AVIO™
INSTALLATION INSTRUCTIONS

52-INCH INDOOR LED CEILING FAN/ 3 Blades/ Light Kit

Dimension Reference:

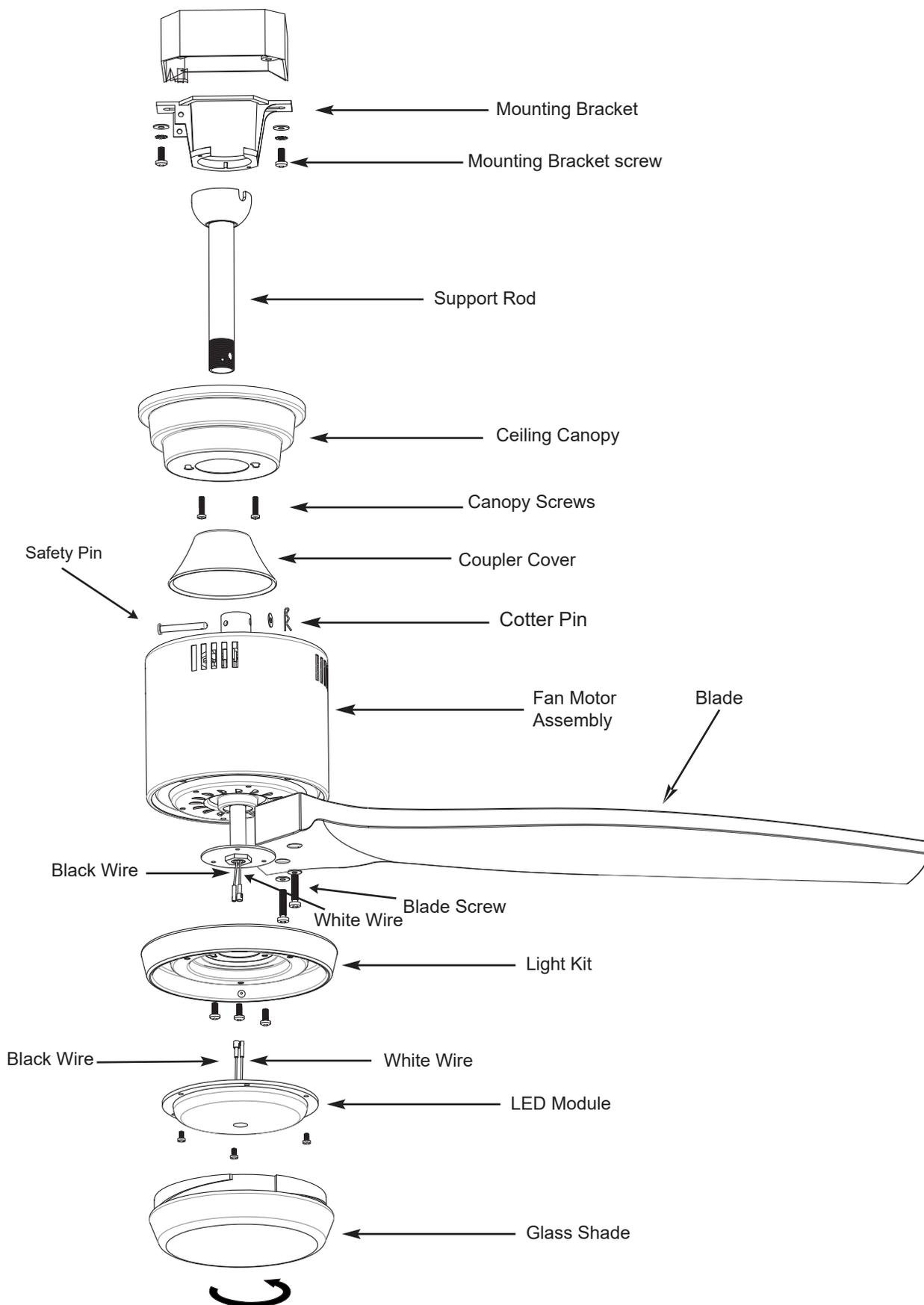5-1/2 inch

2 inch

13-3/4 inch

17-3/4 inch

52 inch
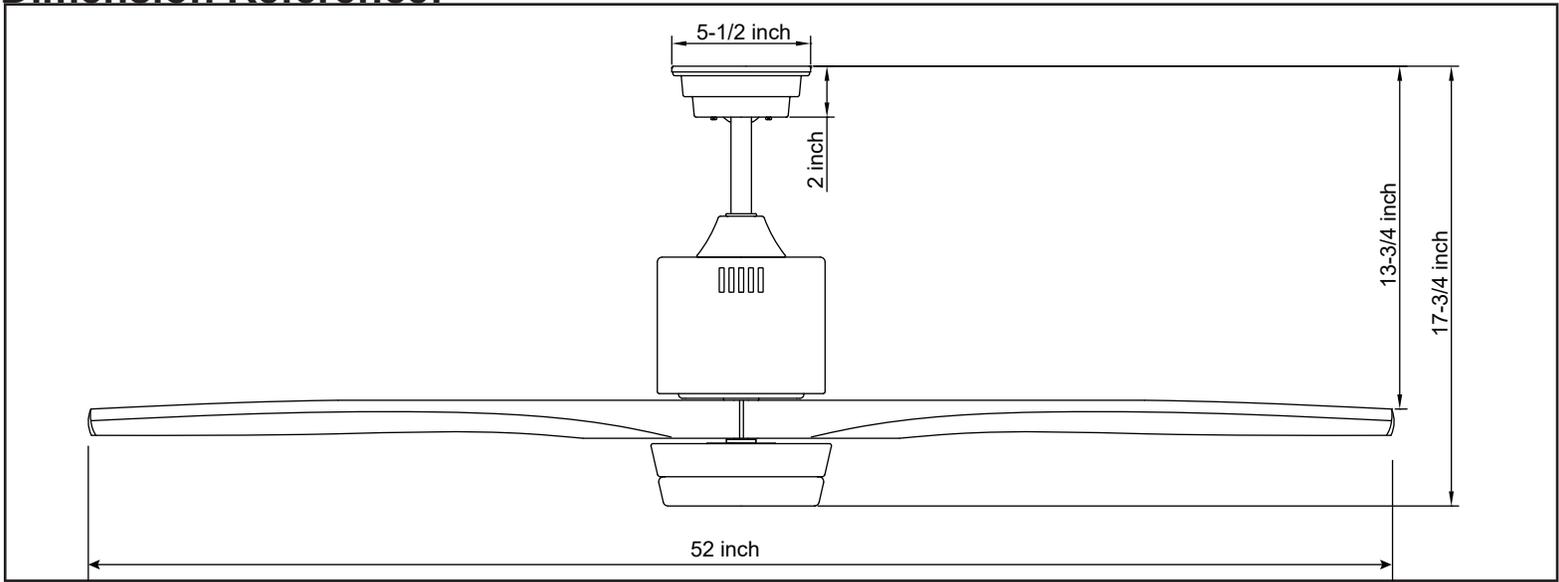
Hardware Package Included:

Hardware Package	Quantity
S1. Machine Screws	2
S2. Machine Screws	2
S3. Wood Screws	2
S4. Washers	2
S5. Lock Washers	2
S6. Star Washers	2
S7. Wire Nuts	3
S8. Blade Screws & Washers	7
S9. Rubber Washers	7
S10. Balance Kit	1
Rubber Ring	2
Balanced Installation Instruction	1

S1

S2

S3

S4

S5

S6

S7

S8

S9

S10

Fan Parts Included:

	Quantity
1. Mounting Bracket	1
2. Support Rod & Cotter Pin	1
3. Canopy	1
4. Coupler Cover	1
5. Fan Motor Assembly	1
6. Light Kit	1
7. LED Module	1
8. Glass	1
9. Blade	3

2

Exploded View:

Mounting Bracket

Mounting Bracket screw

Support Rod

Ceiling Canopy

Canopy Screws

Safety Pin

Coupler Cover

Cotter Pin

Fan Motor Assembly

Blade

Black Wire

Blade Screw

White Wire

Light Kit

Black Wire

White Wire

LED Module

Glass Shade

Safety Instructions:

READ ALL SAFETY INFORMATION AND INSTALLATION INSTRUCTIONS BEFORE YOU BEGIN INSTALLING THE FAN. IF YOU ARE NOT FAMILIAR WITH NATIONAL AND LOCAL ELECTRICAL CODES AND BASIC ELECTRICAL WIRING PROCEDURES WE RECOMMEND THAT YOU HAVE A QUALIFIED ELECTRICIAN INSTALL YOUR NEW CEILING FAN. SAVE INSTRUCTIONS.

• To avoid the risk of electrical shock be sure to shut off power at the main fuse or circuit breaker box before installing or servicing this fixture.

• Make sure that all wiring conforms to national and local electrical codes. If you are in question obtain a copy of the codes and wire the fan accordingly. Never leave bare wire uncovered, use wire nuts to cap all connections. Plastic electrical tape is not recommended.

• Basic requirements for a ceiling fan installed with lights are 120V AC-60Hz on a grounded circuit with a 15 amp breaker or fuse. Make sure that your electrical system and choice of location meet these requirements.

• If the location where you plan to install your fan does not already have an electrical outlet, hire a licensed electrician to run the wiring and install an outlet box designed for ceiling fans or heavy fixtures. The outlet box should be able to support a minimum moving weight of 50 pounds and marked "Acceptable for Fan Support" *(Plastic outlet boxes are not recommended for ceiling fan installation).*

• If you plan to use an existing electrical location check to make sure that the outlet box is not PLASTIC, that it is securely attached and able to support at least 50 pounds of moving weight marked "Acceptable for Fan Support". If you have any questions, outlet boxes and support systems for ceiling fans are available at most hardware and do-it-yourself centers. In most cases your Truly Green Solutions dealer will have all the necessary products for the proper and safe installation of your ceiling fan.

• The location you choose should have a minimum clearance of 20 inches from any wall to the blade tip at any point in its rotation and a minimum of 7 feet from blade level to floor and 10 inches from the blades to the ceiling.

• This ceiling fan was not designed for installation in any location where it might be exposed to moisture or high humidity. Installation in this type of location could be UNSAFE, will most likely damage the fan and its finish...and will VOID YOUR WARRANTY.

• Every effort has been made to provide you with proper instructions for the safe installation of this ceiling fan. You could however, encounter situations or problems not covered in this manual. Should this occur, please refer to a do-it-yourself wiring handbook or hire a qualified electrician to install your fan.

• Lubrication of your new ceiling fan is not necessary. The ball bearings have been adequately charged with grease and permanently sealed at the factory so that, under normal conditions, further attention is not necessary.

• NOTE: The safeguards provided by these safety instructions and by any separate installation instructions 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 fan.

Warning:

• To reduce the risk of fire, electrical shock, or personal injury, mount this fan to an outlet box marked "Acceptable for Fan Support of 22.7 kg (50 lbs)" or less and use Mounting Screws provided with the outlet box. CAUTION: Install the primary mounting means and use only the hardware provided with the fan.

• To reduce the risk of personal injury take care not to bend the blade brackets when installing the brackets, balancing the blades or cleaning the fan. Be careful not to insert foreign objects in between rotating fan blades.

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

• 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 careful attention to detail are factors which cannot be built into this product. These factors must be supplied by the person or persons installing, caring for, and operating the unit.

Installation Instructions:

**Step 1 Assemble Fan Support Rod and Blades**
Note: If support rod is already assembled in the box, skip this step.

Back off (loosen) the set screws (2) in the support rod coupler until the inside of the channel is clear of the screw tip. Remove and save the safety pin and washer on the end of the support rod assembly. Slide the ceiling canopy onto the support rod, followed by the support rod coupler cover (see *figure 1*). Feed the electrical wires from the fan housing through the support rod.

Thread the support rod into the support rod coupler until the safety pin can be inserted through the hole in both the rod and coupler. Insert the safety pin through the hole in the support rod coupler and support rod then attach washer into safety pin and the retaining clip on the other side. Tighten both set screws and safety screw on the support rod coupler.

FIG 1

Support Rod
Safety Pin
Cotter Pin
Ceiling Canopy
Coupler Cover
Support Rod Coupler
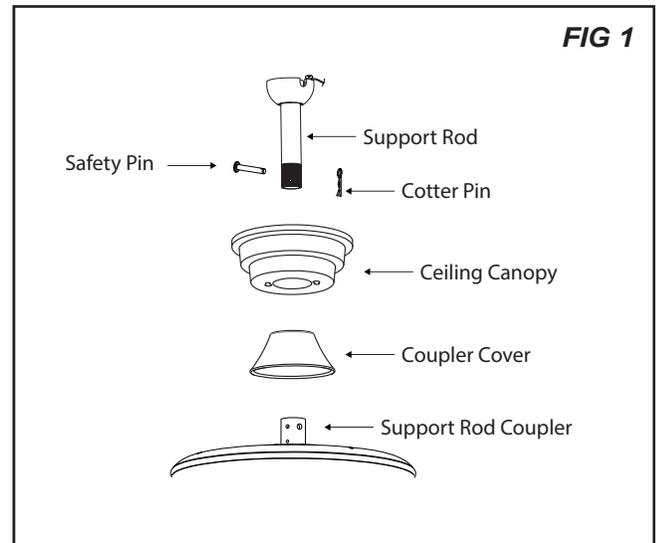
Attach blade arms to motor using supplied screws.(see *figure 2)*

FIG 2

Motor
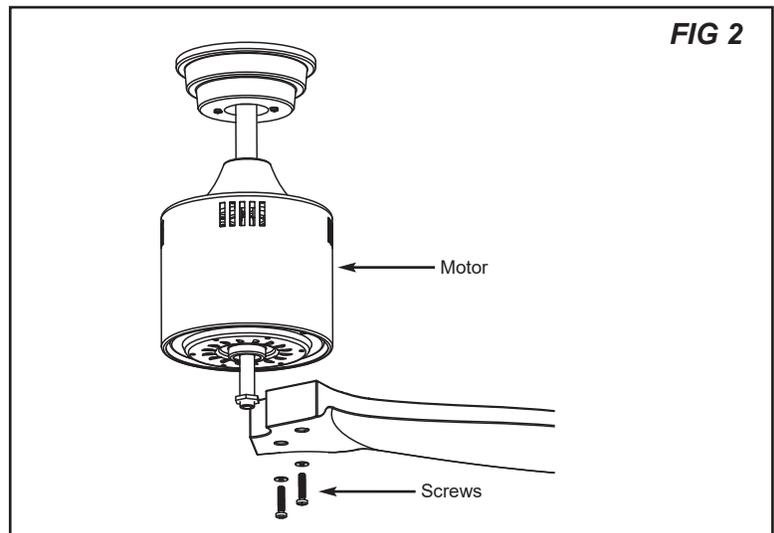
Screws

Step 2 Install Mounting Bracket

Loosen the two canopy mounting screws on the downside face of the mounting bracket. Back them out about half way. This will allow for easier installation of the ceiling canopy later (see *figure 3*).

FIG 3

Ceiling Canopy Mounting Screw

FIG 4

Junction Box

Install the mounting bracket onto the electrical junction box in the ceiling using two machine screws, two washers and two lock washers (see *figure 4*).

Slotted Holes   **FIG 5**

The mounting bracket has slotted holes to enable it to move sideways for proper alignment. Make sure the mounting bracket is centered over the electrical junction box and that it is securely attached (see *figure 5*).

NO MOVEMENT SHOULD OCCUR BETWEEN THE MOUNTING BRACKET AND THE ELECTRICAL JUNCTION BOX.

Pull the electrical wires in the junction box down and through the mounting bracket.

FIG 6

Step 3 Install the receiving Unit

Locate the remote control transmitter and receiver unit. These two items have a block of dip switches inside them (see **figure 6**). Make sure both switches in all two units are aligned exactly the same way. This system will not function properly unless all switches are set the same.

FIG 7

White   Junction Box

Black

Mounting Bracket

Washer

Washer

Receiving Unit

Screw

Attach the WHITE wire from the junction box to the WHITE wire from the receiving unit. Attach the BLACK wire from the junction box to the BLACK wire from the receiving unit (See **figure 7**).

NOTE: Make sure and use wire nuts on these connections. DO NOT USE PLASTIC TAPE.

FIG 8

Insert the receiver into the mounting bracket with the flat side of the receiver facing the ceiling (See **figure 8**).
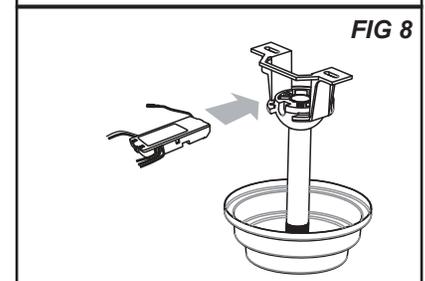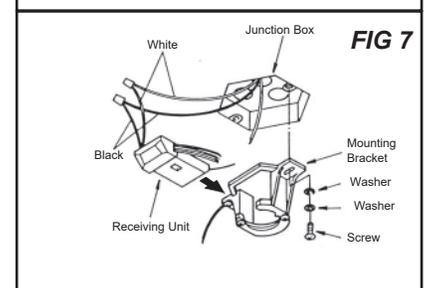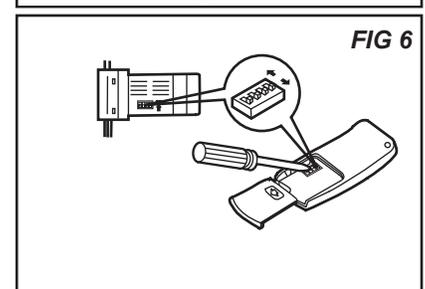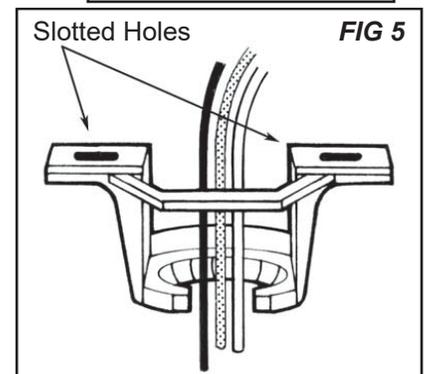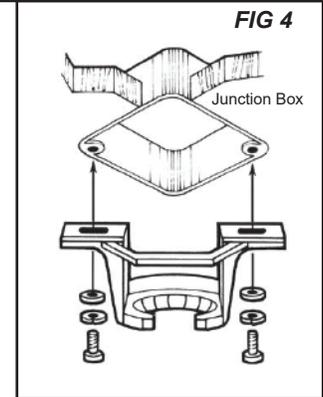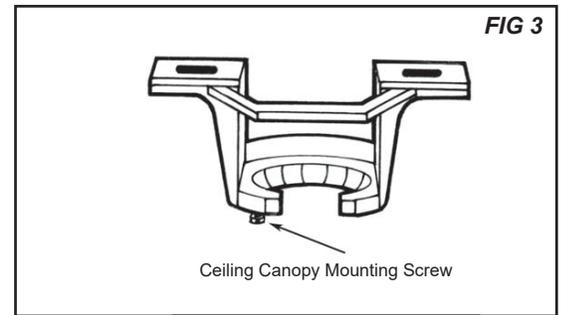
Step 4 Hanging the Fan Body

Notice the half ball on the end of the support rod is grooved down one side (see *figure 9*). This keyway fits over the small keyway pin on the inside of the mounting bracket and keeps the ceiling fan from spinning on the mounting bracket.
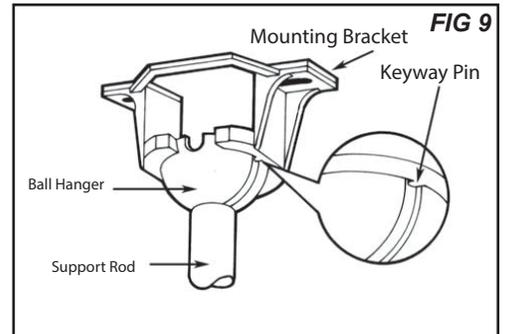
Using your step ladder, lift the fan and place the half ball in the center of the mounting bracket with the keyway pin inserted into the keyway on the ball. Turn the fan left and right slightly to make sure it is seated on the bracket with the keyway pin in the keyway (see *figure 10*).
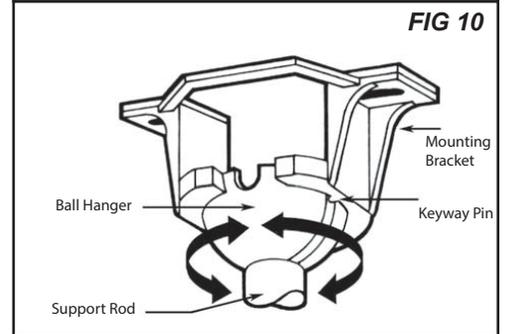
Trim the lead wires, leaving about six inches of each wire extending from the support rod (see *figure 11*).
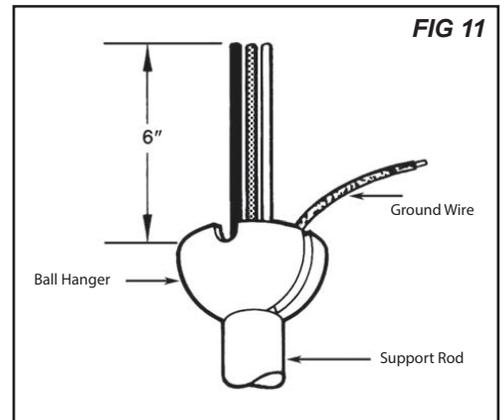
Step 5 Making the Electrical Connections

To operate your ceiling fan with the pull chain(s) and switches mounted on your fan, follow the instruction below (see *figure 12-1*).

Attach the GREEN wire *(connected to the half ball)* to the GROUND wire in the junction box. The GROUND wire is usually a bare copper wire without plastic insulation. It could also be covered in green plastic insulation.

Attach the BLACK wire and BLUE wire from the ceiling fan to the BLACK wire in the junction box.

Attach the WHITE wire from the ceiling fan to the WHITE wire in the junction box.

Fold the connected wires (see *figure 12-2*) and push them up inside the electrical junction box with the BLACK and BLUE wires to one side and the WHITE and GREEN to the other side. Make sure the wire nuts do not come loose during this operation.

7
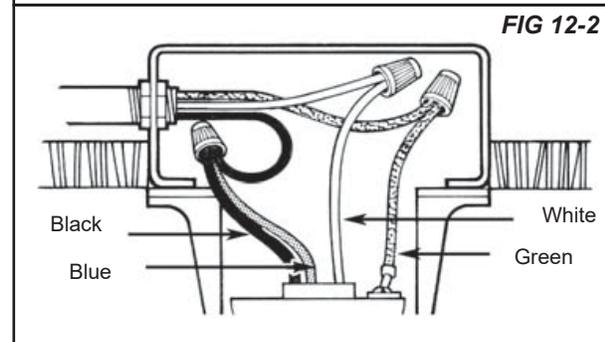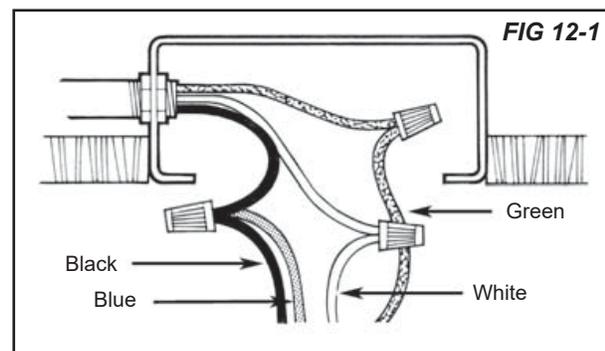
Step 6 Secure Canopy

Slide the ceiling canopy up into place over the ceiling mounting bracket. Secure the ceiling canopy onto the mounting bracket using canopy mounting screws and washers.(see *figure 13*).

FIG 13
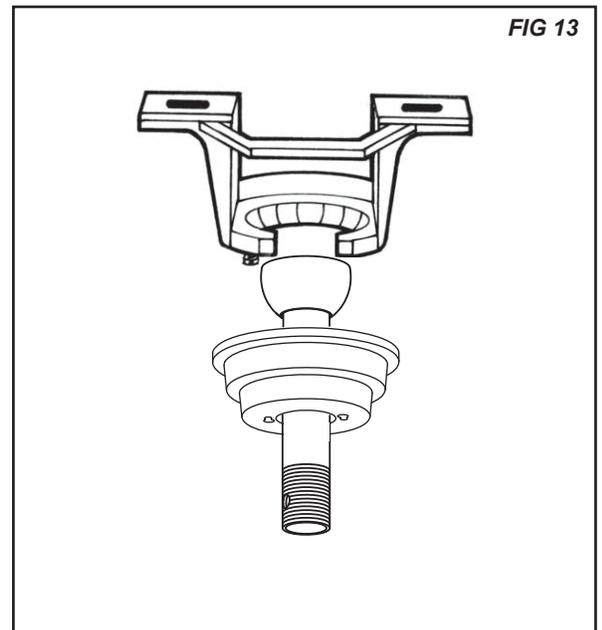
Step 7   Installation of Lighting Fixture

Place the light mounting plate onto fan. Line up (3) keyway holes with keyway screws and press until screw heads pop through keyway holes. Turn counter-clockwise to lock into place. Insert single screw and tighten. (see *figure 14*)

FIG 14

Light Mounting Plate
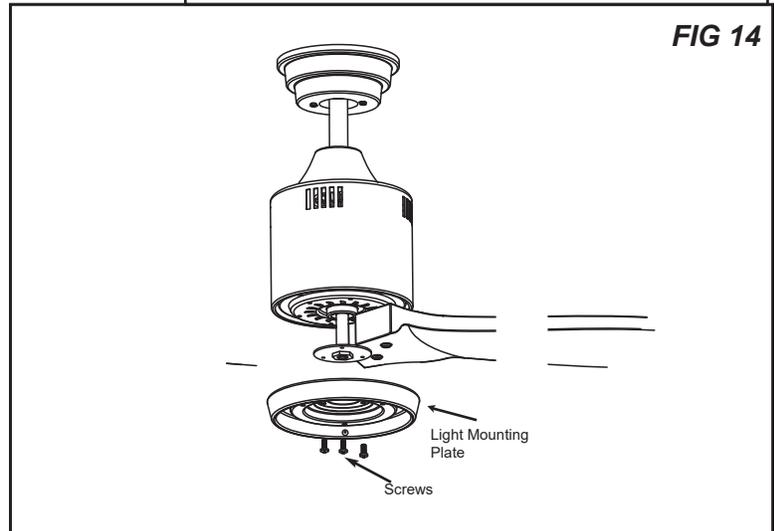
Screws

Loosen the three screws on the LED module (See **figure 15**).

Connect white wire to white wire and black wire to black wire using quick connectors. Press together firmly.

Place LED module onto fan, line up the 3 holes and tighten all three screws securely.

Place glass shade onto fixture and rotate until secure.

Check all set screws and connections are properly in place and tight. Check blade clearance and rotation.

FIG 15

Black Wire   White Wire

Black Wire   White Wire

LED Module

Glass Shade
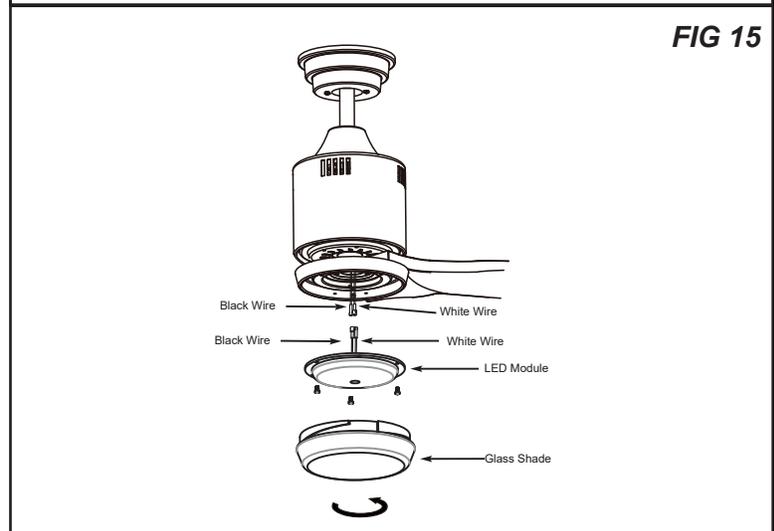
Maintenance:

Your fan requires very little maintenance. Cleaning of the housing should be done with a damp soft cloth (NO CLEANING AGENTS). On the blades, use a duster or dry cloth because any moisture could cause the blades to warp.

Conforms To D.O.E. EPACT Regulation

Remote Control Operation Instruction

(see drawing below for the following instructions)

The Remote Control Transmitter

NOTE: *The Remote Control Transmitter comes with a bracket that can be mounted in any convenient place you choose. Next to a light switch in the same room as the ceiling fan is a good place.*

Attach the bracket with the two screws provided.

Remove the panel on the back of the hand control (transmitter) and install a 9 volt battery. Replace the panel.
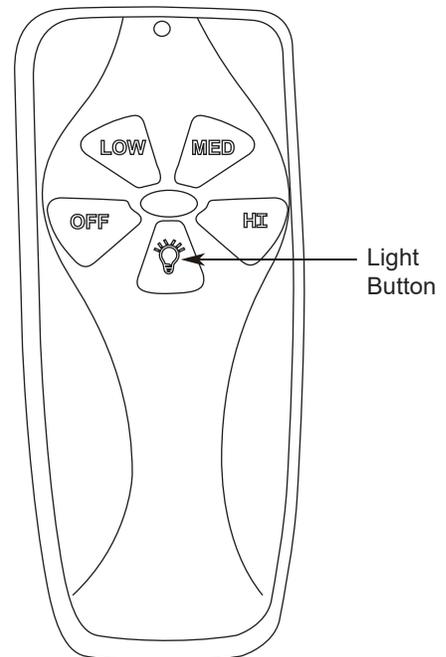
Transmitter

Mounting Screw

Mounting Bracket
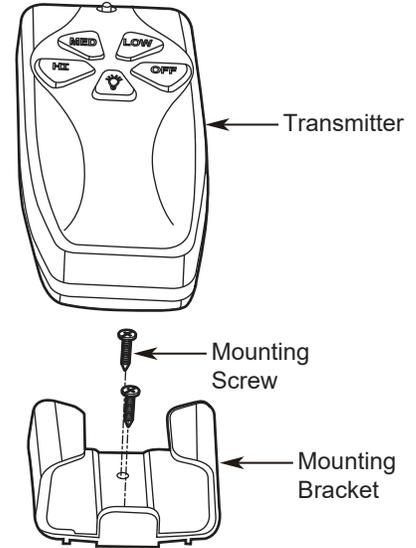
Remote Control

Speed Control

Press HI, MED, or LOW button to start the fan.
Press OFF to stop the fan.

Light Control

Press 💡 to turns the light on or off.
Press and hold for dimming feature.

Light Button

Wall Control Operation Instruction

(see drawing below for following instructions)

IMPORTANT: READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL THIS ELECTRICALDEVICE.

STOP

TO AVOID POSSIBLE ELECTRICAL SHOCK,BE SURE THE ELECTRICITY IS TURNED OFF AT THE CIRCUIT BREAKER PANEL OR FUSE BOX BEFORE WIRING.

TO AVOID THE RISK OF FIRE,ELECTRICAL SHOCK AND SERIOUS PERSONAL INJURY,PLEASE FOLLOW THESE INSTRUCTIONS.

⚠ WARNING

INSTALLATION OF THIS CONTROL REQUIRES THAT A TWO-CONDUCTOR WIRE WITH GROUND WIRE BE RUN BETWEEN THE CONTROL WALL BOX AND THE CEILING FAN OUTLET BOX.

DO NOT MOUNT THIS SPEED CONTROL NEAR HEAT PRODUCING EQUIPMENT

ALL WIRING MUST CONFORM TO NATIONAL AND LOCAL ELECTRICAL CODES. IF YOU FEEL YOU DO NOT HAVE ENOUGH ELECTRICAL KNOWLEDGE,HAVE A LICENSED ELECTRICIAN INSTALL THIS CONTROL

General

This control is designed to operate only one ceiling fan, plus one accessory light fixture that is attached to the ceiling fan.

The speed control is rated for 1.25 amps(for the fan)at 120 volts. To avoid erratic speeds and possible damage to your fan. _Use this control only with the fan pull chain switch set to its highest speed setting_. The light dimmer is rated for a total of 400 watts tungsten light bulb(s).
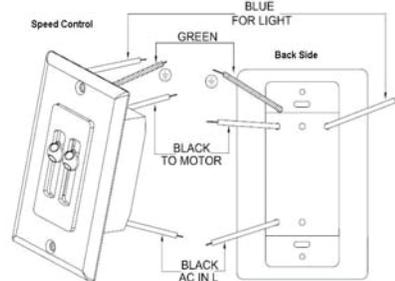
Installing the wall control.

Step l Disconnect the power and remove the existing wall plate and switch (*see figurel*).


Fig. 1
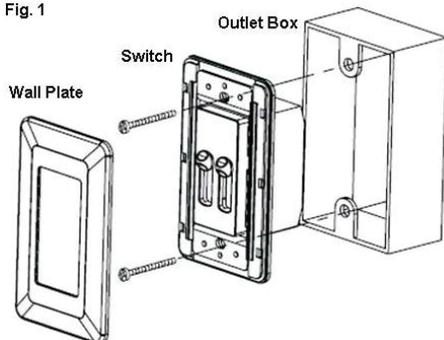
Step 2 Set both slide bars on the control to the off position (*see figure 2*).

Step 3 Make the wire connections and secure them with wire nuts as shown in   *figure 3*   . Depending on where your power supply is located in reference to the wall control, *figure 3* will show you how to attach all of the necessary wiring. Since the wiring is quite different, make sure you know where your main power supply is located.

Assuming your power supply is located before your ceiling fan, wire your control as follows and refer to *figure 3*.

Fig. 3
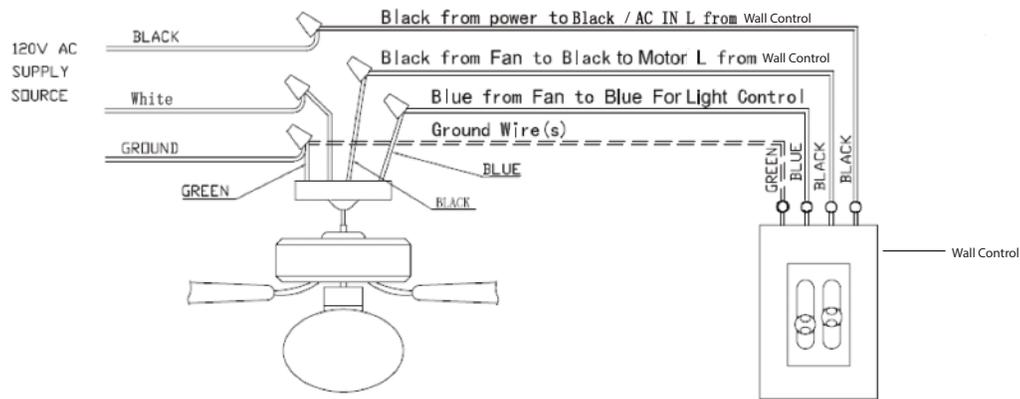
● Connect the black wire from the junction box to the black AC IN.

● Connect the blue wire from the fan to the blue wire from the control.

● Connect the black wire from the fan to the black wire from the wall control.

● Connect the ground wire from the junction box to the green wire from the fan and green wire from the wall control.

Step 4 Attach the speed control to the wall outlet box using the two screws supplied (***see figure 5***). Attach the wall face plate to the front of the control.

Operation

With the speed pull chain located on the ceiling fan, set the ceiling fan on its highest specd setting. *Once this speed and light control has been installed. the speed control on the ceiling fan must be permanently left on high speed. Failure to leave the fan speed pull chain set on high speed will damage the fan and control and could cause a fire.* The light fixture pull chain located on the ceiling fan should be set in the ON position and left there also.

You can now control the speeds of your ceiling fan and the light fixture with the slide bars on the wall control.

You have four (4) speeds plus OFF, and, when you push the

knob upward slowly,   the lightness of light will turn brigther and brigther.

If you want to place your ceiling fan in reverse operation, this must be done with the reverse switch located on the ceiling fan.

Remember, always have the fan speed switch set to its highest speed then control the speeds with the wall control. Failure to do this could damage the fan, may cause a fire and/or cause excessive noise while the fan is running.

Fig.5
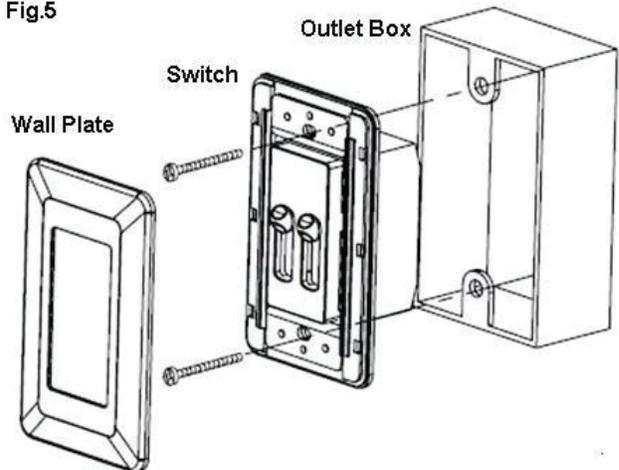
Operation:

The pull chain located on the switch housing controls the speed of your fan. When the fan is OFF, pull the chain once for HIGH speed, twice for MEDIUM speed, three times for LOW speed and a fourth time to turn it off again.

Turn fan completely off before moving the reverse switch. Set reverse switch to recirculate air depending on the season: UP position in summer (1), OWN position in winter (2). IMPORTANT: If the reverse switch is set in the (3) middle position the fan will not operate. Attach the pull chain extensions supplied or custom pull chains (sold separately) to ends of the pull chains.


Reverse Switch
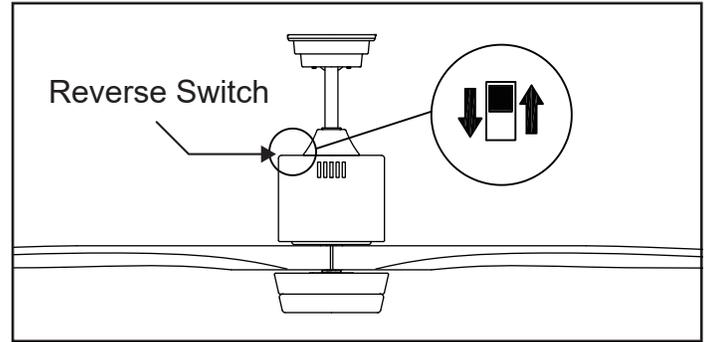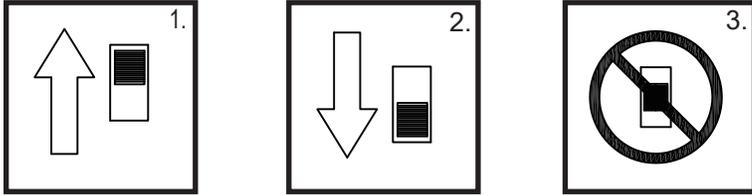
Optional Wiring Diagrams:

Figure 16 illustrates the wiring used to control the fan with a wall switch plus an optional light fixture controlled at the fixture.

Fan Controlled with wall switch and light controlled at fan   *FIG 16*
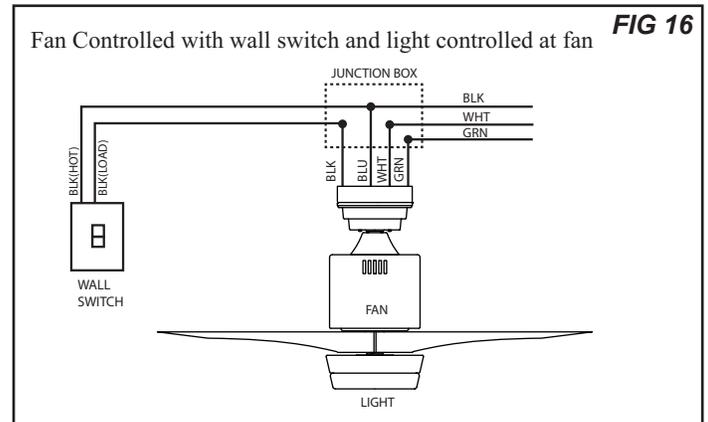
Figure 17 illustrates the wiring used to control fan with the pull chain on the electrical switch housing plus an optional light fixture with a wall switch.

Fan Controlled at fan with light controlled at wall switch   *FIG 17*
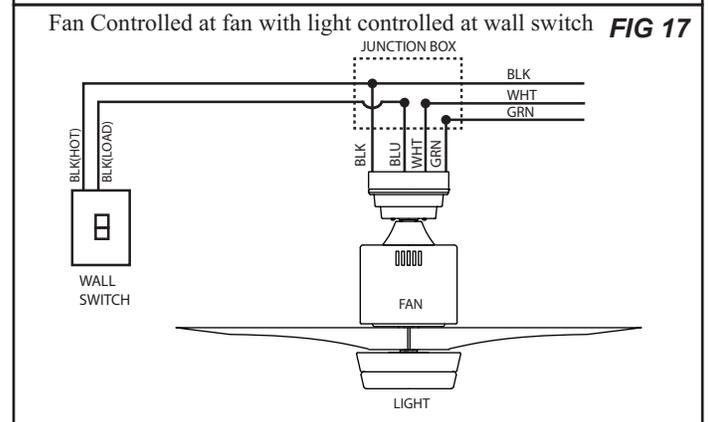
Figure 18 illustrates the wiring used to control the fan and optional light fixture with separate wall switches.
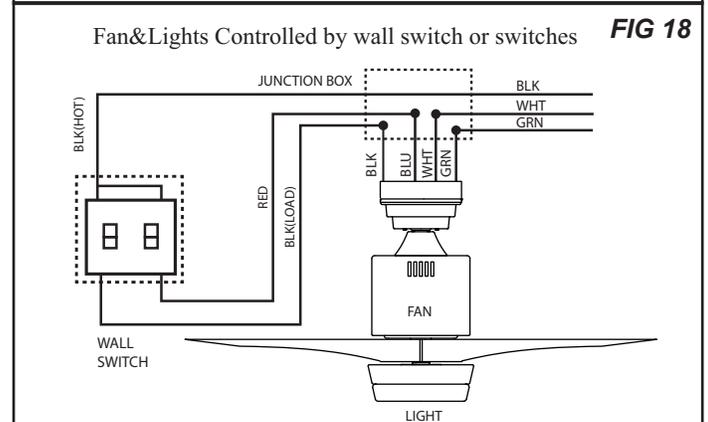
Your dealer carries a number of different types of wall switches that have been designed and tested for use with our products.

If you elect to control the motor of your ceiling fan from a wall switch, remember that the wall switch will only turn your fan ON or OFF. The speed is adjusted at the fan.

If you elect to control the speeds of your ceiling fan from a wall switch, YOU MUST set the speed switch on the ceiling fan to HIGH speed and leave it in that setting.

Fan&Lights Controlled by wall switch or switches   *FIG 18*

Troubleshooting Guide:

If you have difficulty operating your new ceiling fan it may be the result of incorrect assembly, installation, or wiring. In some cases these installation errors may be mistaken for defects. If you experience any faults please check this troubleshooting guide.

Problem   Suggested Remedy:

1. If fan does not start:

1. Check main and branch circuit fuses or circuit breakers.
2. Check line wire connections to fan and switch wire connections in switch housing. CAUTION: Make sure main power is turned off.
3. Make sure forward/reverse switch is firmly in up or down position. Fan will not operate when switch is in the middle.
4. Make sure that the wall controller is turned "ON".

2. If fan sounds noisy:

1. Make sure all screws in motor housing are snug (not over tightened).
2. Make sure the screws which attach the fan blade holder to the motor are tight.
3. Make sure wire nut connectors in switch housing are not rattling against each other or against the interior wall of the switch housing.
   CAUTION: Make sure main power is turned off before entering switch housing.
4. If using an optional ceiling fan light kit check to be sure the screws securing the glass shade are tight. Check to be sure the light bulb is tight on the socket and not touching the glass shade.
5. Some fan motors are sensitive to signals from solid state variable speed controls. DO NOT USE a solid state variable speed control.
6. Your ceiling fan's "break in" period is 24 hours of operation. Most noises associated with a new fan will disappear after this period.

3. If fan wobbles:

All blades are weighed and grouped by weight. Natural woods vary in density which could cause the fan to wobble even though all blades are weight-matched. The following procedures should eliminate most of the wobble. Check for wobble after each step.

1. Check that all blades are screwed firmly into blade holders.
2. Check that all blade holders are tightened securely to motor.
3. Make sure that canopy and mounting bracket are tightened securely to ceiling junction box and junction box is mounted firmly to ceiling joist.
4. Most fan wobble 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 keeping measure within 1/8 in. Rotate the fan until the next blade is positioned for measurement. Repeat for each blade. If all blade levels are not equal you can adjust blade levels by the following procedure. To adjust a blade tip down insert a washer (not supplied) between the blade and blade holder at the screw closest to the motor. To adjust a blade tip up insert washer (not supplied) between the blade and blade holder at the two screws farthest from the motor.
5. If blade wobble is still noticeable interchanging two adjacent (side by side) blades can redistribute the weight and possibly result in smoother operation.

4. If light does not work:

1. Check blue wire from fan to make sure it is connected to hot wire from the house.
2. Check for loose or disconnected wires in fan switch housing.
3. Check for loose or disconnected wires in light kit.
4. Check for faulty light bulbs. CAUTION: Make sure main power is turned off before entering switch housing.
5. If the fan light shuts off shortly after being switched on it may be due to excessive current demand. Turn off power to the fan and replace the light bulbs with lower wattage bulbs. Turn on power to the fan using the pull chain, wall switch, or remote control (whichever is installed on the particular fan).