# CRAFTMADE

#### READ THESE INSTRUCTIONS AND SAVE THEM FOR FUTURE USE



# Enduro

# Installation Guide

# For Model: END52\_5P

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net weight of fan: 17.21 lb (7.8 kg)

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*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 UL-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.

*WARNING*: If using this fan in a WET location, this fan must be connected to a supply circuit that is protected by a Ground Fault Circuit Interrupter (GFCI) to reduce the risk of personal injury, electrical shock or death.

- 5. Electrical diagrams are for reference only. Light kits that are not packed with the fan must be UL-listed and marked suitable for use with the model fan you are installing. Switches must be UL general use switches. Refer to the instructions packaged with the light kits and switches for proper assembly.
- 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 serious bodily injury, DO NOT use power tools to assemble any part of the fan, including the blades.

*WARNING*: To reduce the risk of electrical shock or fire, 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.] (*Note*: This fan *is* suitable for use with remote control approved for WET locations.)

- 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.* 

Distributed by: Craftmade, 650 S. Royal Lane, Coppell, TX, 75019; 1-800-486-4892

**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

а

С

e

h

b. hanging bracket. 1 piece

c. downrod and hanging ball. 1 piece

d. motor housing. 1 piece

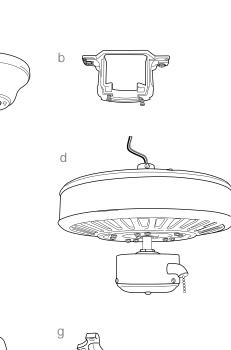
e. weatherproof hanging ball cover. 1 piece

f. weatherproof yoke cover. 1 piece

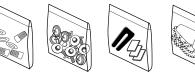
g. blade arm. 5 pieces

h. blade. 5 pieces

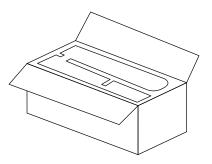
*i.* hardware packs







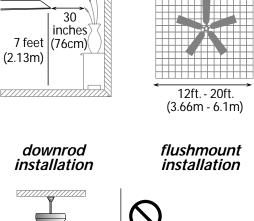




#### 3. Installation Preparation.

To prevent personal injury and damage, ensure that the hanging location allows the blades a clearance of 7ft. (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.



blade edge

#### 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.

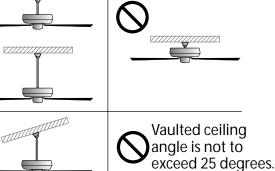
#### Remove existing fixture.

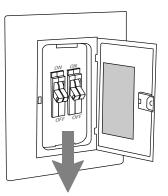
WARNING: When using an existing outlet box, be sure the outlet box is securely attached to the building structure and can support the full weight of the fan. Ensure outlet box is clearly marked "Suitable for Fan Support." If not, it must be replaced with an approved outlet box. Failure to do so can result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

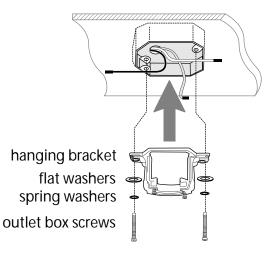
## CAUTION: Be sure outlet box is grounded properly and that a ground wire (GREEN or bare) is present.

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 hanging 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.

Remove hanging ball from downrod provided by loosening set screw on hanging ball. Lower hanging ball and remove stop pin and then slide hanging ball off of the downrod. [*Refer to diagram 1*.]

Loosen yoke set screws and nuts at top of motor housing. Remove pin and clip from motor housing yoke. [*Refer to diagram 2.*]

*Tip*: To prepare for threading electrical wires through downrod, apply a small piece of electrical tape to the ends of the electrical wires--this will keep the wires together when threading them through the downrod. [*Refer to diagram 2.*]

Determine the length of downrod you wish to use. Thread electrical wires through threaded end of downrod and pull extra wire slack from the upper end of the downrod. [*Refer to diagram 2.*]

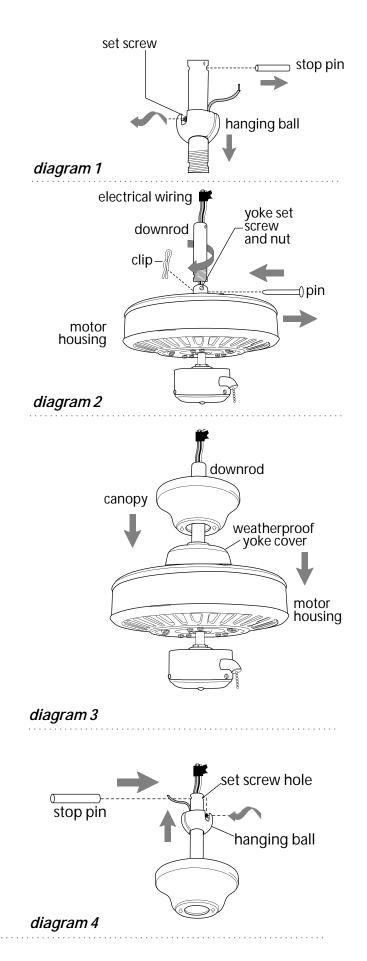
Thread downrod into the motor housing yoke until holes for pin and clip in downrod align with holes in yoke--*make sure wires do not get twisted*. Re-insert pin and clip that were previously removed. Tighten yoke set screws and nuts securely. [*Refer to diagram 2*.]

Slide weatherproof yoke cover and canopy over downrod. [*Refer to diagram 3.*]

Thread wires through hanging ball; then slide hanging ball over downrod--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 downrod and raise hanging ball. Be sure stop pin aligns with slots on the inside of the hanging ball. Tighten set screw securely. [*Refer to diagram 4.*]

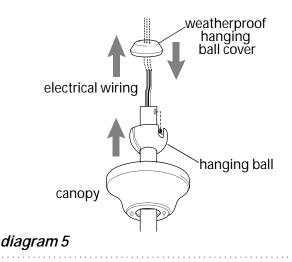
*WARNING*: Failure to tighten set screw on hanging ball completely could result in the fan becoming loose and possibly falling.

["Fan Assembly" continued on next page.]



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

Remove electrical tape from electrical wiring and thread each of the wires through a different hole in the weatherproof hanging ball cover. Pull weatherproof hanging ball cover down securely over hanging ball (on downrod). [*Refer to diagram 5.*]



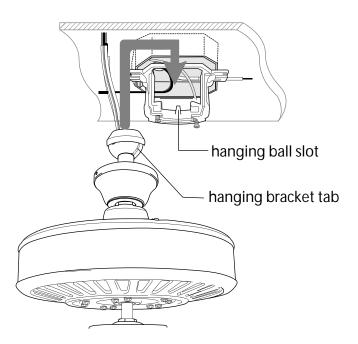
NOTE: The important safety precautions and instructions appearing in the manual are not meant to cover all possible conditions and situations that may occur. It must be understood that common sense and caution are necessary factors in the installation and operation of this fan.

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 lift the fan up to you once you are set on the ladder.

Continue to the "Wiring" section for wiring diagram.



#### 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 instructions below, please use a qualified electrician.

*Note: Excess lead wire length from the fan can be cut to the desired length and then stripped.* 

*WARNING*: If using this fan in a *WET* location, this fan must be connected to a supply circuit that is protected by a Ground Fault Circuit Interrupter (GFCI) to reduce the risk of personal injury, electrical shock or death.

When downrod is secured in place on the hanging bracket, electrical wiring can be made as follows: Connect *BLACK* wire from fan to *BLACK* wire from ceiling with wire connector provided. Connect *WHITE* wire from fan to *WHITE* wire from ceiling with wire connector provided. Connect all *GROUND* (*GREEN*) wires together from fan to *BARE*/ *GREEN* wire from ceiling with wire connector provided.

Since this fan does not come with a light kit, you will need to cap off the *BLUE* wire with a wire connector (as shown with arrow in diagram).

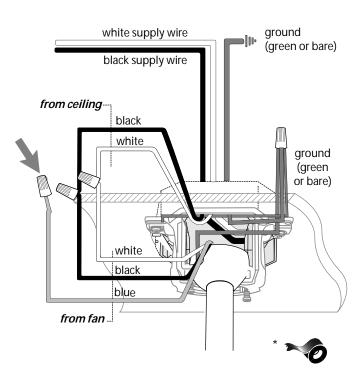
[*Note*: If you elect to purchase a light kit for the fan, the *BLUE* wire from the fan must be connected to the *BLACK* wire from the ceiling instead.]

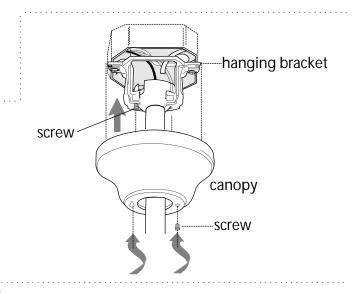
\* Wrap each wire connector separately with electrical tape as an extra safety measure.

*This fan is remote control adaptable (remote control sold separately). Note*: Only remote controls approved for *WET* location can be used with this fan.

## 7. Canopy Assembly.

Locate 2 screws on underside of hanging bracket and remove screw closest to the open end of the hanging bracket. Partially loosen the other screw. Lift canopy to hanging bracket. Place rounded part of slotted hole in canopy over loosened screw in hanging bracket and push up. Twist canopy to lock. Re-insert screw that was removed, and then tighten both screws securely.





#### 8. Blade Assembly.

*WARNING*: To reduce the risk of serious bodily injury, DO NOT use power tools to assemble the blades. If screws are 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 hardware pack. Hold blade arm up to blade and align holes. Insert 3 blade attachment screws (along with washers) with fingers first and then tighten screws securely with a Phillips screwdriver. Repeat for the remaining blades.

Remove blade arm screws and lock washers from underside of motor. If plastic motor locks are installed with blade arm screws, discard plastic motor locks (*save blade arm screws and lock washers to secure blade arms*). Align blade arm holes with motor screw holes and attach blade arm with lock washers and blade arm screws. Before securing screws permanently, repeat with remaining blade arms. Securely tighten all screws.

NOTE: Tighten blade arm screws twice a year.

## 9. Testing Your Fan.

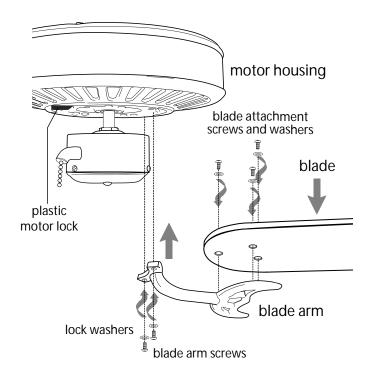
It is recommended that you test fan before finalizing installation. Restore power from circuit box and light switch (if applicable). Test fan speeds with pull chain. (*diagram 1*) Start at the OFF position (no blade movement). First pull will set the fan to HI. Second pull will set the fan to MEDIUM. Third pull will set the fan to LOW. Fourth pull will again set the fan to the OFF setting. If fan does not function, please refer to "Troubleshooting" section to solve any issues before contacting Customer Service.

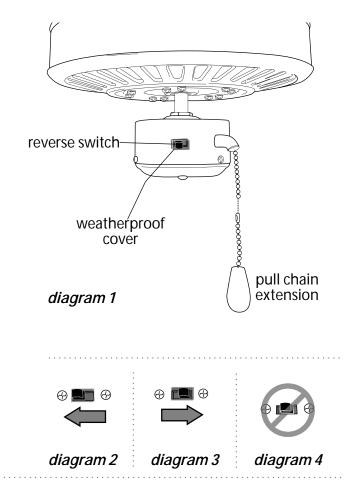
Turn fan completely off *before* moving the reverse switch. Set reverse switch to recirculate air depending on the season:

- 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 LEFT* or *completely RIGHT* for fan to function. If the reverse switch is set in the *middle* position (*diagram 4*), fan will not operate.

*WARNING*: Do NOT remove weatherproof cover from reverse switch.

Attach pull chain extension supplied or custom pull chain extension (sold separately) to the end of the pull chain.





## 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.

2. Verify that reverse switch is set completely in either direction.

3. Check to be sure fan is wired properly.

#### Problem: Fan wobbles.

#### Solutions:

1. Use the balancing kit provided in one of the hardware packs. *If no blade balancing kit is provided, please call Customer Support, at 1-800-486-4892, to request one.* 

 2. Check to make 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.

#### Parts Replacement.

For parts and information, please refer to "Parts Inventory" on page 2. Craftmade Customer Support: *1-800-486-4892* www.craftmade.com

## 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.

