 2.8 / 2.3
Net Weight, approximate (lbs.)	67
Shipping Weight, approximate (lbs.)	74

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, Powermatic reserves the right to change specifications at any time and without prior notice, without incurring obligations.

Grounding Instructions

⚠WARNING Electrical connections must be made by a qualified electrician in compliance with all relevant codes. This machine must be properly grounded to help prevent electrical shock and possible fatal injury.

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

Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor, with insulation having an outer surface that is green with or without yellow stripes, is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded. Use only three wire extension cords that have three-prong grounding plugs and three-pole receptacles that accept the tool's plug.

Repair or replace a damaged or worn cord immediately.

115 Volt Operation

The Air Filtration Unit is ready to run at 115 volt operation. It is intended for use on a circuit that has an outlet and a plug similar to the one illustrated in Figure A. A temporary adapter, which looks like the adapter as illustrated in Figure B, may be used to connect this plug to a two-pole receptacle, as shown in Figure B if a properly grounded outlet is not available. The temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician. **This adapter is not applicable in Canada.** The green colored rigid ear, lug, or tab, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box, as shown in Figure B.

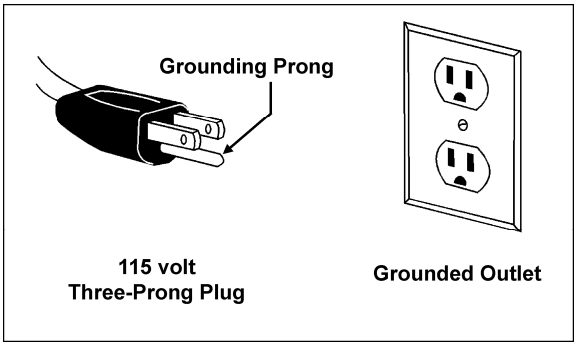


Figure A

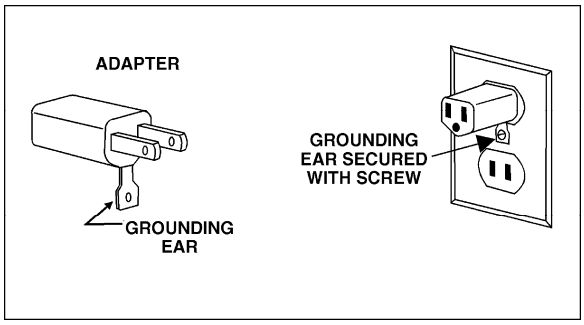


Figure B

If an extension cord is necessary, make sure the cord rating is suitable for the Air Filtration Unit's listed amperage. An undersize cord will cause a drop in line voltage resulting in loss of power and overheating.

Use the chart in Figure C as a general guide in choosing the correct size cord. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Cord Length (115V operation)	Cord Gauge
25	16 AWG
50	16 AWG
100	14 AWG
150	12 AWG

Figure C

Unpacking

Inspect the Air Filtration Unit and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Air Filtration Unit is installed and running properly.

Compare the contents of your container with the following parts list to make sure all parts are intact. Missing parts, if any, should be reported to your distributor.

Contents of the Shipping Container

1 Air Filtration Unit
1 Remote Control with Mounting Bracket
1 9 Volt Battery
4 Eye Bolts
4 Hex Nuts
4 Flat Washers
1 Instruction and Parts Manual
1 Warranty Card

Assembly

Refer to Figure 1.

Tools required: 10mm wrench and cross-point screwdriver

1. Remove both *filter guards* by pulling out on the tabs so that they clear the slots in the sides of the *cabinet*.
2. Remove the *outer filter* and *inner filter* (intake side) and the *diffusion filter* (exhaust side). Remove any protective plastic from these items.
3. Remove all styrofoam packing from inside the cabinet.
4. Re-install the filters and filter guards in proper order. The filters at the intake side should be placed inside the *retaining plate* on the cabinet.

   (The outer filter has an arrow printed on it to show direction of air flow; make sure it is facing the proper direction when installed.)
5. If you will be suspending the unit from an overhead structure, remove the four screws on top of the cabinet. Install the four *eye bolts* with hex nuts and washers into the threaded holes. Screw each eye bolt into the cabinet; turn it to desired position then tighten the hex nut against the cabinet with a 10mm wrench.

Installation

⚠CAUTION The unit must be anchored to a building structure which will support a minimum of 100 pounds. Never mount to surfaces such as dry wall, false ceiling grids, etc.

If mounting to ceiling, make sure chain and ceiling hooks are properly rated for hanging this unit. Clearance should be at least 7 feet from bottom of unit to the floor.

This unit will work best if located away from corners and heating/cooling vents.

Controls and Features

Refer to Figure 2.

The Air Filtration Unit can be operated by either the remote transmitter or the control panel on the cabinet. The remote transmitter uses radio frequency, and thus is not limited by line-of-sight operation.

Fuse

The fuse switch will pop out in case of overload. Wait 3 to 5 minutes and push the fuse switch back in.

Speed

The unit will always start on low speed. On the *remote*, press the up or down button to change speed. Or, on the *control panel,* press and release the Speed button.

Timer

Press the timer button on the remote (the timer indicator will start flashing). Then press the *up* or *down* button to scroll to the desired time (from 1 to 9 hours). Press the timer button again – the indicator will stop flashing. The unit will operate for the programmed time, at the end of which it will automatically shut off.

Note: If the timer function is not used, the filtration unit will continue to operate until the off button is pressed.

Change Filter

The “Change Filter” indicator will light up after 200 hours of operation to remind the operator to inspect and to clean/replace filters if needed.

To turn off the indicator light, press the Reset switch using a thin object, such as a ball point pen or paper clip.

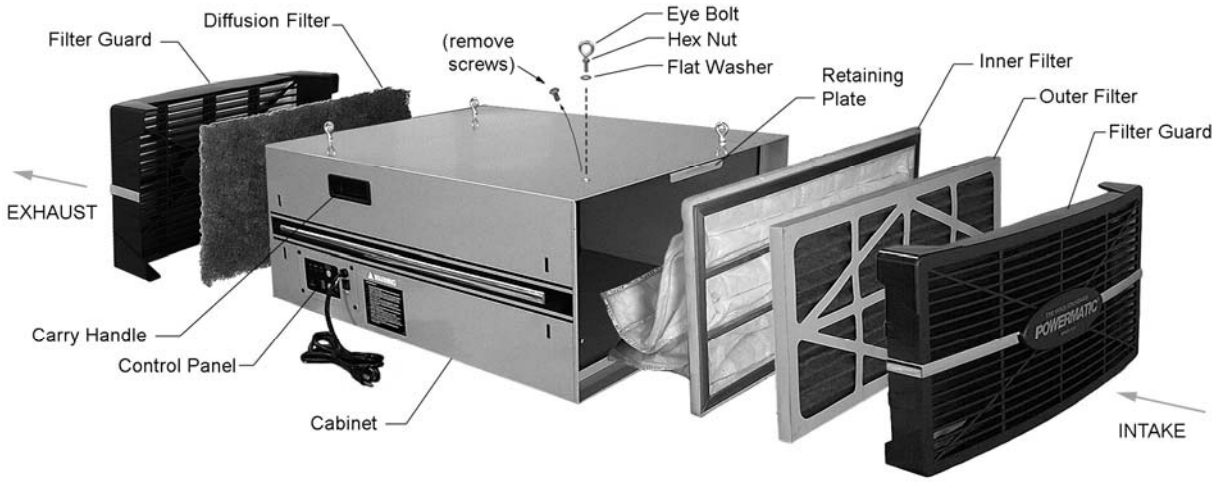


Figure 1

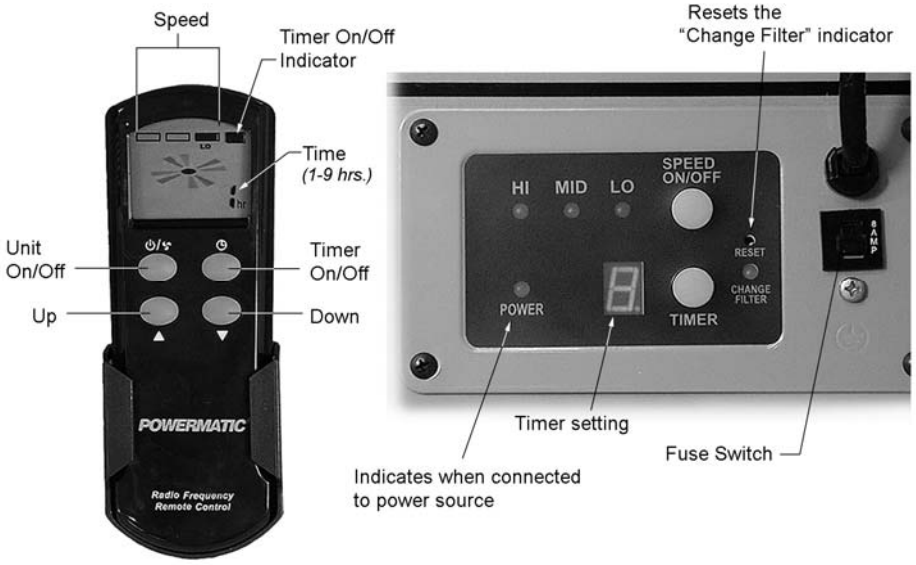


Figure 2

Operation

NOTE: The Air Filtration Unit is designed to remove airborne non-metallic dust particles; it is not designed to take the place of a dust collection system.

Larger particles are trapped by the outer filter. Smaller particles are stopped by the fine mesh pockets of the inner filter. The air is then exhausted through the diffusion filter, which has a fibrous composition to help diffuse the air.

Changing Filters

Refer to Figure 1.

⚠WARNING Turn off, disconnect (unplug) the Air Filtration Unit from the power source before servicing or changing filters.

There are two filters that need to be cleaned and/or replaced periodically, depending upon the amount of use and the environment of your shop. Using clogged filters will diminish the overall efficiency of the unit.

The **outer filter** is disposable, but its life can be extended by occasional use of a shop vac or compressed air to clean off the dust. For maximum efficiency, however, a dirty outer filter should be discarded and replaced with a new one. *(An optional, washable outer filter is available – stock no. 1791085.)*

The **inner filter** can be blown out with compressed air.

The **diffusion filter** will not need replacing. It should be inspected occasionally, and if needed, cleaned by light vacuuming or compressed air. *(An optional charcoal diffusion filter – stock no. 1791084 – may be purchased, and is used to reduce odors and non-flammable vapors.)*

Transmitter Replacement

The remote transmitter provided with your Air Filtration Unit is pre-programmed and ready to operate once the battery is installed.

However, should you ever need to replace the remote transmitter, the new transmitter will need to be programmed for your Air Filtration Unit. This is easily done, as follows (Figures 4 and 5):

1. Start the Air Filtration Unit.
2. On the Air Filtration Unit's control panel, press and hold the *Speed* and *Timer* buttons simultaneously for 4 seconds, until you hear a "beep".
3. Turn on the remote transmitter.
4. You should now be able to operate the machine using the remote transmitter.

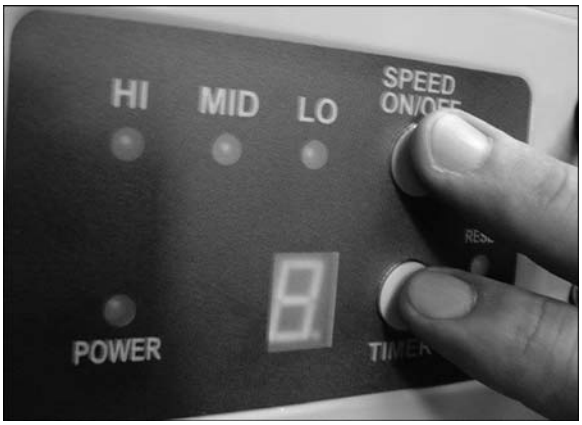


Figure 3



Figure 4

Hole Dimensions

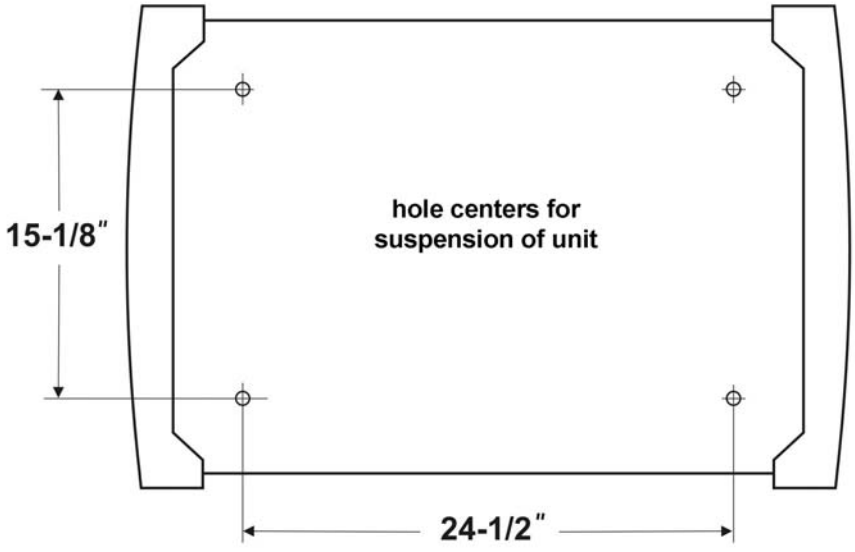


Figure 5

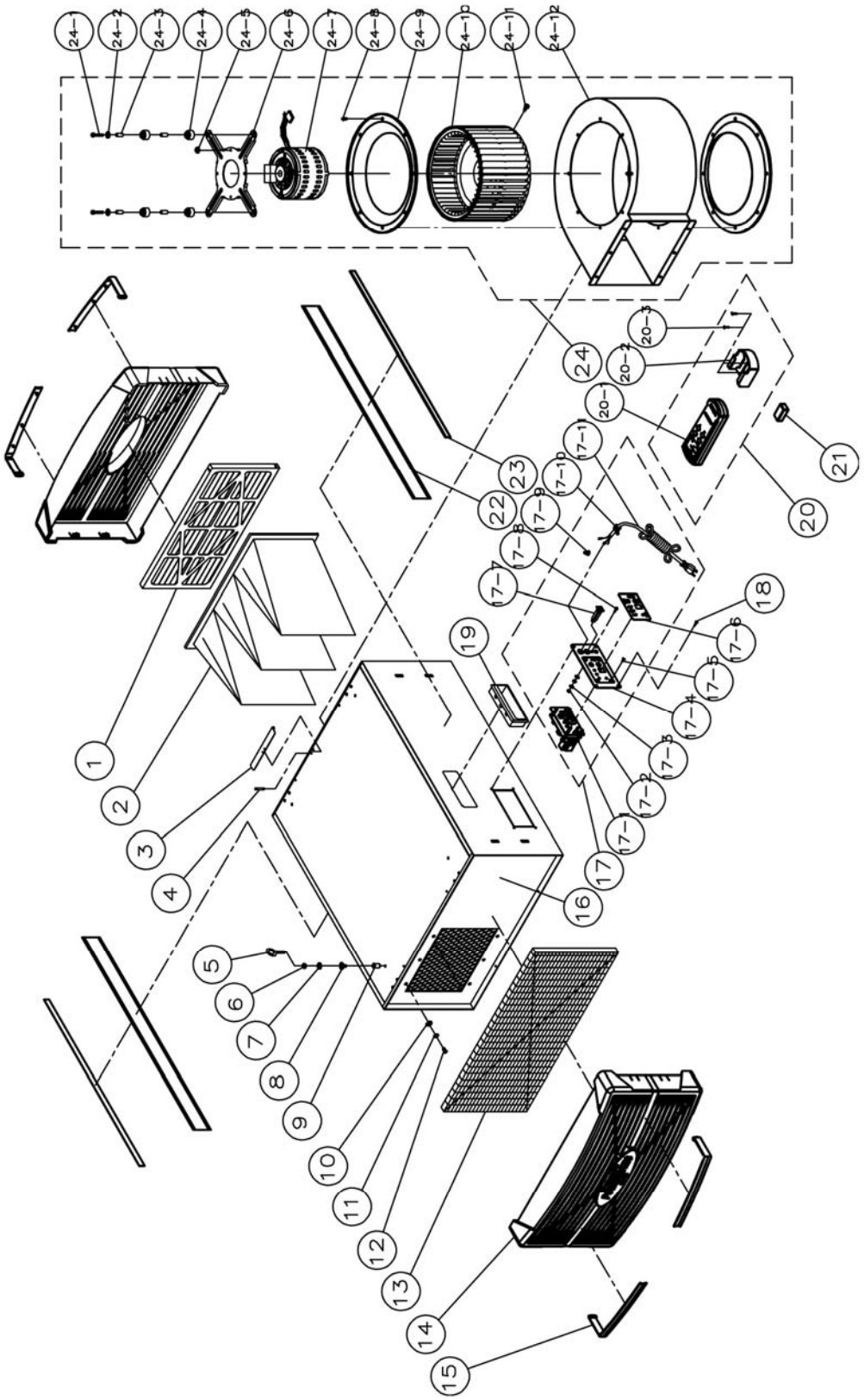
Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from Powermatic.

Some parts are shown for reference only, and may not be available individually.

Parts Breakdown for PM1200 Air Filtration System



Parts List for PM1200 Air Filtration System

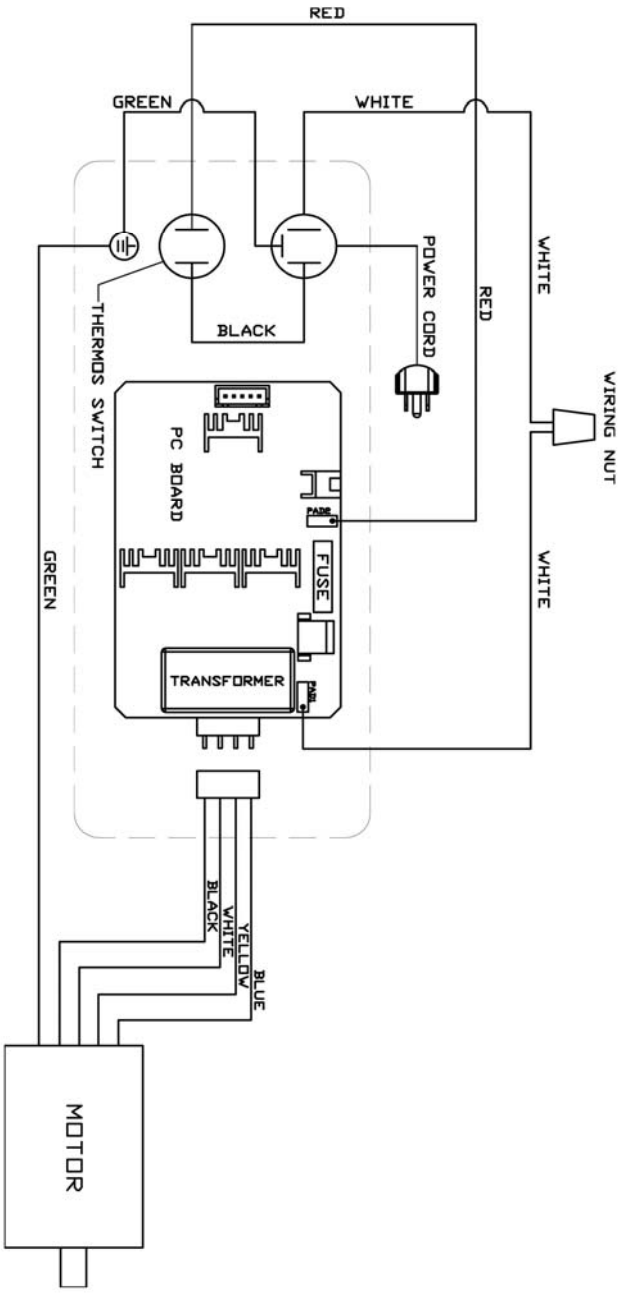
Index No.	Part No.	Description	Size	Qty
1	1791083	Outer Filter for PM1200	12”x24”x1”	1
2	1791082	Inner Filter for PM1200	12”x24”x1”	1
3	PM1200-03	Retaining Plate		1
4	PM1200-04	Rivet	NSS 4-4	2
5	PM1200-05	Eye Bolt *	M6	4
6	TS-1540041	Hex Nut *	M6	4
7	TS-1550041	Flat Washer *	M6	4
8	TS-1534032	Phillips Pan Head Machine Screw	M6x8	4
9	PM1200-09	Special Nut	M6	4
10	TS-1550041	Flat Washer	M6	6
11	TS-1551041	Lock Washer	M6	6
12	TS-1503031	Socket Head Cap Screw	M6x12	6
13	PM1200-13	Diffusion Filter		1
14	PM1200-14	Filter Guard *(re: PM1200-14A)*		2
15	PM1200-15	Short Chrome Strip *(re: PM1200-14A)*		4
	PM1200-14A	Filter Guard Assembly (includes #14 and 15)		1
16	PM1200-16	Cabinet		1
	PM1200-16A	Cabinet Assembly (includes #3, 4, 9 and 16)		1
17	PM1200-17	Control Switch Assembly		1
17-1	PM1200-1701	Circuit Board Assembly		1
17-2	TS-1540031	Hex Nut	M5	2
17-3	PM1200-1703	Toothed Washer	M5	2
17-4	PM1200-1704	Switch Plate		1
17-5	TS-1531012	Counter Sunk Screw	M3x6	4
17-6	PM1200-1706	Control Switch Label		1
17-7	PM1200-1707	Thermos Switch	5A	1
17-8	TS-1533042	Phillips Pan Head Machine Screw	M5x12	1
17-9	PM1200-1709	Wiring Nut	P2	1
17-10	PM1200-1710	Strain Relief		1
17-11	PM1200-1711	Power Cord	18AWGx3C	1
18	PM1200-18	Tapping Screw	M4x6	4
19	PM1200-19	Concave Handle		2
20	PM1200-20	RF Transmitter Assembly		1
20-1	PM1200-2001	RF Transmitter		1
20-2	PM1200-2002	Holder		1
20-3	PM1200-2003	Wood Screw	M3x12	2
21		Battery *(local purchase)*	9 Volt	1
22	6823013	Black Stripe		2
23	PM1200-23	Long Chrome Strip		2
24	PM1200-24	Blower Assembly		1
24-1	TS-1503071	Socket Head Cap Screw	M6x30	4
24-2	TS-1550041	Flat Washer	M6	4
24-3	PM1200-2403	Sleeve		4
24-4	PM1200-2404	Rubber Pad		4
24-5	TS-1540031	Hex Nut	M5	4
24-6	PM1200-2406	Motor Bracket		1
24-7	PM1200-2407	Motor	1/4HP, 115V	1
24-8	TS-1534032	Phillips Pan Head Machine Screw	M6x8	12
24-9	PM1200-2409	Air Guide Plate		2
24-10	PM1200-2410	Fan Blade		1
24-11	TS-1504021	Socket Head Cap Screw	M8x12	1
24-12	PM1200-2412	Fan Housing		1
	PM1200-HD	Hardware Kit (includes index # 5, 6 and 7)		1
	PM1200-ID	I.D. Label (not shown)		1
	LM000334	Warning Label (not shown)		1

Items with an asterisk (*) are included in the PM1200-HD Hardware Kit.

Replacement Filters:

Stock No.	Description
1791082	Inner Filter, PM1200, 12”x24”x1”
1791083	Disposable Outer Filter, PM1200, 12”x24”x1”
1791084	Charcoal Diffusion Filter, PM1200 (optional)
1791085	Washable Electrostatic Filter, PM1200, 12”x24”x1” (optional)

Electrical Connections





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