

READ AND SAVE THESE INSTRUCTIONS

INSTALLATION INSTRUCTIONS

Model: AC-20452

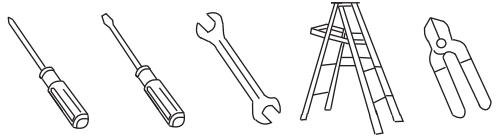


**Kendal Lighting (BC) Inc.
#110, 6780 Dennett Place
Delta, BC V4G 1N4
Canada
Tel: (604) 952-5510
Fax: (604) 952-5513**

**UL and cUL Listed Model: AC-387
Weight of Fan: Kgs**

1. TOOLS AND MATERIALS REQUIRED

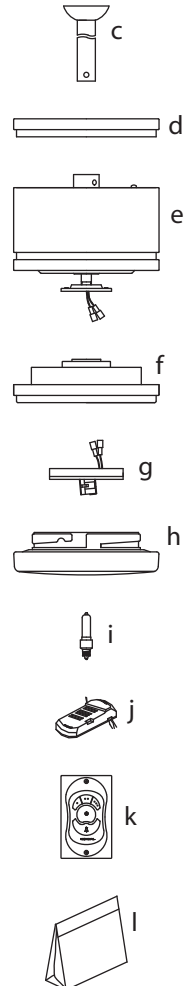
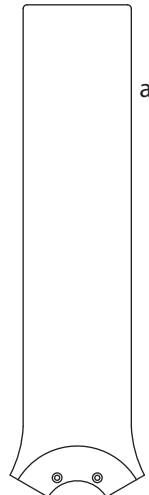
- Philips screw driver
- Flat screw driver
- 11 mm wrench
- Step ladder
- Wire cutters



2. PACKAGE CONTENTS

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

- a. Blade set (3)
- b. Hanger bracket assembly
- c. Downrod
- d. Coupling cover
- e. Fan motor assembly
- f. Mounting plate
- g. Light plate
- h. Glass shade
- i. 75W JD-type halogen bulbs (2)
- j. Receiver + 6 wire nuts
- k. Transmitter assembly
- l. Package hardware
 - 1) Mounting hardware:
wood screws (2), screws (2), lock washers (4), washers (2), wire nuts (3), rubber gasket (2)
 - 2) Blade attachment hardware:
screws (10), flat washers (10)
 - 5) Safety cable clamp w/screw



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 shock, this fan must be installed with an isolating wall control/switch.
4. **WARNING:** To reduce the risk of fire, electric shock, or personal injury, mount to outlet box marked "acceptable for fan support of 15.9 kg (35 lbs.) or less" and use mounting screws provided with the outlet box. Most outlet boxes commonly used for the support of light fixtures are not acceptable for fan support and may need to be replaced. Due to the complexity of the installation of this fan, a qualified licensed electrician is strongly recommended.
5. The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 50 pounds. Use only CUL 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.
10. 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 CUL Listed and marked suitable for use with the model fan you are installing. Switches must be CUL General Use Switches. Refer to the Instructions packaged with the light kits and switches for proper assembly.

WARNING

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

ATTENTION: Canada's Office of Energy Efficiency requires this fan to be equipped with a 190 watt limiting device. If lamping exceeds 190 watts, the ceiling fan's light kit will shut off automatically.

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 CUL 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.

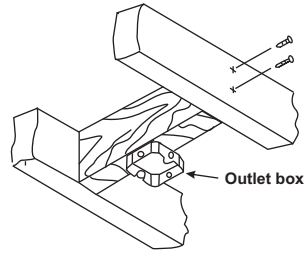


Figure 1

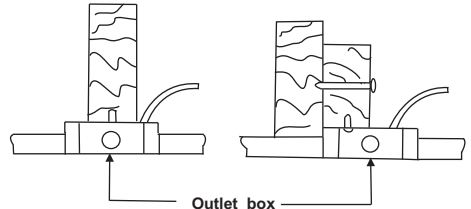


Figure 2

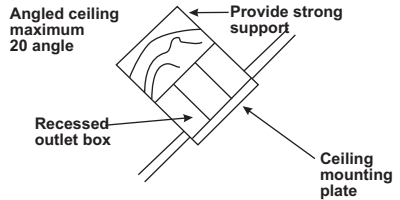


Figure 3

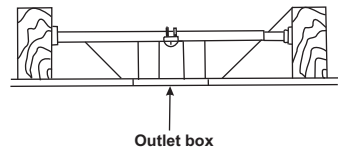


Figure 4

5. HANGING THE FAN

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

Step 1. Remove the decorative canopy bottom cover from the canopy by turning the cover counter clockwise. (Fig. 5)

Step 2. Remove the hanger bracket from the canopy by removing the non-slotted screws from the bottom of the mounting bracket and loosening the slotted screw a half turn from the screw head. Next, turn the canopy counter clockwise to removing the hanger bracket from the canopy. (Fig. 5)

Step 3. Pass the 120-volt supply wires through the center hole in the ceiling hanger bracket as shown in Fig. 6.

Step 4. Secure the hanger bracket to the ceiling outlet box with the screws and washers provided with your outlet box.

Step 5. Remove the hanger pin, locking pin and set screws from the top of the motor assembly.

Step 6. Route wires exiting from the top of the fan motor through the coupling cover, canopy cover and canopy, then through the ball/downrod. (Fig. 7)

Step 7. Align the holes at the bottom of the downrod with the holes in the collar on top of the motor housing (Fig. 7). Carefully insert the hanger pin through the holes in the collar and downrod. Insert the locking pin through the hole near the end of the hanger pin until it snaps into its locked position, as noted in the circle inset of Fig. 7.

Step 8. Tighten two set screws on top of the fan motor firmly. (Fig. 7)

Step 9. Place the downrod ball into the hanger bracket socket. (Fig. 8)

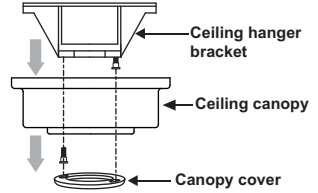


Figure 5

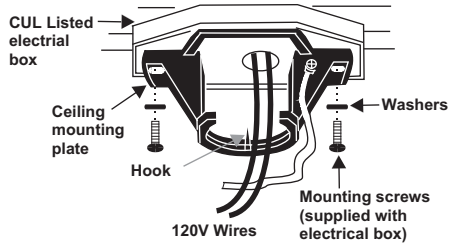


Figure 6

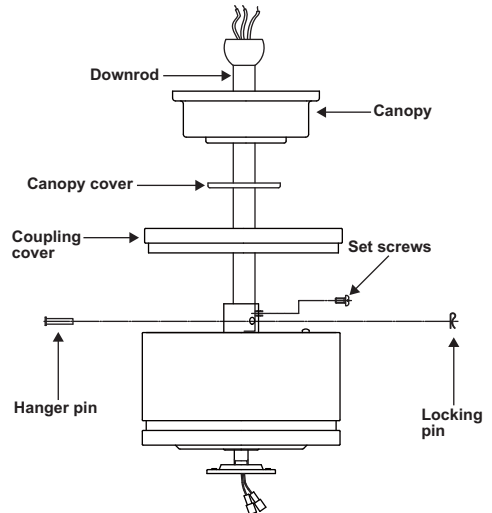


Figure 7

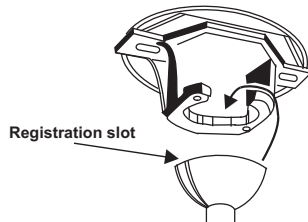


Figure 8

6. MAKE THE ELECTRIC CONNECTIONS

WARNING: To avoid possible electrical shock, be sure electricity is turned off at the main fuse box before wiring.

NOTE: This remote control unit is equipped with 16 code combinations to prevent possible interference from or to other remote units. The frequency switches on your receiver and transmitter have been preset at the factory. Please recheck to make sure the switches on transmitter and receiver are set to the same position, any combination of settings will operate the fan as long as the transmitter and receiver are set to the same position. (Figure 9)

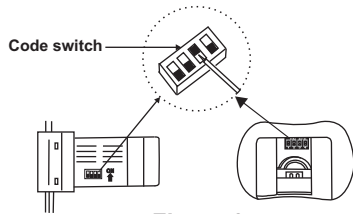


Figure 9

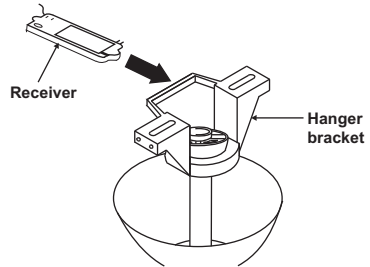


Figure 10

Step 1. (Fig. 10) Insert the receiver into the mounting bracket with the flat side of the receiver facing the ceiling.

Step 2. (Fig. 11) Motor to Receiver Electrical Connections: Connect the Black wire from the fan to Black wire marked "TO MOTOR L". Connect the White wire from the fan to the White wire marked "TO MOTOR N" from the receiver. Connect the Blue wire from the fan to the Blue wire marked "For bottom Light" from the receiver. Secure wire connections with the plastic wire nuts provided.

Step 3. (Fig. 11) Receiver to House Supply Wires Electrical Connections: Connect the black (hot) wire from the ceiling to the black wire marked "AC in L" from the receiver. Connect the white (neutral) wire from the ceiling to the white wire marked "AC in N" from the Receiver. Secure the wire connections with the plastic wire nuts provided.

Step 4. (Figure 11) If your outlet box has a ground wire (green or bare copper) connect it to the fan ground wires; otherwise connect the hanging bracket ground wire to the mounting bracket. Secure the wire connection with a plastic nut provided. After connecting the wires, spread them apart so that the green and white wires are on one side of the outlet box and black and blue wires are on the other side. Carefully tuck the wire connections up into the outlet box.

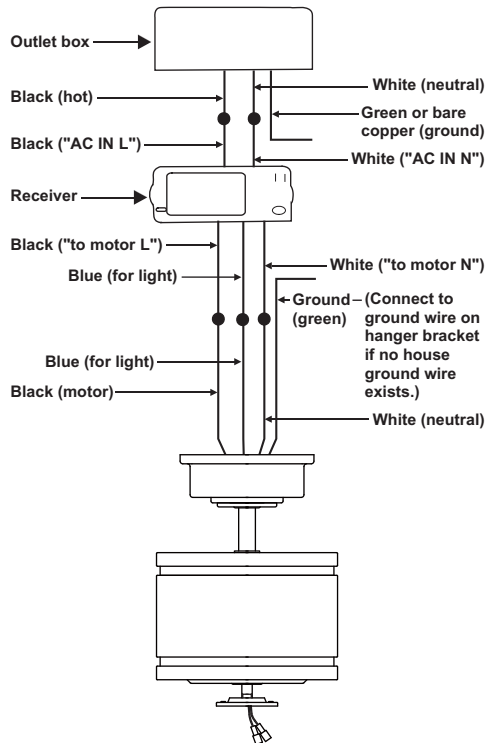


Figure 11

Note: Fan must be installed at a maximum distance of 20 feet from the transmitting unit for proper signal transmission between the transmitting unit and the fan's receiving unit.

7. INSTALLATION OF SAFETY SUPPORT

Attach the lag bolt and flat washer to ceiling joist. Attach the safety cable to lag bolt. Slide cable clamp onto safety cable (from fan). Place the end of cable through the lag bolt. Pull as much cable through lag bolt as possible. Feed end of cable into clamp hole and firmly tighten screw (Figure 12). Cut off excess safety cable.

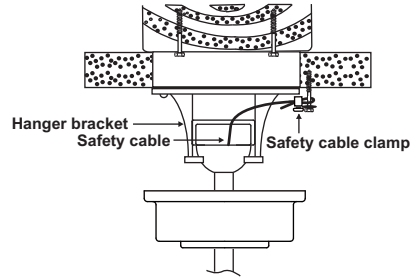


Figure 12

8. FINISHING THE INSTALLATION

Step 1. Tuck connections neatly into ceiling outlet box.

Step 2. Slide the canopy up to hanger bracket and place the key hole on the canopy over the screw on the hanger bracket, turn canopy until it locks in place at the narrow section of the key holes. (Fig.13)

Step 3. Align the circular hole on canopy with the remaining hole on the hanger bracket, secure by tightening the two set screws. **Note:** Adjust the canopy screws as necessary until the canopy and canopy cover are snug.

WARNING: Make sure tab at bottom of hanger bracket is properly seated in groove of hanger ball before attaching canopy to bracket. Failure to properly seat tab in groove could cause damage to electrical wiring.

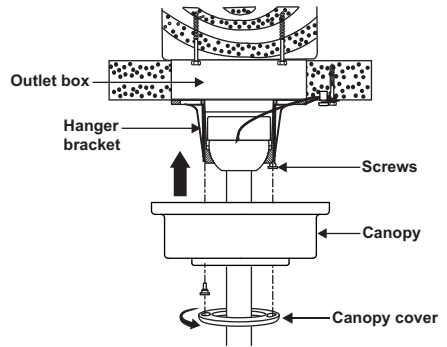


Figure 13

9. ATTACHING THE FAN BLADES

Fasten blade assembly to motor using the flat washers and screws supplied. (Fig. 14)

CAUTION: Make sure all screws are tightened securely.

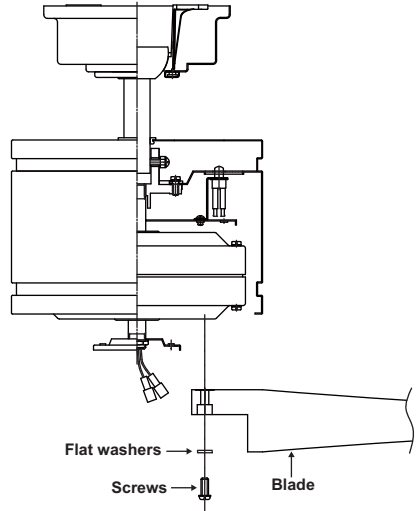


Figure 14

10. ATTACHING THE MOUNTING PLATE

1. Remove 1 of 3 screws from the mounting ring and loosen the other 2 screws. (Do not remove)

2. Place the key holes on mounting plate over the 2 screws previously loosened from the mounting ring, turn mounting plate until it locks in place at the narrow section of the key holes. Secure by tightening the 2 screws previously loosened and the one previously removed.

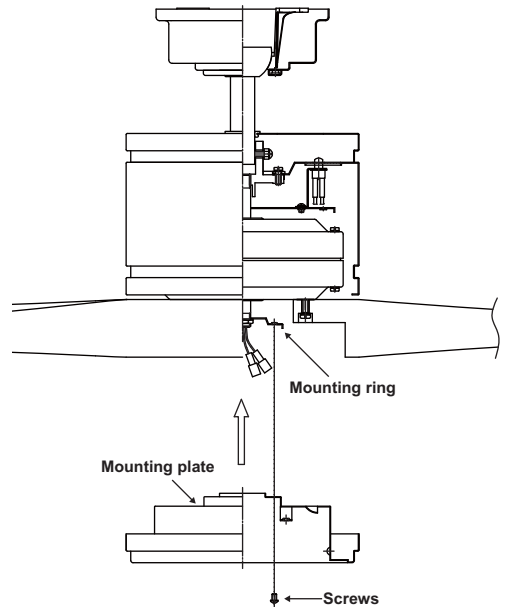


Figure 15

11. ATTACHING THE LIGHT PLATE

NOTE: Before starting installation, disconnect the power by turning off the circuit breaker or removing the fuse at fuse box. Turning power off using the fan switch is not sufficient to prevent electric shock.

Raise and hold the light plate close to the mounting plate and proceed to do the wire connections. Connect the white wire connectors from the light plate and fan, follow the same procedure with the black wire connectors. Attach the light plate to the mounting plate by using the three screws provided that are preinstalled on the mounting plate. (Fig. 16)

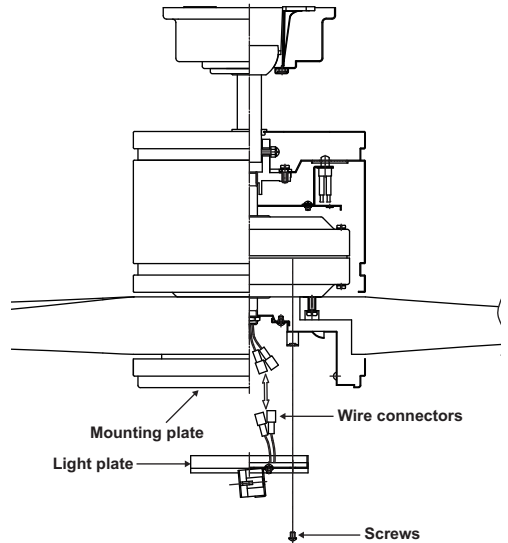


Figure 16

12. ATTACHING THE LIGHT BULBS AND GLASS SHADE

WARNING: Shut off the power supply before removing or replacing lamp. In handling of halogen bulb, care should be taken not to touch it with your bare hands. Oil residue will shorten the life of the halogen bulb. If you accidentally come into contact, wipe thoroughly with a clean, lint-free, cotton cloth. Allow the bulb to cool off for 10 minutes before changing the bulb. Use light bulb in accordance with the fan's specification. **TO REDUCE THE RISK OF FIRE DO NOT EXCEED MAXIMUM WATTAGE RATING.**

Step 1. Install 1 × 75W JD-type halogen bulb (included). (Fig. 17)

Step 2. Install the glass shade by carefully turning it clockwise until snug. **DO NOT OVERTIGHTEN.** (Fig. 17)

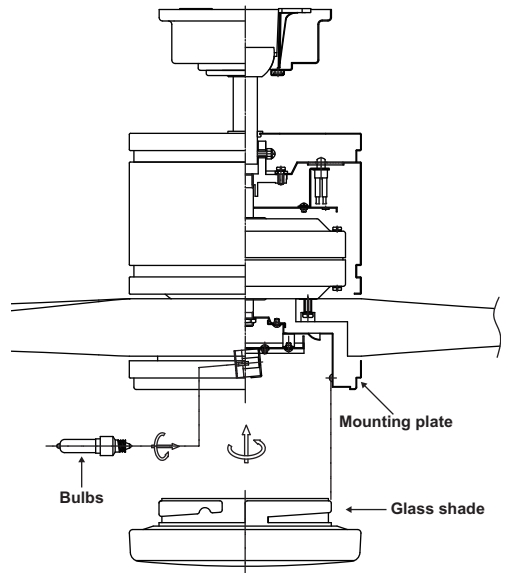


Figure 17

13. INSTALLING THE TRANSMITTER HOLDER

Select a location to install your remote control system transmitter. You can replace an existing wall switch or, install the transmitter on ANY flat surface.

Option 1: Install the remote control system using an existing wall switch outlet box. Make sure the electrical power is **TURNT OFF** at the main panel before continuing.

Step 1. Remove the existing wall plate and the old switch from the wall outlet box. Wire nut the **BLACK** leads (hot) together and push back inside the outlet box. (Fig. 18)

Step 2. Install the metal plate and wall plate to the existing wall outlet box with 4 screws provided. (Fig. 19)

Option 2: Install the control system on ANY flat surface.

Select the desired location and use the wall plate to mark the location for the mounting holes. Plastic wall anchors and screws are provided for this type of installation. After installing the wall anchors, attached the wall plate with the mounting screws. (Fig. 20)

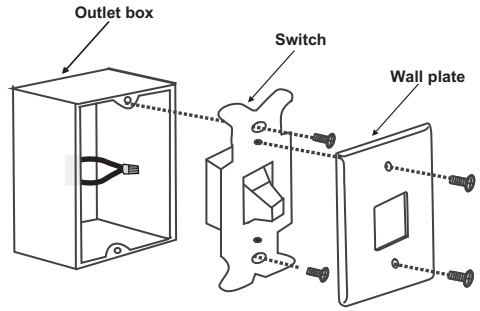


Figure 18

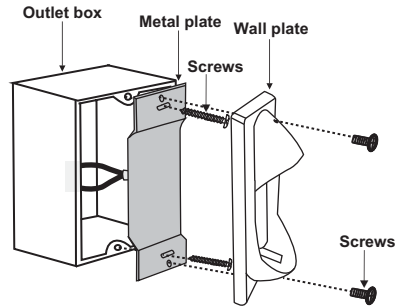


Figure 19

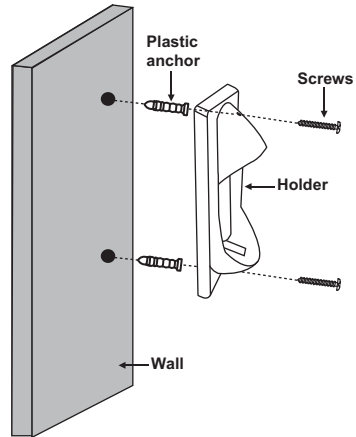


Figure 20

14. INSTALLING THE BATTERY

Remove the back cover on the transmitter and install both, 3 volt (#2032) batteries that were included with the remote control. Make sure the + sign is facing up. (Fig. 21)

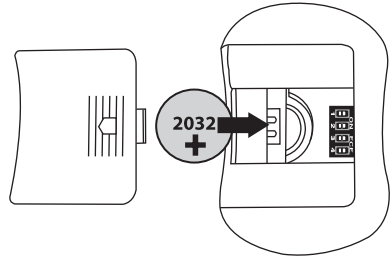


Figure 21

15. OPERATING YOUR TRANSMITTER

Restore power to ceiling fan and test for proper operation.

- A. ●, ●● and ●●● buttons:
These three buttons are used to set the fan speed as follows:
- = low speed
 - = medium speed
 - = high speed

- B. ⏻ button:
This button turns the fan off.

- C. ⏻ button:
This button controls the light. Press and release the button to turn the light ON or OFF. Press and hold the button to set the desired brightness. The light key has an auto-resume, it will stay at the same brightness as the last time it was turned off.

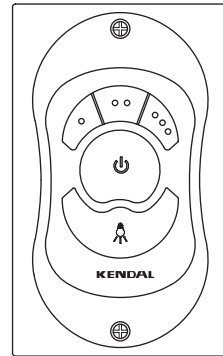


Figure 22

The Reverse switch is located on the top housing. Slide the switch to the Left for warm weather operation. Slide the switch to the Right for cool weather operation.

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

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

Warm weather - (Forward) A downward airflow creates a cooling effect as shown in Fig. 23. This allows you to set your air conditioner on a warmer setting without affecting your comfort.

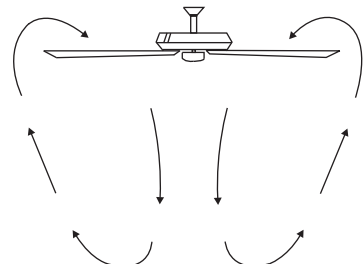


Figure 23

Cool weather - (Reverse) An upward airflow moves warm air off the ceiling area as shown in Fig. 24. This allows you to set your heating unit on a cooler setting without affecting your comfort.

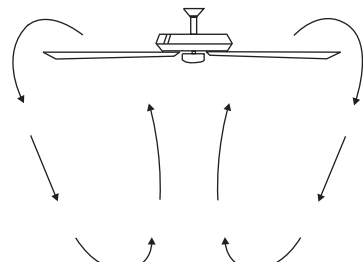


Figure 24

16. CARE OF YOUR FAN

Here are some suggestions to help you maintain your fan.

1. Because of the fan's natural movement, some connections may become loose. Check the support connections, brackets, and blade attachments twice a year. Make sure they are secure. (It is not necessary to remove fan from ceiling.)
2. Clean your fan periodically to help maintain its new appearance over the years. Use only a soft brush or lint-free cloth to avoid scratching the finish. The plating is sealed with a lacquer to minimize discoloration or tarnishing. Do not use water when cleaning. This could damage the motor, or the wood, or possibly cause an electrical shock.
3. You can apply a light coat of furniture polish to the wood blades for additional protection and enhanced beauty. Cover small scratches with a light application of shoe polish.
4. There is no need to oil your fan. The motor has permanently lubricated sealed ball bearings.

17. TROUBLESHOOTING

Problem	Solution
Fan will not start.	<ol style="list-style-type: none">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.3. Check to make sure the dip switches from the transmitter and receiver are set to the same frequency.
Fan sounds noisy.	<ol style="list-style-type: none">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 tight.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 light bulb is also secure.6. Do not connect the fan with 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.
Remote control malfunction.	<ol style="list-style-type: none">1. Do not connect the fan with wall mounted variable speed control(s).2. Make sure the dip switches are set correctly.
Lights shut off and will not come back on.	<ol style="list-style-type: none">1. This unit is equipped with a wattage limiting device. Lamping in excess of 190 watts will disable your ceiling fan's light kit. To reset your light kit you must turn the power off and re lamp, keeping the wattage under 190 watts. Restore power to your ceiling fan and continue normal operation.
Fan wobble.	<ol style="list-style-type: none">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. 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.