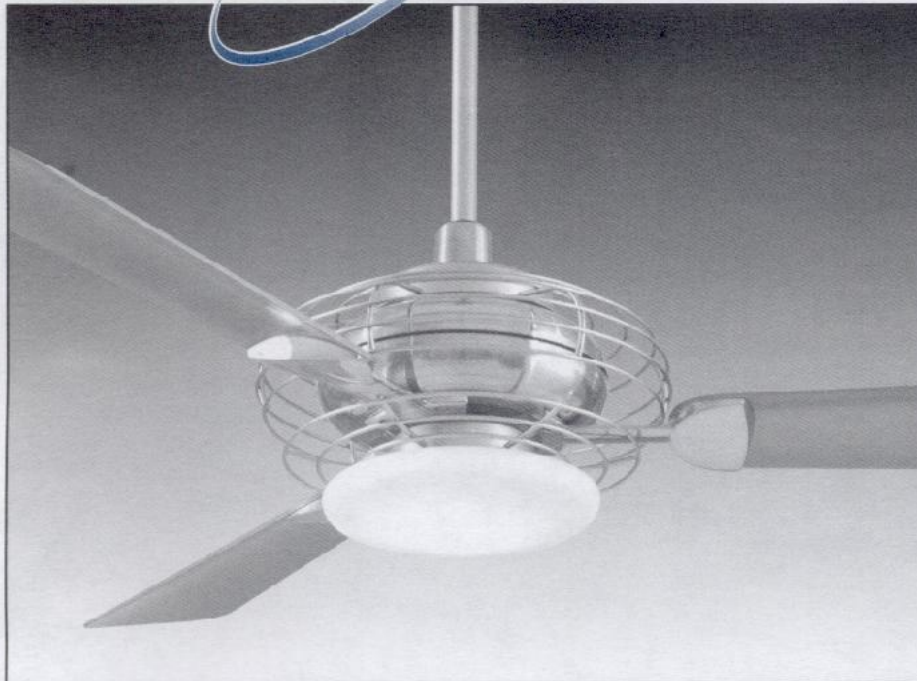# minkaAire™

Acero™
Model No. F601

Instruction Manual

Please Read and Save Instructions

Lifetime
WARRANTY

Lifetime WARRANTY

Congratulations on your purchase of a **Minka-Aire™** ceiling fan! Your new fan will be a beautiful addition to your home, and will keep you comfortable throughout the year. **Minka-Aire™** offers a variety of ceiling fans: combinations of wood and brass finishes, solid designer colors, and unique glass and crystal designs. A large selection of light fixtures and light kits are also available. Ask your dealer about accessories that will allow you to customize your fan.

We're certain that your **Minka-Aire™** fan will provide you with many years of comfort energy savings and satisfaction. To ensure your personal safety and to maximize the performance of your fan, please read this manual thoroughly.

LIMITED LIFETIME WARRANTY

Minka-Aire™ warrants this fan to be free from defects in material and workmanship for one year from the date of purchase, except for the motor. **Minka-Aire™** warrants to the original owner that the motor in this fan shall be free from defects in material and workmanship as long as the original purchaser owns the fan. **Minka-Aire's™** only obligation under this limited warranty is to replace, repair or refund the purchase price any fan confirmed by **Minka-Aire™** to be defective in material or workmanship after such fan is returned to **Minka-Aire™** by the original purchaser along with a proof of purchase and with shipping charges prepaid. This warranty shall not apply to fans which have been damaged as a result of improper installation, removed from the original installation or subjected to use for which the fan was not designed. The customer shall be responsible for any cost of removing the old fan, installing a new fan or any other costs. This limited lifetime warranty is in lieu of all other expressed warranties. **Minka-Aire™** shall under no circumstances be liable for any incidental or consequential damages.

Date Purchased _____

Store Purchased _____

Model No. __F601_____

Serial No. _____

CONTENTS

minkaAire™

american lighting association

UL LISTED E75795

1. SAFETY FIRST

1. Before you begin installing the fan, **shut the power off** at the circuit breaker or the fuse box.

2. Be Cautious! Read and save all instructions and safety information before installing your new fan. Review the accompanying assembly diagrams.

3. Make sure that all electrical connections comply with local codes, ordinances, or National Electrical Codes. Hire a qualified electrician or consult a do-it-yourself wiring handbook if you are unfamiliar with installing electrical wiring.

4. Make sure the installation site you choose allows the fan blades to rotate without any obstructions. Allow a **minimum clearance of 7 feet** from the floor to the lowest edge of the blades and **18 inches** from the tip of the blade to the wall.

5. If you are mounting the fan to a ceiling outlet box, use a U.L. Listed metal octagonal outlet box marked "Acceptable for fan support". Secure the box directly to the building structure. The outlet box and its support must be able to support the moving weight of the fan (at least 50 lbs.). **Do not use a plastic outlet box.**

6. Secure the hanger bracket using the hardware supplied with the outlet box.

7. If you are mounting the fan to a joist, make sure it is able to support the moving weight of the fan (at least 50 lbs.).

8. After you install the fan, make sure that all mountings are secured to prevent the fan from falling.

9. Do not insert anything into the fan blades while fan is operating.

10. Turn the fan off and wait for it to stop before reversing fan direction.
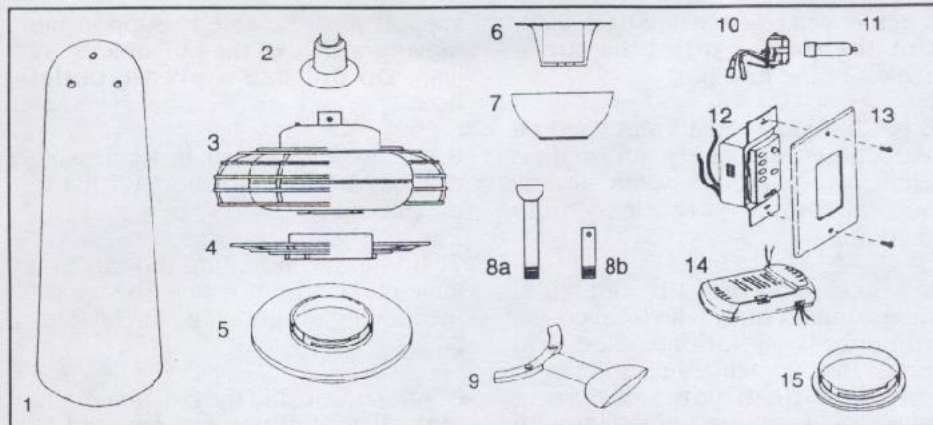
NOTE: The important safeguards and instructions appearing in this manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense, caution and care are factors which can not be built into this product. These factors must be supplied by the person(s) installing, caring for and operating the unit.
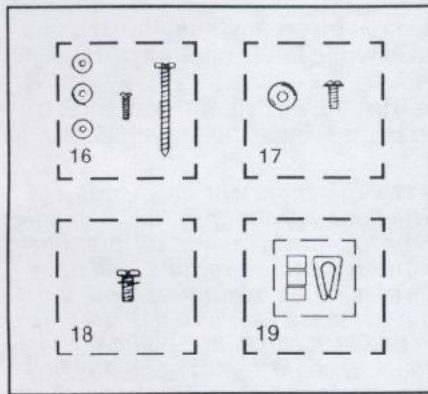
WARNING

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR OTHER PERSONAL INJURY, MOUNT FAN ONLY ON A U.L. LISTED OUTLET BOX OR SUPPORTING SYSTEM MARKED ACCEPTABLE FOR FAN SUPPORT AND USE THE HARDWARE PROVIDED WITH THE OUTLET BOX. MOST OUTLET BOXES COMMONLY USED FOR SUPPORT OF'LIGHTING FIXTURES ARE NOT ACCEPTABLE FOR FAN SUPPORT AND NEED TO BE REPLACED.
CONSULT A QUALIFIED ELECTRICIAN IF IN DOUBT.

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

PACKAGE CONTENTS 2.

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

1. Fan blade
2. Coupling cover
3. Fan motor/housing ass'y
4. Light assembly
5. Glass diffuser
6. Mounting bracket
7. Canopy
8a. Standard 6" downrod ass'y
8b. Minimum-length 3 1/2" downrod (for close to ceiling mounting only)
9. Blade bracket
10. Bulb socket
11. 100W Halogen bulb
12. Remote control wall transmitter
13. Wall plate (includes 2 6x8 mounting screws & 6 wire nuts)
14. Remote Control Receiver
15. Optional switch cup cover

16. Mounting Hardware:
#10 x 2-1/2 screws (2 pcs.)
#8-32 x 3/4 machine screws (2 pcs.)
Washers (2 pcs.)
Lockwashers (2 pcs.)
4mm Star Washers (2 pcs)

17. Blade Attachment Hardware:
3/16" x 7.5mm screws (10 pcs.)
Washers (10 pcs.)

18. Bracket Attachment Hardware:
1/4" x 14mm screws (6 pcs.)

19. Balancing Kit

3. BEGIN INSTALLATION

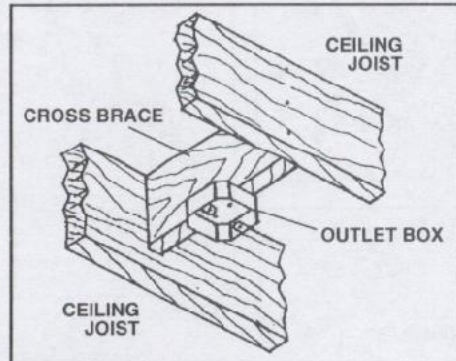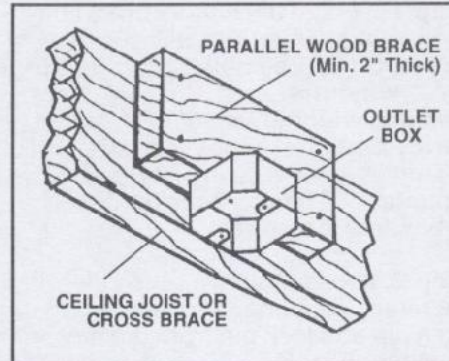Tools Required: Phillips screw driver; slotted screw driver; pliers; wire cutters; electrical tape.

CEILING JOIST
CROSS BRACE
OUTLET BOX
CEILING JOIST

FIG. 1

PARALLEL WOOD BRACE (Min. 2" Thick)
OUTLET BOX
CEILING JOIST OR CROSS BRACE

FIG. 2

Angled Ceiling Maximum 29° angle
PROVIDE STRONG SUPPORT
HANGER OPENING MUST BE FACING UPSIDE
RECESSED OUTLET BOX

FIG. 3
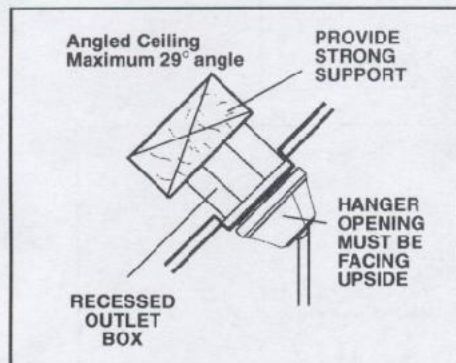

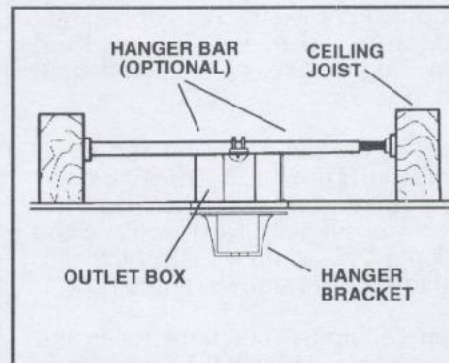HANGER BAR (OPTIONAL)
CEILING JOIST
OUTLET BOX
HANGER BRACKET

FIG. 4

MOUNTING OPTIONS

If there isn't an existing mounting box, then read the following instructions. **Shut the power off at the circuit breaker or fuse box.**

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.). **Use a U.L. Listed metal outlet box marked "Acceptable for ceiling fan support". Do not use a plastic outlet box.**

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. Longer downrods are available from your **Minka-Aire™** dealer.

To hang your fan where there is an existing fixture but no ceiling joist, you may need to install a hanger bar as shown in Fig. 4 (available at your **Minka-Aire™** dealer).

HANGING THE FAN 4.

REMEMBER to shut the power off at the circuit breaker or fuse box.

Step 1. Secure the hanger bracket to the ceiling outlet box using screws provided with the outlet box and the lock washers and flat washers included with the fan. (Fig. 5).
Note: Optional wood screws and spring washers are provided for mounting of hanger bracket directly to building structure.

Step 2. Loosen the two set screws in the motor coupling. Also remove the hitch pin and lock pin from the motor coupling. (Fig. 6)

Step 3. Remove the hanger ball by loosening the set screw and removing the cross pin, slide ball off rod. (Fig. 7)

Step 4. Carefully feed the fan wires through the downrod. Thread the rod into the coupling and tighten until the holes are aligned. Next, replace the lock pin and secure with the hitch pin. Tighten the set screws. (Fig. 8)

Step 5. Slip the coupling cover and canopy onto downrod. Allow canopy to rest on top of the coupling cover. Reinstall the hanger ball onto rod, making sure that the cross pin rests properly inside the ball and the set screw is securely tighten. (Fig. 8)

Step 6. Now lift the motor assembly into position and place the downrod ball into the hanger bracket. Rotate until the check groove has dropped into the registration slot and seats firmly. Rod should not rotate if this is done correctly. (Fig. 9)
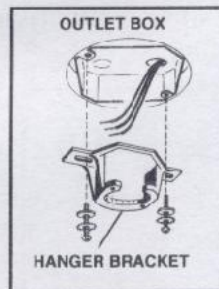
OUTLET BOX
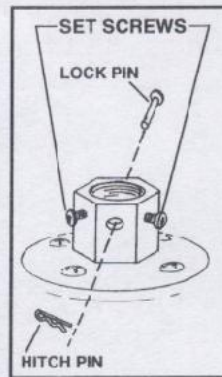
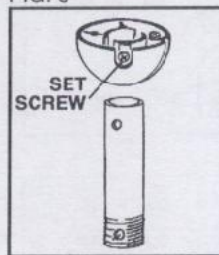HANGER BRACKET

FIG. 5

SET SCREW

FIG. 7

SET SCREWS

LOCK PIN

HITCH PIN

FIG. 6

CROSS PIN

SET SCREW

HANGER BALL

CANOPY

COUPLING COVER

SET SCREW

HITCH PIN

LOCK PIN

FIG. 8

REGISTRATION SLOT
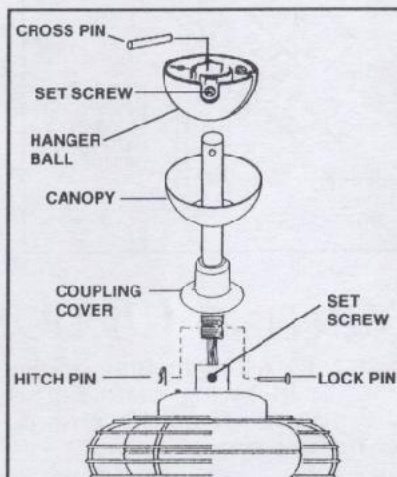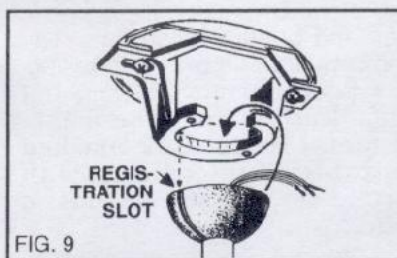
FIG. 9

5. Installing the Receiver

NOTE: (Fig. 10). 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 wall transmitter and receiver are set to the same position, any combination of settings will operate the fan as long as the wall transmitter and receiver are set to the same position.
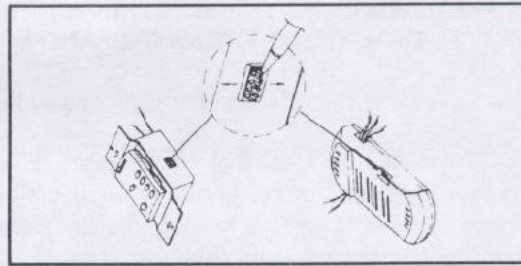
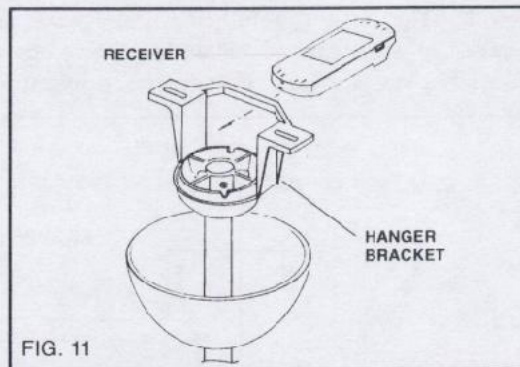**Step 1.** (Fig. 11). Insert the receiver into the Mounting Bracket, with the flat side of the Receiver facing the ceiling.

Step 2. (Fig. 12). Motor to Receiver Electrical Connections:. Connect the Black wire from the fan to the Black wire marked "To Motor L" from the receiver. 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 Light" from the receiver. Secure wire connections with the plastic wire nuts provided.

Step 3. (Fig. 12). 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 wire connections with the plastic wire nuts provided.

Step 4. (Fig. 12). If your outlet has a ground wire (Green or Bare Copper) connect the fan ground wires from the Hanger Ball and Mounting Bracket to it; otherwise, connect the Hanger Ball ground wire directly to the ground wire from the Mounting Bracket.

FIG. 10

RECEIVER

HANGER BRACKET

FIG. 11

OUTLET BOX

BLACK (HOT)

BLACK ("AC IN L")

RECEIVER

BLACK ("TO MOTOR L")
BLUE ("FOR LIGHT")

BLUE (LIGHT)
BLACK (MOTOR)

WHITE (NEUTRAL)

GREEN OR BARE COPPER (GROUND)

WHITE ("AC IN N")

WHITE ("TO MOTOR N")

GROUND (CONNECT TO GROUND WIRE ON HANGER BRACKET IF NO HOUSE GROUND WIRE EXISTS.)
(GREEN)

WHITE (NEUTRAL)

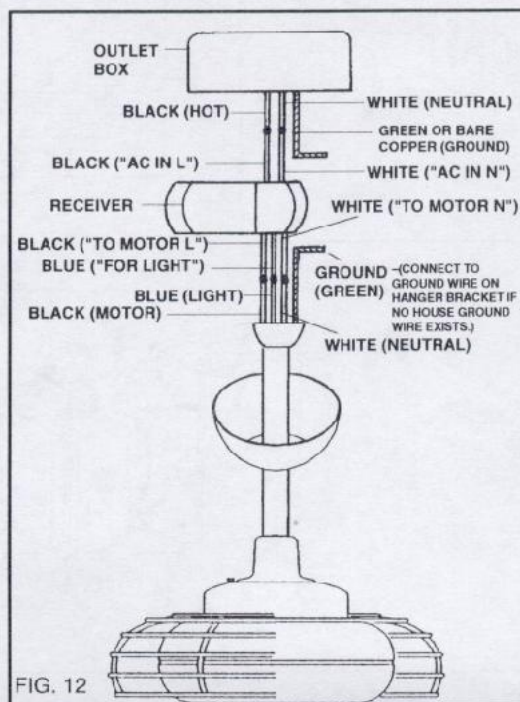FIG. 12

INSTALLING THE WALL TRANSMITTER 6.

WARNING: HOOK UP IN "SERIES ONLY" DO NOT CONNECT THE HOT AND NEUTRAL WIRES OF THE ELECTRIC CIRCUIT TO THE TRANSMITTER WALL SWITCH DAMAGE TO THE SWITCH AND POSSIBLE FIRE COULD OCCUR.

Step 1. Remove the existing wall plate and switch from the wall junction box.

Step 2. Make the electrical connections as shown in (Fig. 13). If your outlet box has a ground wire (green or bare copper) connect the wall transmitter's ground wire to it; otherwise connect the wall transmitter's ground wire directly to one of the screws from the outlet box.

Step 3. (Fig. 14). Carefully tuck the wire connectors inside the junction box. Secure the wall transmitter with the two screws provided. Attach the decorator faceplate over the wall transmitter and secure with the two screws provided.
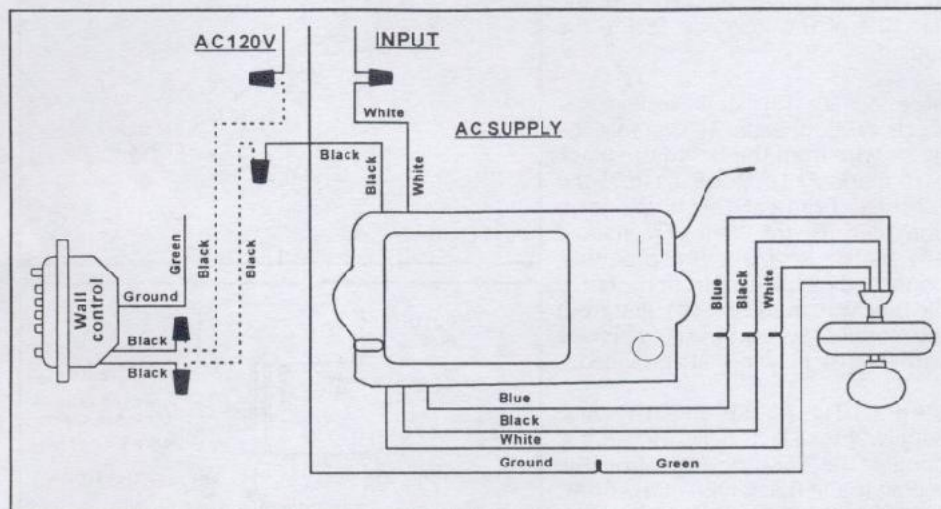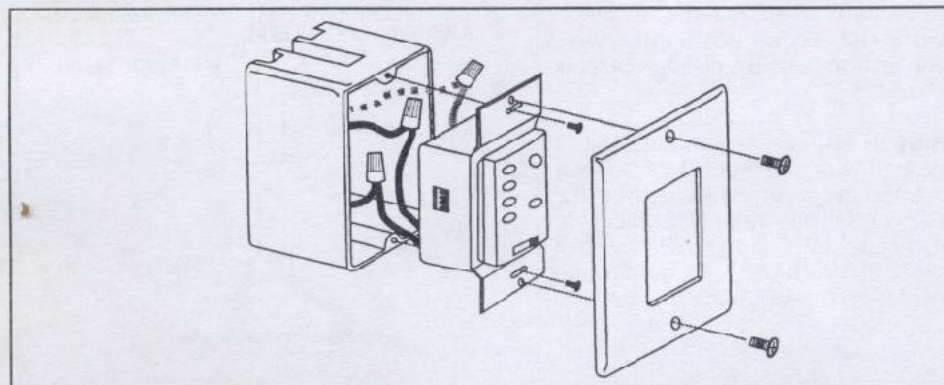
FIG 13

FIG 14

7. FINISHING THE INSTALLATION

Step 1. Tuck connections neatly into ceiling outlet box.

Step 2. Slide canopy up to ceiling. Rotate canopy so that the screw holes are aligned and secure with the two screws provided on hanger bracket. (Fig. 15)
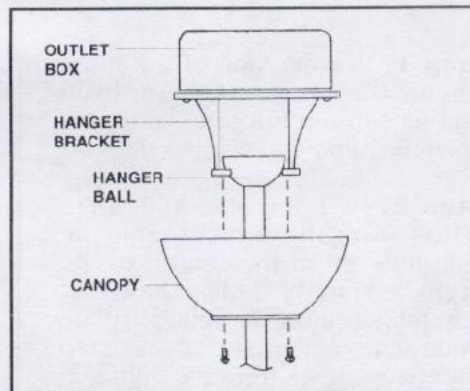
OUTLET BOX

HANGER BRACKET

HANGER BALL

CANOPY

FIG. 15

8. INSTALLING THE FAN BLADES

Step 1. Attach the fan blade to the blade bracket using the screws provided. Tighten screws securely. Repeat process with remaining blades. (Fig. 16)

Step 2. Align holes from the blade bracket and motor and secure with screws provided, make sure the screws are securely tighten. Repeat process with the other blade brackets. (Fig. 16)
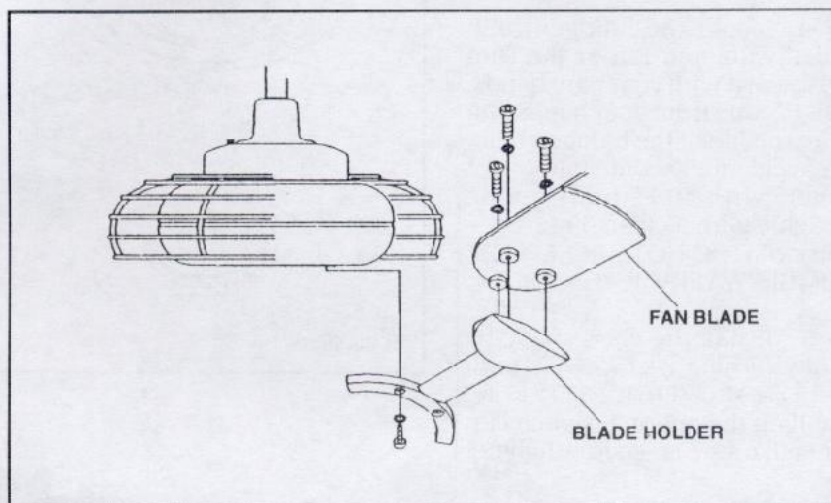
FAN BLADE

BLADE HOLDER

FIG. 16

INSTALLING THE LIGHT KIT
ASSEMBLY 9.

Step 1. Remove one of the three screws located on the light cup plate and loosen (do not remove all the way) the other two screws. (Fig. 17)

Step 2. Pass the blue and white wires from the fan through the side hole (from the center) of the Light assembly. Place the Light assembly against the light cup plate and rotate to align the key holes to the two screws from the light cup plate. Turn the Light assembly counterclockwise until secure. Install the third screw previously removed and securely tighten all three screws. (Fig. 17)

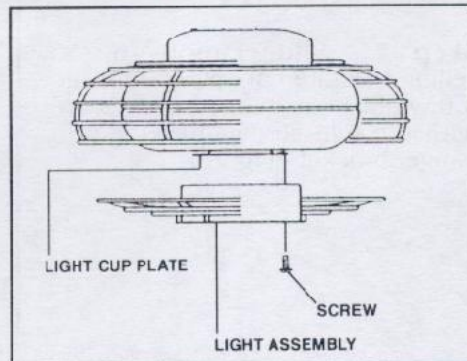LIGHT CUP PLATE

SCREW

LIGHT ASSEMBLY

FIG. 17

NOTE: IF YOU DO NOT PLAN TO INSTALL THE LIGHT KIT WITH YOUR FAN AT THIS TIME, THEN GO STRAIGHT TO STEP 6.

Step 3. Connect the blue wire to the Black wire that has the female connector. Repeat process with the remaining two white wires. (Fig. 18)

Step 4. Install the halogen bulb included with your fan, make sure not to touch it with your bare hands. The oil residue from your hands will shorten the life of the halogen bulb. If you accidentally come into direct contact with the bulb, wipe thoroughly with a clean, lint free, cotton cloth. DO NOT EXCEED THE MAXIMUM WATTAGE. (Fig. 18)

Step 5. Install the glass shade by carefully turning it clockwise until snug. DO NOT OVERTIGHTEN. Note: If installing the optional switch cup cover, make sure is securely tighten.
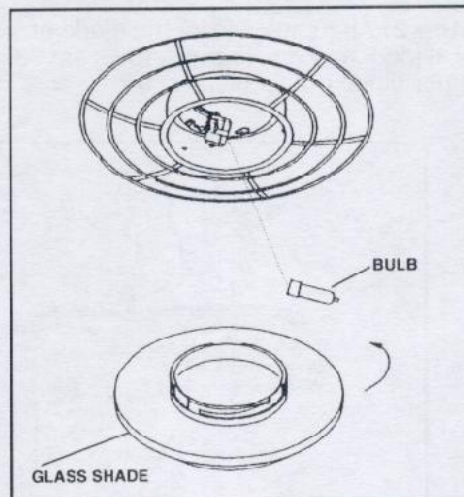

BULB

GLASS SHADE

FIG. 18

10. Operating the Wall Transmitter

Restore power to ceiling fan and test for proper operation.

A. HI, MED and LO buttons:
These three buttons are used to set the fan speed as follows;
HI=High Speed
MED=Medium Speed
LOW=Low Speed

FOR/REV = Press this button to control the airflow direction as follows; Forward (Warm Weather) or Reverse (Cool Weather). CAUTION! Do not change the direction of the blades when the fan is on MED or HI speeds modes – change the direction of the blades only an LOW speed mode.

B. "FAN OFF" button:
This button turns the fan off.

C. The "LIGHT" button turns the light ON or OFF and also controls the brightness setting. Press and release the button to turn the light ON or OFF. Press and hold the button to set the desired brightness. The light will cycle continuously between bright and dim setting as long as the button is held down. The light key has an auto-resume, it will stay at the same brightness as the last time it was turned off.

D. The Slide "OFF-ON" button turns all power off-on to fan and light.

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

Warm weather - (Counter Clockwise) A downward air flow creates a cooling effect as shown in Fig. 19. This allows you to set your air conditioner on a warmer setting without affecting your comfort.

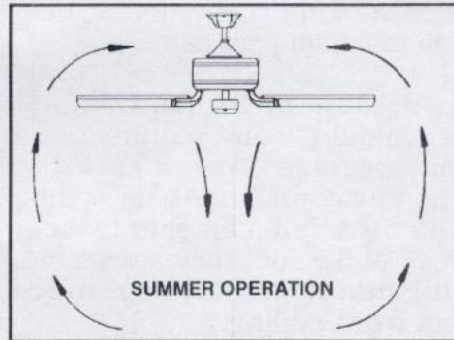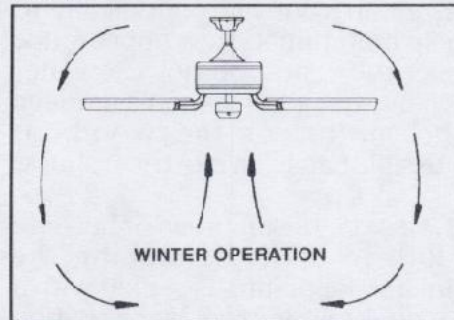**Cool weather** - (Clockwise) An upward airflow moves warm air off the ceiling area as shown in Fig. 20. This allows you to set your heating unit on a cooler setting without affecting your comfort.

SUMMER OPERATION

FIG. 19

WINTER OPERATION

FIG. 20

MAINTENANCE 11.

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. Do not use water when cleaning. This could damage the motor, or the wood, or possibly cause an electrical shock.

3. 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.

4. You can apply a light coat of furniture polish to the wood for additional protection and enhanced beauty. Cover small scratches with a light application of shoe polish.

5. There is no need to oil your fan. The motor has permanently lubricated bearings.

6. All glass should be cleaned using lukewarm soapy water and a soft cloth or sponge. DO NOT IMMERSE GLASS IN HOT WATER. DO NOT PUT GLASS INTO AN AUTOMATIC DISHWASHER.

WARNING
Make sure the power is off at the electrical panel box before you attempt any repairs. Refer to the section,
"Making Electrical Connections".

12. TROUBLESHOOTING

Problem	Solution

Fan will not start.

1. Check fuses or circuit breakers.

2. Check line wire connections to fan and switch wire connections in switch housing.
   CAUTION: Make sure main power is off.

Fan sounds noisy.

1. Allow a 24-hour 'break-in" period. Most noises associated with a new fan go away during this time.

2. Make sure all motor housing screws are snug.

3. Make sure the screws that attach the fan blade to the motor hub are tight.

4. Some fan motors are sensitive to signals from solid-state variable speed controls. If you have installed this type of control, choose and install another type of control.

Fan Wobble

1. Check that all blade screws are secured.

2. Use the enclosed blade balancing kit if blade wobble is still excessive. (See instructions included with the balancing kit.)

NOTE: All blades sets are grouped by weight. Because natural woods vary in density, the fan may wobble even though blades are weight matched.

13. SPECIFICATIONS

Fan Size	Speed	Volts	Amps	Watts	RPM	CFM	N.W.	G.W.
	Low	120	0.34	15	74	2400		
52"	Med	120	0.46	32	113	3200	11	12
	High	120	0.59	70	183	6100	KGS.	KGS.

These are typical readings. Your actual fan may vary.