# CRAFTMADE

# READ THESE INSTRUCTIONS AND SAVE THEM FOR FUTURE USE



# Cavalier

# Installation Guide

For Model: CAV52

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LISTED FOR DAMP LOCATION

net weight of fan: 29.7 lb (13.47 kg)

#### SAFETY TIPS.

**WARNING**: To reduce the risk of electrical shock, turn off the electricity to the fan at the main fuse box or circuit panel before you begin the fan installation or before servicing the fan or installing accessories.

1. READ ALL INSTRUCTIONS AND SAFETY INFORMATION CAREFULLY BEFORE INSTALLING YOUR FAN AND SAVE THESE INSTRUCTIONS.

**CAUTION**: To avoid personal injury, the use of gloves may be necessary while handling fan parts with sharp edges.

- Make sure all electrical connections comply with Local Codes or Ordinances, the National Electrical Code, and ANSI/NFPA
  70-1999. If you are unfamiliar with electrical wiring or if the house/building wires are different colors than those
  referred to in the instructions, please use a qualified electrician.
- 3. Make sure you have a location selected for your fan that allows clear space for the blades to rotate, and at least seven (7) feet (2.13 meters) of clearance between the floor and the fan blade tips. The fan should be mounted so that the tips of the blades are at least thirty (30) inches (76 centimeters) from walls or other upright structures.
- 4. The outlet box and ceiling support joist used must be securely mounted and capable of supporting at least 35 pounds (16 kilograms). The outlet box must be supported directly by the building structure. Use only CETL or CUL in Canada or ETL or UL in USA listed outlet boxes marked "FOR FAN SUPPORT."

**WARNING**: To reduce the risk of fire, electrical shock, or personal injury, mount to the outlet box marked "Acceptable for Fan Support of 15.9 kg (35 lb) or less," and use the 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, electrical shock, or personal injury, wire connectors provided with this fan are designed to accept only one 12 gauge house wire and two lead wires from the fan. If your house wire is larger than 12 gauge or there is more than one house wire to connect to the corresponding fan lead wires, consult an electrician for the proper size wire connectors to use.

- 5. Electrical diagrams are for reference only.
- 6. After installation is complete, check that all connections are absolutely secure.
- 7. After making electrical connections, spliced conductors should be turned upward and pushed carefully up into the outlet box. The wires should be spread apart with the grounded conductor and the equipment-grounding conductor on opposite sides of the outlet box.

**WARNING**: To reduce the risk of fire or electrical shock, do not use this fan with any solid state speed control device or control fan speed with a full range dimmer switch. [Using a full range dimmer switch to control fan speed will cause a loud humming noise from fan.]

- 8. Do not operate the reverse switch until fan has come to a complete stop.
- 9. Do not insert anything between the fan blades while they are rotating.

**WARNING**: To reduce the risk of personal injury, do not bend the blade arms during assembly or after installation. Do not insert objects into the path of the blades.

WARNING: 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.

**WARNING**: To reduce the risk of personal injury, use *only* parts provided with this fan. **The use of parts OTHER than those** provided with this fan will void the warranty.

Modifications not approved by the party responsible for compliance could void the user's authority to operate the equipment. [The equipment refers to the remote and/or wall control and/or LED light kit.]

**NOTE**: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

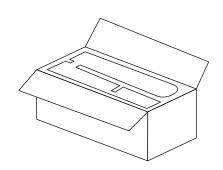
- \* Reorient or relocate the receiving antenna.
- \* Increase the separation between the equipment and receiver.
- \* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- \* Consult the dealer or an experienced radio/TV technician for help.

**NOTE**: The important safety precautions and instructions appearing in the manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense and caution are necessary factors in the installation and operation of this fan.

### 1. Unpacking Your Fan.

Carefully open the packaging. Remove items from Styrofoam inserts. Remove motor housing and place on carpet or Styrofoam to avoid damage to finish. Do not discard fan carton or Styrofoam inserts should this fan need to be returned for repairs.

Check against parts inventory that all parts have been included.



### 2. Parts Inventory.

a. canopy. 1 piece

**b**. hanging bracket (pre-attached to canopy). 1 piece

c. remote control receiver. 1 piece

d. rod support cap. 1 piece

e. rod. 3 pieces

**f**. downrod and hanging ball (with pin and clip). 1 piece

g. wall control. 2 pieces

h. rod support. 1 piece

i. plate. 1 piece

j. remote control cover. 1 piece

k. faceplate. 3 pieces

I. yoke cover. 1 piece

m. motor housing. 1 piece

n. light kit fitter. 1 piece

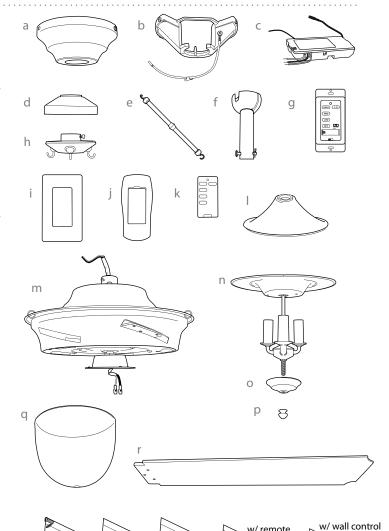
o. finial plate. 1 piece

**p**. finial. 1 piece

q. glass shade. 1 piece

r. blade. 5 pieces

s. hardware packs





**required bulbs:** 3 x 6.5 watt medium base LED bulbs (included)



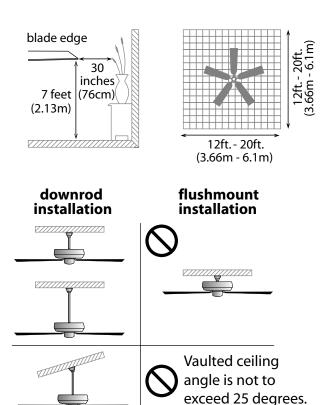
#### 3. Installation Preparation.

To prevent personal injury and damage, ensure that the hanging location allows the blades a clearance of 7 feet (2.13m) from the floor and 30in. (76cm) from any wall or obstruction. This fan is suitable for room sizes up to 400 square feet (37.2 square meters).

This fan can be mounted with a **downrod** on a regular (no-slope) or vaulted ceiling. The hanging length can be extended by purchasing a longer downrod (0.5in./1.27cm diameter). Other installation, such as **flushmount**, is *not* available for this fan.

#### Installation requires these tools:

Phillips screwdriver, flat-head screwdriver, adjustable pliers or wrench, stepladder, wire cutters and rated electrical tape.



## 4. Hanging Bracket Installation.

Turn off circuit breakers to current fixture from breaker panel and be sure operating light switch is turned to the OFF position.

**WARNING:** Failure to disconnect power supply prior to installation may result in serious injury.

#### Remove existing fixture.

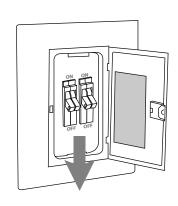
**WARNING:** When using an existing outlet box, be sure the outlet box is securely attached to the building structure and can support the full weight of the fan. Ensure the outlet box is clearly marked "Suitable for Fan Support." If not, it must be replaced with an approved outlet box. Failure to do so can result in serious injury.

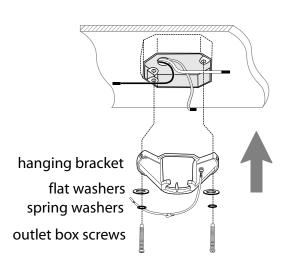
**CAUTION**: Be sure outlet box is grounded and that a ground wire (**GREEN** or bare) is present.

Partially loosen screws in slotted holes of canopy. Remove the other 2 screws (along with the star washers)--save for later use. Twist canopy to remove hanging bracket.

Install hanging bracket to outlet box using original screws, spring washers and flat washers provided with new or original outlet box.\* If installing on a vaulted ceiling, face opening of hanging bracket towards high point of ceiling. Arrange electrical wiring around the back of the hanging bracket and away from the bracket opening.

\*Note: It is very important that you use the proper hardware when installing the hanging bracket as this will support the fan.

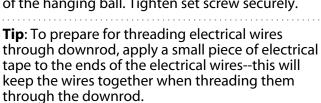




#### 5. Fan Assembly.

If you wish to extend the hanging length of your fan, you must remove the hanging ball from the downrod provided to use with an extended downrod (sold separately). [If you wish to use the downrod provided, please proceed to instructions following the dotted line below.]

To remove hanging ball, loosen set screw on hanging ball and remove the pin and clip. Lower hanging ball and remove stop pin. Slide hanging ball off the original downrod, A, and slide it down the longer downrod, B (the top of the downrod should be noted as having a set screw hole; use this hole when setting the set screw). Insert stop pin into top of extended downrod and raise hanging ball. Be sure stop pin aligns with slots on the inside of the hanging ball. Tighten set screw securely.



Loosen yoke set screws and nut at top of motor housing. Remove pin and clip from downrod (if you have not already done so). Slide downrod through canopy, rod support cap, rod support (loosen rod support set screw to prevent scratching the downrod finish) and then the yoke cover.

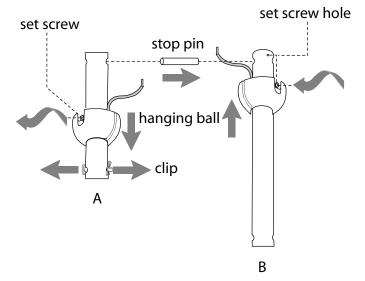
Thread electrical wires through downrod and pull extra wire slack from the upper end of the downrod.

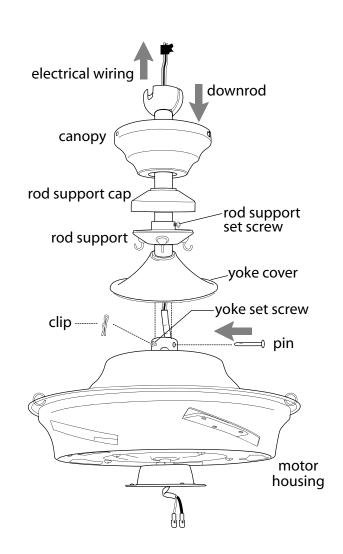
Thread downrod into the motor housing yoke until holes for pin and clip in downrod align with holes in yoke--make sure wires do not get twisted. Re-insert pin and clip that were previously removed. Tighten yoke set screws and nut securely.

**WARNING**: Failure to tighten set screw (on hanging ball) completely could result in the fan becoming loose and possibly falling.

**NOTE:** The important safety precautions and instructions appearing in the manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense and caution are necessary factors in the installation and operation of this fan.

["Fan Assembly" continued on next page.]



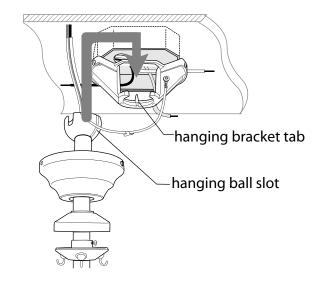


#### 5. Fan Assembly. (cont.)

With the hanging bracket secured to the outlet box and able to support the fan, you are now ready to hang your fan. Grab the fan firmly with two hands. Slide downrod through opening in hanging bracket and let hanging ball rest on the hanging bracket. Turn the hanging ball slot until it lines up with the hanging bracket tab.

**WARNING**: Failure to align slot in hanging ball with tab in hanging bracket may result in serious injury or death.

**Tip**: Seek the help of another person to hold the stepladder in place and to help lift the fan up to you once you are set on the ladder.



#### 6. Wiring.

**WARNING**: Turn off circuit breakers to current fixture from breaker panel and be sure switch is turned to the OFF position.

**CAUTION**: Be sure outlet box is properly grounded and that a ground wire (**GREEN** or Bare) is present.

Make sure all electrical connections comply with Local Codes or Ordinances and the National Electrical Code. If you are unfamiliar with electrical wiring or if the house/building wires are different colors than those referred to in the diagram to the right, please use a qualified electrician.

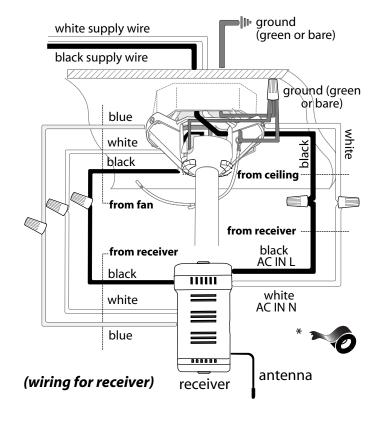
Wire the receiver with wire connectors provided as shown in diagram at right.

**Tip:** While you are wiring, keep in mind that wires must not obstruct receiver from sliding into hanging bracket.

\* Wrap each wire connector separately with electrical tape as an extra safety measure.

Insert receiver into hanging bracket (flat side up) and gently push taped wire connectors into outlet box. Allow antenna from remote control receiver to hang out of the hanging bracket.

["Wiring" continued on next page.]



### 6. Wiring. (cont.)

[PLEASE NOTE: Wall and/or handheld remote control must be used for fan to operate. If you do **not** wish to use the wall control, please proceed to Section 7 below to continue with fan installation.]

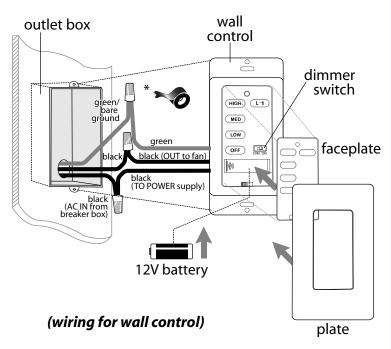
**To install wall control**, remove existing wall switch. Wire one of the wall controls with wire connectors provided as shown in diagram at right.

\*Wrap each wire connector separately with electrical tape as an extra safety measure. Gently push wires and taped wire connectors into outlet box.

Install one 12-volt battery (included) in wall control. **IMPORTANT**: Wall control will not function unless battery is installed.

Since this fan comes with an incandescent bulb, the dimmer switch (labeled **DIM** and **ON**) has been pre-set to the "ON" position (**DIM**). If you do not wish to have dimming capability, please move the switch to the "OFF" position (**ON**).

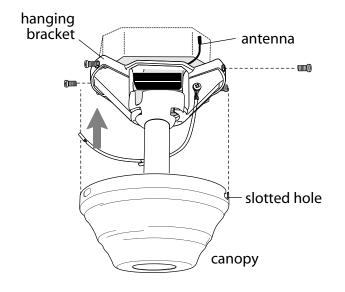
Select a faceplate (almond or white) and press firmly onto front of wall control. Attach wall control to outlet box and secure with screws from original wall switch. Attach plate (included) to wall control using 2 screws provided with the wall control.



#### 7. Canopy Assembly.

Raise canopy to hanging bracket and align slotted holes in canopy with loosened screws in hanging bracket. Twist canopy to lock. Re-insert screws (along with star washers) that were previously removed (page 4, Section 4) and secure all screws with a Phillips screwdriver.

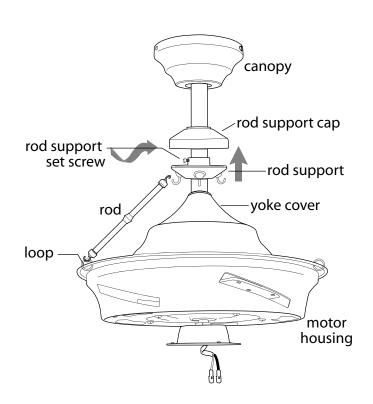
\*Remember that antenna for remote control receiver must rest *outside* of hanging bracket.



### 8. Rod Support Assembly.

Hook one end of rod to loop on motor housing. Adjust rod support to top end of rod so it holds the rod in place and tighten rod support set screw. Allow rod support cap to rest on rod support.

Install remaining rods in between motor housing and rod support. If rods fall off easily, re-adjust rod support (by re-adjusting rod support set screw as described above) with rods already installed.



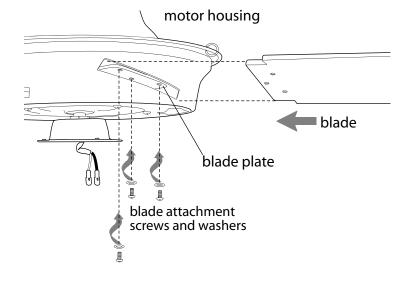
#### 9. Blade Assembly.

**WARNING**: To reduce the risk of serious bodily injury, DO NOT use power tools to assemble the blades. If overtightened, blades may crack and break.

**Time Saver:** Washers for blade screws can be set on each blade screw prior to installing blades.

Locate 15 blade attachment screws and washers in a hardware pack. Slide blade into slot on side of motor housing (*please note side of blade indicating THIS SIDE UP*), then align holes in blade with holes on blade plate located *inside* motor housing. Insert 3 blade attachment screws (along with washers) from *underside* of motor housing. Tighten screws securely with a Phillips screwdriver. Repeat for remaining blades.

Note: Tighten blade arm screws twice a year.



### 10. Light Kit Assembly.

Remove 1 screw from fitter plate (on the underside of the motor housing) and loosen the other 2 screws.

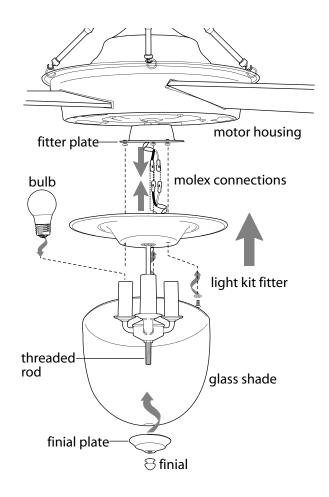
Connect **WHITE** wire from light kit fitter to **WHITE** wire from motor housing. Connect **BLACK** wire from the light kit fitter to **BLACK** (or **BLUE**) wire from the motor housing. Be sure that the molex connections snap together securely.

Align slotted holes in light kit fitter with loosened screws on fitter plate; twist light kit fitter to lock. Re-install screw that was previously removed and then securely tighten all 3 screws.

Install 3 medium base 6.5 watt LED bulbs (included).

**Important**: When replacing bulbs, please allow bulbs and glass shade to cool down before touching.

Align hole in glass shade with threaded rod on light kit fitter and push up gently until threaded rod comes through hole. Align hole in center of finial plate with threaded rod and push up. Secure glass shade with finial. Do NOT overtighten finial as glass may crack or break.



### 11. Handheld Remote Control Assembly.

IN ORDER TO USE THE HANDHELD REMOTE CONTROL, PLEASE CONTINUE WITH SECTION 11 for remote control assembly instructions. If you have already installed the wall control but do **not** wish to use the handheld remote control, please proceed to Section 12.

Gently pull on remote control cover to separate top and bottom parts. [Refer to diagram 1.]

In order to use wall control as a handheld remote control, cut each wire on wall control (that was not previously used)--use wire cutters to cut off each wire as close to the wall control as possible. [Refer to diagram 2.]

Install one 12-volt battery (included) in wall control. [Refer to diagram 2.]

The dimmer switch (labeled **DIM** and **ON**) has been pre-set to the "ON" position (**DIM**). If you do not wish to have dimming capability, please move the switch to the "OFF" position (**ON**). [Refer to diagram 2.]

Attach **black faceplate** to front of wall control; press down firmly. [Refer to **diagram 3**.]

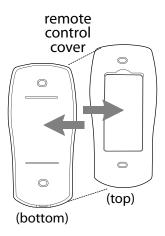
Align holes in wall control with posts located on *inside* of TOP part of remote control cover and press together firmly. Place wall control into BOTTOM part of remote control cover, aligning posts in top of remote control cover with post holes in the bottom. [Refer to diagram 3.]

(**NOTE**: Make sure to align narrower ends of remote control cover before closing.) Squeeze top and bottom of remote control cover together until you hear a click at each end, indicating that the remote control cover has closed completely.

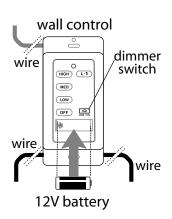
**IMPORTANT**: Store the remote control away from excess heat or humidity. To prevent damage to remote control, remove the battery if remote control will not be used for long periods.

**CAUTION:** "DO NOT DISPOSE OF BATTERIES IN FIRE, BATTERIES MAY EXPLODE OR LEAK." - When disposing of household alkaline batteries, it is best to check with your local and state recycling or household hazardous waste coordinators concerning the specifics of the program in your area. You may also locate a recycling center by calling 1-800-8-BATTERY or 1-877-2-RECYCLE or visit www.epa.gov/epawaste/index.htm or www.earth911.org for more information.

**WARNING**: *Choking Hazard* - Small parts. Keep battery away from children.



#### diagram 1



#### diagram 2

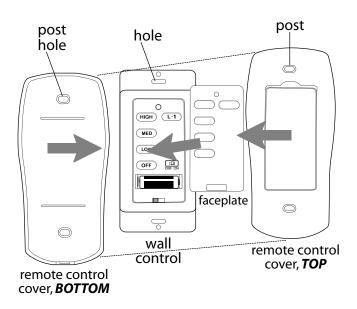


diagram 3

### 12. Automated Learning Process./Activating Code.

**CAUTION**: The wall and/or handheld remote control can be programmed to multiple receivers or fans. If this is not desired, turn wall switch off to any other programmable receiver or fan.

Restore electrical power and then, if using wall control, set slider switch on wall control to the ON position. Within 60 seconds of turning on the <u>wall control</u>, press and hold the fan **OFF** button on the wall control for 5 seconds or until light blinks twice.

**Turn power off again for at least 5 seconds** and then turn power back on. Within 60 seconds of restoring the power, press and hold the fan **OFF** button on the front of the <u>handheld remote control</u> for 5 seconds or until light blinks twice.

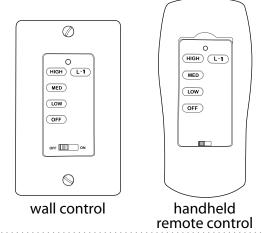
Test the light and fan functions to confirm the learning process is complete--see Section 14 below.

### 13. Remote Control Operation.

**ON/OFF** slider switch - turns wall control ON or OFF (ON/OFF slider switch not functional on handheld remote)

**HIGH** button - turns *fan* to HIGH speed **MED** button - turns *fan* to MEDIUM speed **LOW** button - turns *fan* to LOW speed **OFF** button - turns *fan* OFF

**L1** button - turns *light kit* ON/OFF when pressed once; dims *light kit* when pressed and held down



#### 14. Testing Your Fan.

It is recommended that you test fan before finalizing installation. Restore power from circuit box and light switch (if applicable). Test wall control (optional installation) by locating ON/OFF slider switch on wall control, then set to the ON position. Test light and dimmer function and then test fan speeds. Next, locate handheld remote control. Test the light ON/OFF function by pressing the L1 button; test the dimmer function by pressing the L1 button and holding it down for1 second. Test fan speeds with the different fan speed buttons. If the wall and/or handheld remote control operates all of the functions of the fan, battery has been installed correctly. If the wall and/or handheld remote control do (does) not operate all of the fan/light functions, refer to "Troubleshooting" section to solve any issues before contacting Customer Service.

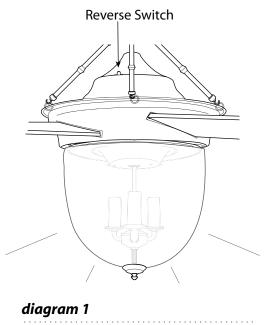
Turn fan completely off *before* moving the reverse switch (located on top of the motor housing). (*diagram 1*) Set reverse switch to recirculate air depending on the season:

- LEFT position in summer (diagram 2)
- RIGHT position in winter (*diagram 3*)

A ceiling fan will allow you to raise your thermostat setting in summer and lower your thermostat setting in winter without feeling a difference in your comfort.

**Important**: Reverse switch must be set either *completely to the LEFT* or *completely to the RIGHT* for fan to function. If the reverse switch is set in the *middle* position (*diagram 4*), fan will not operate.

**NOTE**: If the wall control/handheld remote control interferes with other appliances, turn off power and go back to the instructions in Section 12.



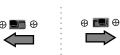




diagram 2 diagram 3 diagram 4

#### Troubleshooting.

**WARNING:** Failure to disconnect power supply prior to troubleshooting any wiring issues may result in serious injury.

**Problem:** Fan fails to operate.

#### **Solutions:**

- 1. Check wall switch to fan/wall control.
- 2. Check to be sure wall control (optional use) is wired properly.
- 3. Check to be sure fan is wired properly.
- 4. Learning process between fan, handheld remote control and, if applicable, wall control may not have been successful and code was not activated. Turn off power and repeat instructions in Section 12 (page 11).
- 5. Check that red light on handheld remote control turns on when a button is pressed indicating that the battery is good.

#### **Problem:** Light kit not lighting. **Solutions:**

- 1. Check wall switch to fan/wall control.
- 2. Check that bulb is installed correctly.
- 3. Check that wires in canopy are wired properly.
- 4. Verify that molex connections in light kit fitter are connected properly.
- 5. Learning process between fan, handheld remote control and, if applicable, wall control may not have been successful and code was not activated. Turn off power and repeat instructions in Section 12 (page 11).

**Problem:** Fan operates but light fails. **Solutions:** 

- 1. Check that bulb is installed correctly.
- 2. Check that wires in canopy are wired properly.
- 3. Replace defective bulb with same type of bulb.
- 4. Verify that molex connections in light kit fitter are connected properly.

**Problem:** Fan and light fail to operate with wall control (optional) and/or handheld remote control.

#### **Solutions:**

- 1. Check battery power in handheld remote control.
- 2. Learning process between fan, handheld remote control and, if applicable, wall control may not have been successful and code was not activated. Turn off power and repeat instructions in Section 12 (page 11).
- 3. If using optional wall control, check that battery in wall control is still good.

**Problem:** Lighting source (up-light, down-light or both) not functioning.

#### **Solution:**

Wattage Limiting Device has interrupted the flow of electricity to the light source. Ensure bulbs total no more than 190W in the light source.

**Problem:** Fan wobbles.

#### Solutions:

- 1. Use the balancing kit in one of the hardware packs. If no blade balancing kit is provided, please call Customer Support, 1-800-486-4892, to request one.
- 2. Check to be sure set screw(s) on motor housing yoke is (are) tightened securely.
- 3. Check to be sure set screw on hanging ball is tightened securely.

#### Warranty.

CRAFTMADE™ LIFETIME LIMITED WARRANTY:

CRAFTMADE warrants this fan to the original household purchaser for indoor use under the following provisions: 1-YEAR WARRANTY: CRAFTMADE will replace or repair any fan which has faulty performance due to a defect in material or workmanship. Contact Craftmade Customer Service at **1-800-486-4892** to arrange for return of fan. Return fan, shipping prepaid, to Craftmade. We will repair or ship you a replacement fan, and we will pay the return shipping cost.

5-YEAR WARRANTY: CRAFTMADE will repair or replace, at no charge to the original purchaser, any fan motor that fails to operate satisfactorily when failure results from normal use.

RETURN FAN MOTOR ONLY, shipping prepaid, to Craftmade Industries. We will repair or ship purchaser a replacement motor and Craftmade will pay the return shipping cost. 6-YEAR to LIFETIME LIMITED WARRANTY: CRAFTMADE will repair the fan, at no charge for labor only to the original purchaser, if the fan motor fails to operate satisfactorily when failure results from normal use. Parts used in the repair will be billed to the purchaser at prevailing prices at time of repair.

The purchaser shall be responsible for all costs incurred in the removal, reinstallation and shipping of the product for repairs.

This warranty does not apply when damage from mechanical, physical, electrical or water abuse results in causing the malfunction. Deterioration of finishes or other parts due to time or exposure to salt air is specifically exempted under this warranty.

Neither Craftmade nor the manufacturer will assume any liability resulting from improper installation or use of this product. In no case shall the company be liable for any consequential damages for breach of this, or any other warranty expressed or implied whatsoever. This limitation as to consequential damages shall not apply in states where prohibited.

#### Parts Replacement.

For parts and information, please refer to "Parts Inventory" on page 3.
Craftmade Customer Support:

1-800-486-4892

www.craftmade.com

CRAFTMADE

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