

ITEM NO: M2022BNRV

M2022MBKRV

### • • • CEILING FAN • • •

### **CEILING FAN OWNER'S MANUAL**

### **READ AND SAVE THESE INSTRUCTIONS**

FAN RATING AC 120V. 60Hz UL LISTED MODEL: AC-552

# 1. TOOLS AND MATERIALS REQUIRED

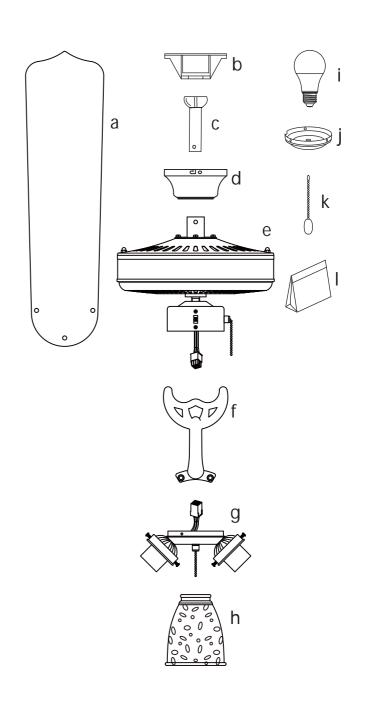
- Philips screwdriver
- Blade screwdriver
- 11 mm wrench
- Step ladder
- Wire cutter



### 2. PACKAGE CONTENTS

Unpack your fan and check the contents. You should have the following items;

- a. Set of blades assembly (5)
- b. Hanger bracket
- c. Downrod
- d. Canopy
- e. Fan motor assembly
- f. Set of blades brackets (5)
- g. Light kit
- h. Glass shades (3)
- i. 7 Watt LED bulbs (3)
- j. Extra switch housing cover
- k. Pull chains and fobs (2)
- I. Package hardware
  - 1) Mounting hardware: screws (2), lock washers (2), star washers (2), wire nuts (3) wood screws (2), washers (2)
  - 2) Blade attachment hardware: screws (16), fiber washers (16)
  - 3) Blade arm hardware: screws with lock washers (11)
  - 4) Safety cable hardware: wood screw, lock washer, metal washer
  - 5) Balance Kit



### 3. SAFETY RULES

- 1. To reduce the risk of electric shock, insure electricity has been turned off at the circuit breaker or fuse box before beginning.
- 2. All wiring must be in accordance with the National Electrical Code and local electrical codes. Electrical installation should be performed by a qualified licensed electrician.
- 3. **WARNING:** To reduce the risk of electrical shock and fire, do not use this fan with any solid-state fan speed control device.
- 4. WARNING: To reduce the risk of fire, electric shock, or other personal injury, mount fan only on an outlet box or supporting system marked acceptable for fan support of 35 lbs (15.9 kg) or less and use mounting screws provided with the outlet box. Most outlet boxes commonly used for the support of lighting fixtures are not acceptable for fan support and may need to be replaced. Consult a qualified electrician if in doubt..

#### **WARNING**

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY, MOUNT FAN TO OUTLET BOX MARKED "ACCEPTABLE FOR FAN SUPPORT".

- The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 50 pounds. Use only UL Listed outlet boxes marked "FOR FAN SUPPORT".
- 6. The fan must be mounted with a minimum of 7 feet clearance from the trailing edge of the blades to the floor.
- 7. Do not operate reversing switch while fan blades are in motion. Fan must be turned off and blades stopped before reversing blade direction.

- 8. Avoid placing objects in the path of the blades.
- 9. To avoid personal injury or damage to the fan and other items, be cautious when working around or cleaning the fan.
- Do not use water or detergents when cleaning the fan or fan blades. A dry dust cloth or lightly dampened cloth will be suitable for most cleaning.
- 11. After marking electrical connections, spliced conductors should be turned upward and pushed carefully up into outlet box. The wires should be spread apart with the grounded conductor and the equipment- grounding conductor on one side of the outlet box.
- 12. Electrical diagrams are reference only. Light kit that are not packed with the fan must be UL Listed and marked suitable for use with the model fan you are installing. Switches must be UL General Use Switches. Refer to the Instructions packaged with the light kits and switches for proper assembly.

#### **WARNING**

TO REDUCE THE RISK OF PERSONAL INJURY, DO NOT BEND THE BLADE BRACKETS (ALSO REFERRED TO AS FLANGES) DURING ASSEMBLY OR AFTER INSTALLATION. DO NOT INSERT OBJECTS IN THE PATH OF THE BLADES.

### 4. MOUNTING OPTIONS

If there isn't an existing UL listed mounting box, then read the following instructions. Disconnect the power by removing fuses or turning off circuit breakers.

Secure the outlet box directly to the building structure. Use appropriate fasteners and building materials. The outlet box and its support must be able to fully support the moving weight of the fan (at least 50 lbs). Do not use plastic outlet boxes.

Figures 1, 2 and 3 are examples of different ways to mount the outlet box.

**Note:** You may need a longer downrod to maintain proper blade clearance when installing on a steep, sloped ceiling. (Fig. 3)

To hang your fan where there is an existing fixture but no ceiling joist, you may need an installation hanger bar as shown in Figure 4.

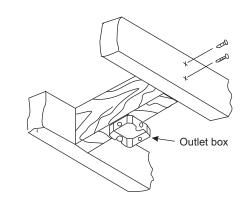


Figure 1

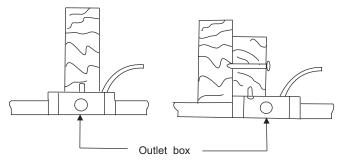


Figure 2

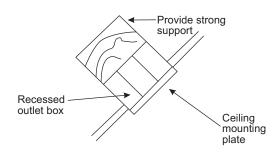


Figure 3

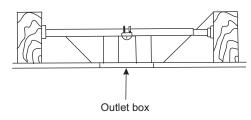


Figure 4

### 5. HANGING THE FAN

**REMEMBER** to turn off the power. Follow the steps below to hang your fan properly.

NOTE: This ceiling fan is supplied with two types of hanging assemblies; the standard ceiling installation using the downrod with ball and socket mounting and the "close-to-ceiling" installation. The "close-to -ceiling" installation is recommended in rooms with less than 8-feet ceilings or in areas where additional space is desired from the floor to the fan blades.

#### STANDARD CEILING INSTALLATION

**Step 1**. Pass the 120-volt supply wires through the center hole in the ceiling hanger bracket as shown in Fig. 5.

**Step 2.** Secure the hanger bracket to the ceiling outlet box with the screws and washers provided with your outlet box.

**Step 3**. Remove the hitch pin, lock pin and set screws from the top of the motor assembly.

**Step 4**. Route wires exiting from the top of the fan motor through the canopy and then through the ball/ downrod. (Fig. 6)

Step 5. Align the holes at the bottom of the downrod with the holes in the collar on top of the motor housing (Fig.6). Carefully insert the hitch pin through the holes in the collar and downrod. Be careful not to jam the pin against the wiring inside the downrod. Insert the locking pin through the hole near the end of the hitch pin until it snaps into its locked position, as noted in the circle inset of Fig. 6.

**Step 6.** Tighten two set screws on top of the fan motor firmly. (Fig. 6)

**Step 7**. Place the downrod ball into the hanger bracket socket. (Fig. 7)

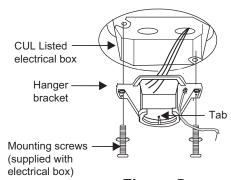


Figure 5

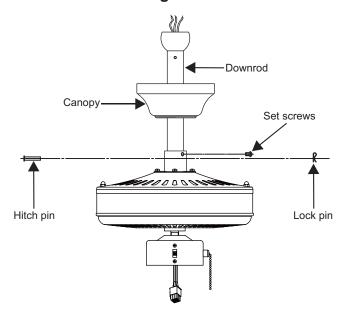


Figure 6

Screw tightened to hold Downrod in place

Cotter Pin

Unused hole in Downrod

Downrod

Cotter Pin

Holes in Downrod for Cotter Pin

Figure 6-1

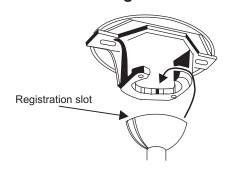


Figure 7

#### **CLOSE-TO-CEILING INSTALLATION**

- 1. Pass the 120-volt supply wires through the center hole in the ceiling hanger bracket as shown in Fig. 5.
- 2. Remove the decorative canopy cover from the canopy. (Fig. 8)
- 3. Secure the hanger bracket to the ceiling outlet box with the screws and washers provided with your outlet box.
- 4. Remove three of the six screws and lock washers (every other one) from the collar of top motor. (Fig. 9)
- 5. Place the ceiling canopy over the collar at the top of the motor. Align the mounting holes with the holes in the motor and fasten using the screws and lock washers provided. (Fig. 9)
- 6. Tighten the mounting screws securely.
- **WARNING:** Failure to completely tighten the three screws in step 5 could result in fan loosening and possibly falling.
- Hang the fan on the hook of the hanger bracket. Be certain that the canopy is fully locked into hook as shown in Fig. 10. This will allow you to make the electrical connections.

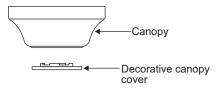
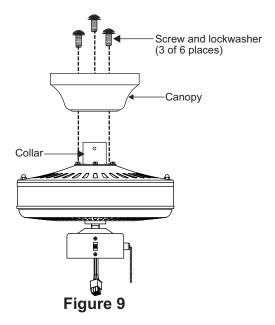


Figure 8



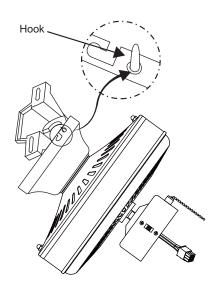


Figure 10

## 6. MAKE THE ELECTRIC CONNECTIONS

Remember to disconnect the power. Follow the steps below to connect the fan to your household wiring. Use the wire connecting nuts supplied with your fan. Secure the connectors with electrical tape. Make sure there are no loose strands or connections.

**Step 1**. Connect the fan supply (black) wire and light supply (blue) wire to the black household supply wire as shown in Figure 11.

Step 2. Connect the neutral fan (white) wire to the white neutral household wire.

**Step 3**. Connect the fan ground wire (green) to the household ground wire.

Step 4. After connecting the wires, spread them apart so that the green and white wires are on one side of the outlet box and the black and the blue wires are on the other side.

**Step 5.** Turn the connecting nuts upward and push the wiring into the outlet box.

Figures 12 and 13 illustrate the wiring connections for optional wall control. (The wire color out of wall control may vary, see wall control's installation manual for correct wire connections.)

**NOTE:** LIGHT KITS ARE AVAILABLE AT YOU SAVOY HOUSE RETAILER. THE FAN IS ALREADY WIRED TO SUPPORT THE LIGHT KIT OPTION.

WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR OTHER PERSONAL INJURY. MOUNT FAN ONLY ON AN OUTLET BOX OR SUPPORTING SYSTEM MARKED ACCEPTABLE FOR FAN SUPPORT.

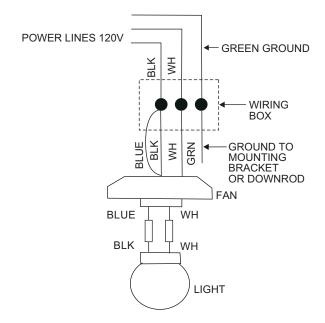


Figure 11

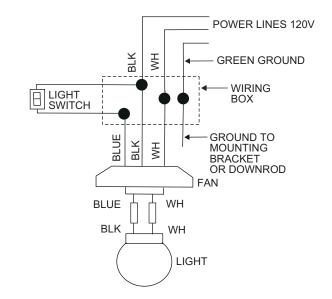


Figure 12

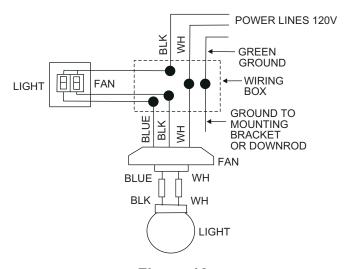


Figure 13

# 7. FINISHING THE INSTALLATION

#### STANDARD CEILING INSTALLATION

Slide canopy up to the ceiling as shown in Figure 14. Make sure you place the wires safely into the outlet box. Secure the canopy to the hanger bracket with the four screws with your fan.

### **CLOSE-TO-CEILING INSTALLATION**

Remove the fan from the hook on the hanger bracket. Secure the canopy to the hanger bracket as shown in Figure 15 with four screws included with your fan.

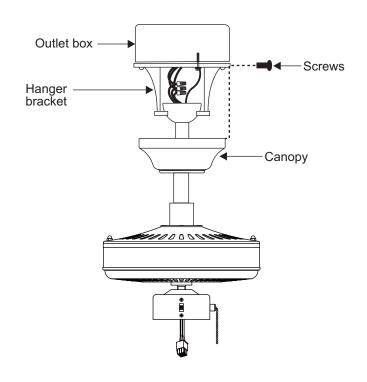


Figure 14

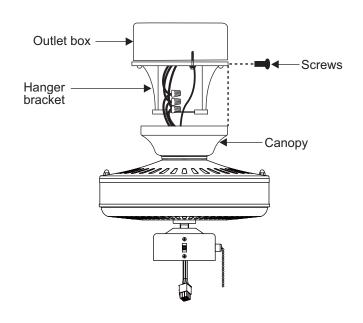


Figure 15

# 8. ATTACHING THE FAN BLADES

**Caution:** Remove 5 rubber packing mounts and discard before installation.

**Step 1.** Attach the blade to the blade bracket using the screws and fiber washers as shown in Figure 16. Start screw into bracket. Repeat for the two remaining screws.

**Step 2.** Tighten each screw. Make sure the blade is straight.

**Step 3.** Fasten blade assembly to motor using the screws supplied. (Fig. 16)

# 9. INSTALLING THE LIGHT KIT

**NOTE:** Before starting installation, disconnect the power by turning off the circuit breaker or removing the fuse at fuse box.

**Step 1.** Raise and hold the light kit close to the mounting plate and proceed to do the wire connections. Make the polarized plug connections:

- -White to white
- -Blue to black

**Step 2.** Carefully push all wires back into the switch housing. Attach the light kit fitter by aligning its keyhole slots with the three screws holes and reversing switch on the side of switch housing. Tighten the three screws securely to prevent the light kit from vibrating loose. (Fig. 17)

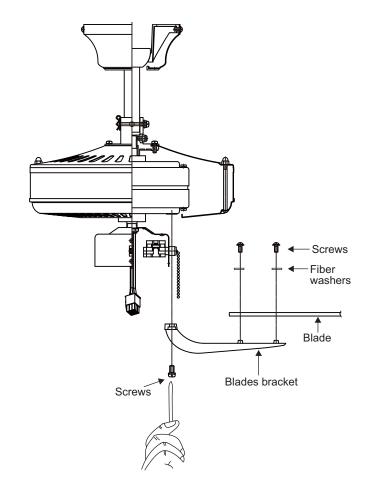


Figure 16

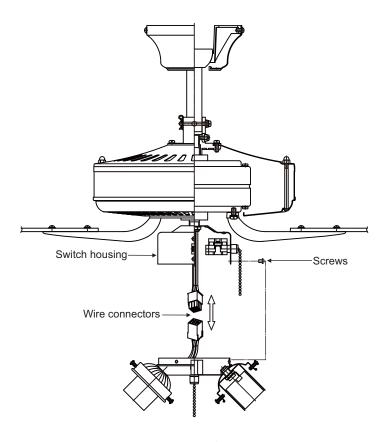
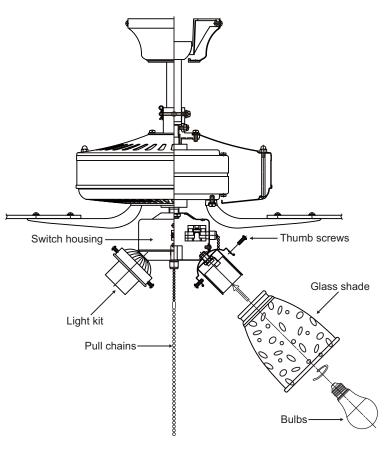


Figure 17

# 10. INSTALLING THE LIGHT BULBS & GLASS SHADE

- 1. Mount the glass shades to the light fixture by unscrewing partway the thumb screws on the glass holders, inserting the glass, then gently tightening the thumb screws by hand evenly to the glass. DO NOT OVER TIGHTEN. (Fig. 18)
- 2. Install 3 x 7W LED bulbs. (provided) (Fig. 18)
- 3. Restore power and your light kit is ready for operation.



# 11. FAN WITHOUT LIGHT KIT (Optional)

- 1. Disassemble the light kit assembly from the switch housing, you can keep the light kit for future use.
- 2. Carefully push all wires back into the switch housing, then install the switch housing cover onto the switch housing with 3 screws provided. Be sure to tighten all screws. (Fig. 19)

Figure 18

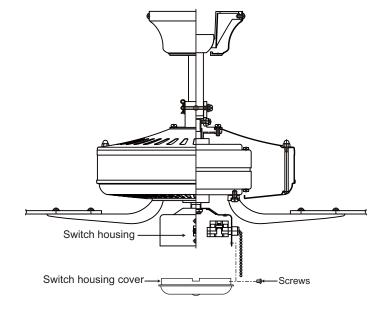


Figure 19

### 12. OPERATING YOUR FAN

**NOTE:** Wait for fan to stop before changing the setting of the slide switch.

Turn on the power and check the operation of your fan. The pull chain controls the fan speed as follows: 1 pull- High, 2 pulls-Medium, 3 pulls- Low, and 4 pulls-Off.

Light pull chain it controls the light in "ON" or "OFF".

Speed settings for warm or cool weather depend on factors such as the room size, ceiling height, number of fans and so on.

The slide switch controls directions: forward (switch down) or reverse (switch up)

Warm weather - (Forward) A downward airflow creates a cooling effect as shown in Fig. 20. This allows you to set your air conditioner on a warmer setting without affecting your comfort.

Cool weather - (Reverse) An upward airflow moves warm air off the ceiling area as shown in Fig. 21. This allows you to set your heating unit on a cooler setting without affecting your comfort.

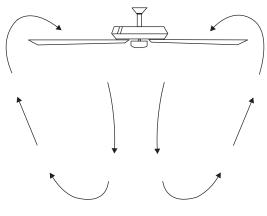


Figure 20

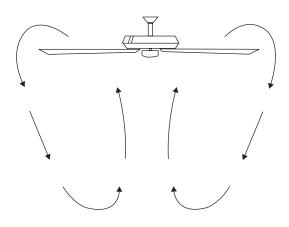


Figure 21

### 13. TROUBLESHOOTING

#### **Problem**

Solution

- Fan will not start. 1. Check circuit fuses or breakers.
  - 2. Check line wire connections to the fan and switch wire connections in the switch housing.

**CAUTION:** Make sure main power is off.

### Fan sounds noisy.

- 1. Make sure all motor housing screws are snug.
- 2. Make sure the screws that attach the fan blade bracket to the motor hub is tiaht.
- 3. Make sure wire nut connections are not rubbing against each other or the interior wall of the switch housing.

**CAUTION:** Make sure main power is off.

- 4. Allow a 24-hour "breaking-in" period. Most noise associated with a new fan disappear during this time.
- 5. If using an optional light kit, make sure the screws securing the glassware are tight. Check that the light bulb is also secure.
- 6. Do not connect the fan with a wall mounted variable speed control (s)
- 7. Make sure the upper canopy is a short distance from the ceiling. It should not touch the ceiling.

#### Fan wobble.

- 1. Check that all blade and blade arm screws are secure.
- 2. Most fan wobbling problems are caused when blade levels are unequal. Check this level by selecting a point on the ceiling above the tip of one of the blades. Measure this distance. Rotate the fan until the next blade is positioned for measurement. Repeat for each blade. The distance deviation should be equal within 1/8".
- 3. Use the enclosed Blade Balancing Kit if the blade wobble is still noticeable.
- 4. If the blade wobble is still noticeable, interchanging two adjacent (side by side) blades can redistribute the weight and possibly result in smoother operation.

WARNING: TO REDUCE THE RISK OF PERSONAL INJURY, DO NOT BEND THE BLADE ARM WHILE INSTALLING, BALANCING THE BLADES, OR CLEANING THE FAN. DO NOT INSERT FOREIGN OBJECTS BETWEEN ROTATING FAN BLADES.