



# HIGH CAPACITY BARREL FAN

User's Manual &  
Operating Instructions

## Model Numbers: MAC-36-BDF, MAC-42-BDF, MAC-48-BDF

### CONSUMER: READ AND SAVE THESE INSTRUCTIONS

**IMPORTANT:** Read and understand all of the instructions in this manual before assembling, starting, or servicing the fan. Improper use of this fan can cause serious injury. Keep this manual for future reference.

For general ventilating use only. Do not use to exhaust hazardous or explosive materials and vapors. Never use the fan in spaces which contain products such as gasoline, solvents, paint thinners, dust particles, volatile or airborne combustibles, or any unknown chemicals.

This product meets the requirements of OSHA 1910.212(a)(5), the standard which regulates electric fan blade safety, and is certified under UL File E355088.

### **WARNING**

This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Please note the serial number of your fan, and write it on the back of this User's Manual for future reference. Your serial number is located on upper rear section of mount bar.

### Safety Information

### **WARNING**

THIS IS A FAN - NOT A TOY! TO REDUCE THE RISK OF PERSONAL INJURY AND ELECTRIC SHOCK, FAN SHOULD NOT BE PLAYED WITH OR PLACED WHERE SMALL CHILDREN CAN REACH IT.

### **WARNING**

DO NOT MOVE THE FAN WHILE OPERATING! MOVING FAN DURING OPERATION CAN CAUSE BLADE DAMAGE.

### **WARNING**

To guard against electric shock while operating, do not allow fan to come in contact with other grounded objects such as pipes, radiators, etc.

### **WARNING**

Risk of fire, electric shock, or personal injury when performing service or maintenance. Unplug or disconnect the fan from the power supply before servicing.

### **WARNING**

CAUTION: automatically operated device - to reduce the risk of injury disconnect from power source before servicing.

### **WARNING**

To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

### **WARNING**

To reduce the risk of electric shock and injury to persons, do not use in a window.



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## Safety Information

### **⚠ WARNING**

To reduce the risk of electric shock, do not expose to water or rain. This unit is designed for indoor use only.

### **⚠ WARNING**

Installation work and electrical wiring must be done by qualified person (s) in accordance with all applicable codes and regulations.

### **⚠ WARNING**

When Servicing or replacing a component requires the removal or disconnection of a safety device, the safety device is to be reinstalled or remounted as previously installed before operating this fan.

### **⚠ WARNING**

Use this fan only in the manner intended by the manufacturer. If you have any questions, contact Customer Service at 800-779-3267.

- Before operating always check fan for loose or damaged parts. Inspect power cord for damage. Never use fan without safety guards attached.

- Operate only on 120 volt 60 Hz (cycle) current with a minimum 15 amp circuit.

- When used with an extension cord, use a UL listed, 14 AWG cord equipped with a receptacle to accept the three-prong grounded plug on the fan's power cord and a 3-prong grounded plug for the power source. If extension cord is longer than 50 feet, consult with cord manufacturer for proper cord AWG rating. Always keep power cord and extension cords away from heat, oil, and sharp edges. Inspect cords periodically and replace if damaged.

## Operation

**NOTE: This fan is equipped with a 2-speed control switch.**

### **TO START FAN:**

1. Be sure the Power Switch is in the (OFF) position.
2. Connect to an approved power source.
3. Make sure area is clear from all obstructions.
4. Push the Power Switch to the LOW position and allow to operate for 10 seconds.
5. Once 10 seconds have passed, you may now push the Power Switch to the HIGH position.

### **TO TURN OFF FAN:**

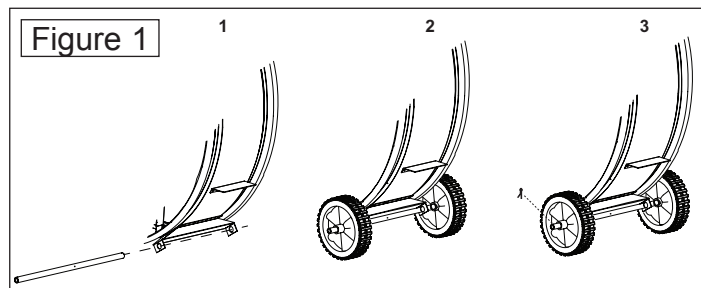
1. To turn off the fan, simply return the Power Switch to the middle (OFF) position.

**NOTE: For longer parts life, after 10 hours of continuous operation, turn fan off for 15 minutes to allow motor and fan belt to cool.**

## Installation and Assembly

### **Attaching The Wheels (Figure 1)**

1. Slide wheel axle through wheel support frame.
2. Slide one (1) wheel onto either side of axle.
3. Secure each wheel with one (1) cotter pin.



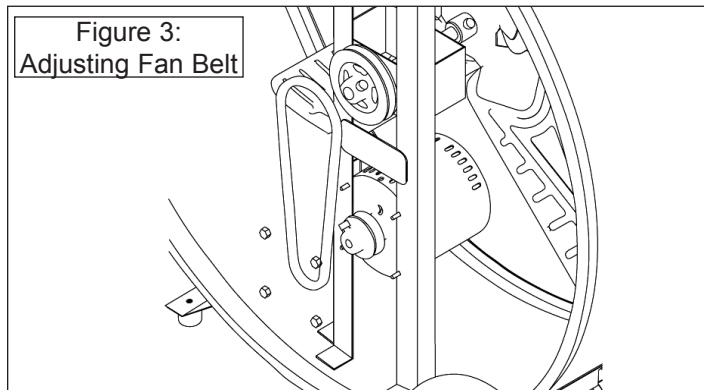
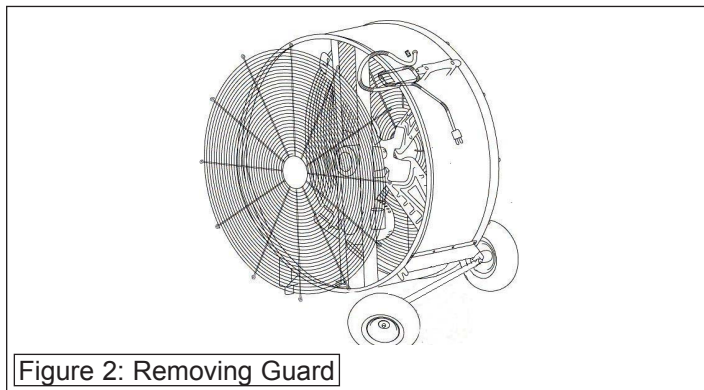
4. Locate fan in a safe, desired position on level ground, and connect to approved power source.

### **⚠ WARNING**

Do not operate any fan with a damaged cord or plug. Discard fan or return to an authorized service facility for examination and/or repair. Do not run cord under carpeting. Do not cover cord with throw rugs, runner, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic areas and where it will not be tripped over.

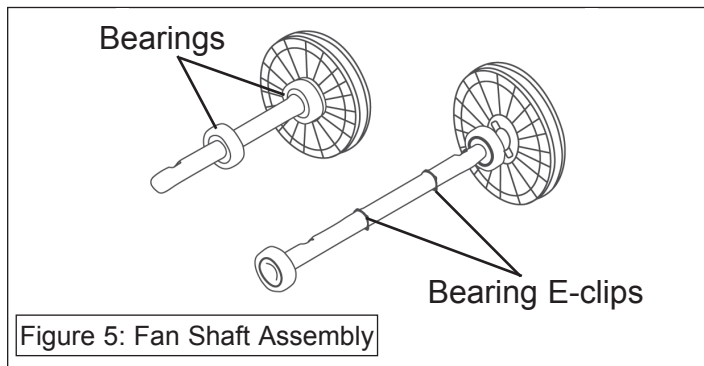
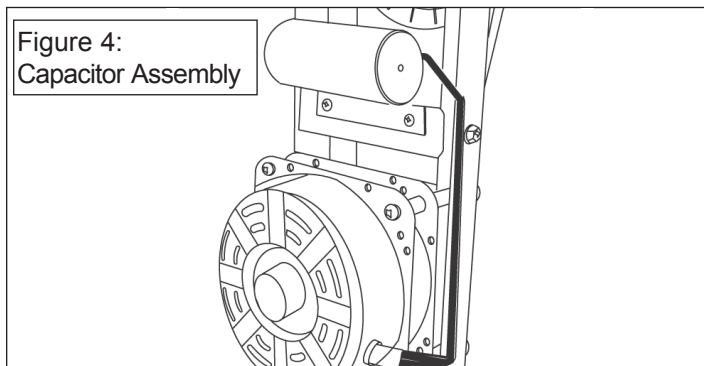
## **Belt Tightening / Replacement**

1. Remove screws from Rear Guard and tilt wheel (Figure 2).
2. Loosen motor nuts, and motor safeguards (located above and below motor).
3. Remove belt to replace, or adjust motor to tighten belt (Figure 3).

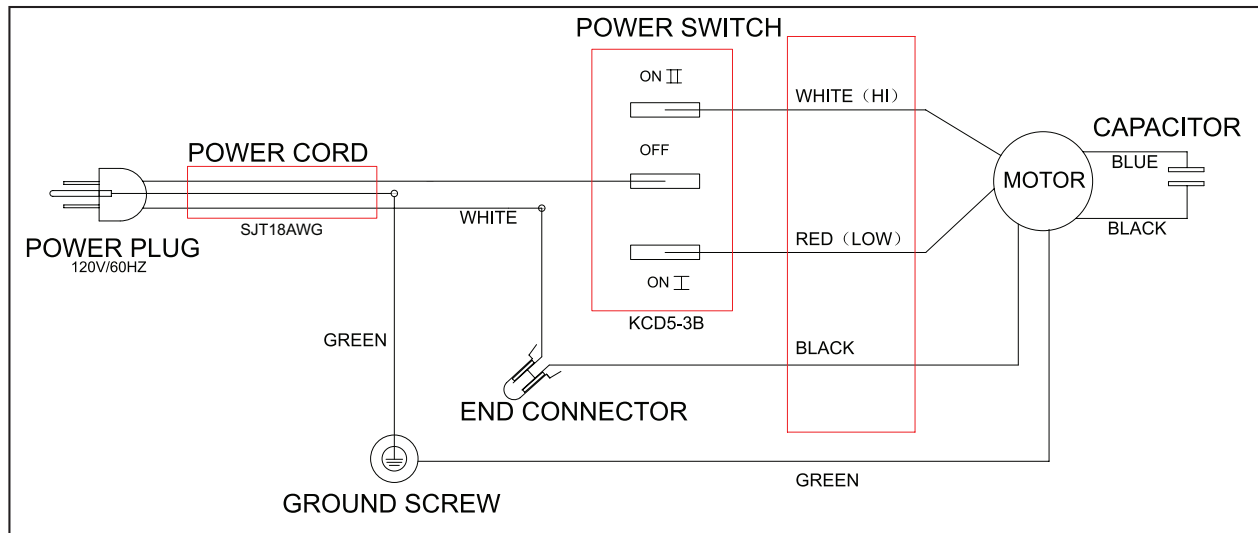


## **Maintenance and Storage**

1. Inspect your fan before each use. Check all wires and extension cords, following the procedure outlined on Page 1 (Safety Information).
2. After use, always be sure fan's Power Switch is in the OFF position before unplugging. Use cord wrap (see page 4 Item #5) to keep cord off the ground when transporting fan.



## Wiring Diagram

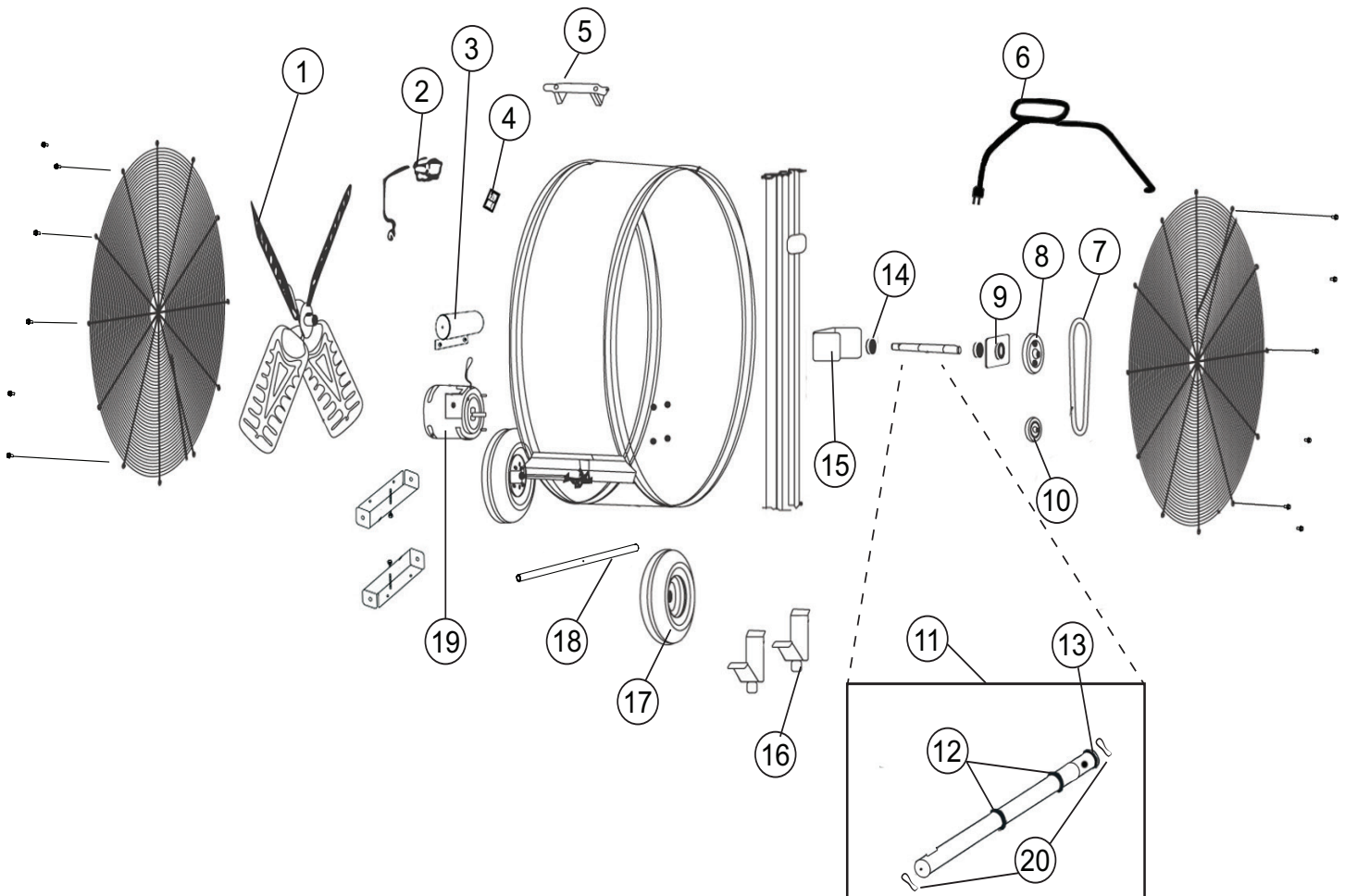


**NOTE:** Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and regulations.

## Troubleshooting Guide

Problem	Possible Cause	Corrective Action
Fan does not operate	1. No power	Inspect Power Cord for damage. Be sure unit is plugged in and turned on.
	2. Bad switch	Have Power Switch replaced by a qualified professional according to code (Note: To prolong life of Power Switch, it is recommended that the fan is first operated in LOW for 5-10 seconds before switching to HIGH).
	3. Motor is humming	Capacitor is damaged. Have Capacitor (see Figure 4) replaced by a qualified professional according to code.
Reduced Air Flow	1. Loose pulleys or fan blade	Tighten motor pulley Hex Screw.
	2. Loose or worn belt	See page 2 for belt tightening instructions.
	3. Motor is humming	Capacitor is damaged. Have Capacitor (see Figure 4) replaced by a qualified professional according to code.
Excess Noise (vibration, slapping, squealing)	1. Fan is not on level ground	Turn off fan, and relocate unit to smooth level surface.
	2. Motor bolts are not secure	Tighten Motor Safeguard bolts and 4 motor bolts.
	3. Defective E-clips	Have Fan Bearings / E-clips / Wavy Spring Washer (see Figure 5) replaced by a qualified professional according to code.

## Exploded View



### Replacement Parts

Item #	Description	Models:		
		MAC-36-BDF	MAC-42-BDF	MAC-48-BDF
1	Fan Blade Assembly	90-003-1060	90-003-2060	90-003-5250
2	Power Switch Holder	90-016-0100	90-016-0100	90-016-0100
3	Capacitor	90-004-1000	90-004-1000	90-004-2500
4	Power Switch	90-025-0100	90-025-0100	90-025-0110
5	Handle / Cord Wrap	90-006-0200	90-006-0200	90-006-0200
6	Power Cord	90-026-0050	90-026-0100	90-026-0100
7	Belt	90-037-0400	90-037-0450	90-037-0450
8	Fan Pulley	90-034-0300	90-034-0350	90-034-0350
9	Bearing Plate	90-013-0100	90-013-0100	90-013-0100
10	Motor Pulley	90-035-0350	90-035-0350	90-035-0355
11	Fan Shaft Assembly: (1) shaft, (2) bearings, (2) e-clips, (2) washers	90-003-0660	90-003-0750	90-003-0755
12	Bearing E-Clip	90-065-0210	90-065-0220	90-065-0220
13	Fan Pulley E-Clip	90-065-0220	90-065-0220	90-065-0220
14	Bearing	90-040-0100	90-040-0100	90-040-0100
15	Bearing Housing	90-013-0200	90-013-0200	90-013-0105
16	Leg	90-002-0480	90-002-0480	90-002-0450
17	Wheel	70-041-1400	70-041-1400	70-041-1400
18	Wheel Axle	90-008-0485	90-008-0485	90-008-0485
19	Motor	90-030-0730	90-030-0830	90-030-0925
20	Wavy Spring Washer	90-066-0001	90-066-0001	90-066-0001

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Model #: \_\_\_\_\_ Serial #: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_



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