



CARRO

INSTALLATION INSTRUCTIONS

CARROHOME.COM

MANUFACTURING QUALITY
CEILING FANS SINCE FOREVER.

**Important: Please read and save
these instructions before installation**

Basic Product Specifications

Model	48W-523AN	Voltage	48V
Fan Blade Span	52"	Rated Wattage	Fan 27W
Gross Weight	12 lbs	Motor RPM	60-155 RPM
Maximum Airflow	4920 CFM	Maximum Noise	55 dB(A)

**U.S. Patent Nos.: 10,511,206 and 11,296,561 and 11,268,568
and 11,668,326 and 11,808,446.
Other Patent(s) Pending.**

Questions

Have questions about our products? Contact us and talk
to our helpful tech support team.

Technical Support

Business Hours:
Monday – Friday (Holidays observed).

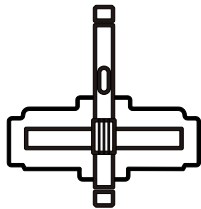
**9:00 am to 5:30 pm PST.
Tel: (888) 253-2374**

The product images shown in the manual are for reference purposes only.
Actual product may differ slightly.

This Carro Ceiling Fan has :



Forward / Reverse
Fan Direction



DC Motor, stable & silent,
suitable for indoor use



Built with premium materials
for durability & power

SAFETY PRECAUTIONS

CARRO

READ AND SAVE THESE INSTRUCTIONS

- Before you begin installing the fan, shut power off at the circuit breaker of the fuse box.
- Make sure that all electrical connections are in accordance with National Electrical Code, ANSI/NFPA 70 and local codes. Hire a licensed electrician if you are unfamiliar with installing electrical wiring.
- Make sure the installation site you choose allows the fan blades to rotate without any obstructions. Allow a minimum clearance of 2.1m (7 feet) from the floor and 18 inches from the tip of the blades to the wall.
- The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 35 pounds. Use only U.L. listed outlet boxes marked "Acceptable for Fan Support of 15.9 kg (35 lbs) or less".
- Before and after you install the fan, make sure that all mounting components are secured to prevent the fan from falling.
- Do not insert anything into the fan blades while the fan is operating.
- To change the direction of the rotation of the blades, the fan must be in operation mode.
- All screws must be checked and retightened where necessary before installation.
- After making the wire connections, the wires should be spread apart with the grounded conductor and the equipment-grounding conductor on one side of the outlet box and the ungrounded conductor on the other side of the outlet box.
- The splices after being made should be turned upward and pushed carefully up into the outlet box. Conductor wiring identified as grounded is to be connected to a grounded conductor of power supply. Conductor wiring identified as ungrounded conductor is to be connected to an ungrounded conductor. Conductor wiring identified for equipment grounding is to be connected to an equipment- grounding conductor.

SAFETY PRECAUTIONS

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- **CAUTION:** Read all instructions and safety information before installing your new fan. Review accompanying assembly diagrams.
- **WARNING:** Mount only to an outlet box marked acceptable for fan support.
AVERTISSEMENT: Assembler uniquement à une boîte de sortie jugée acceptable pour retenir un ventilateur.
- **WARNING:** To reduce the risk of fire, electric shock, or personal injury, mount to a structural framing member or to an outlet box marked acceptable for fan support of 15.9 kg (35 lbs) or less. For outlet box mounting, use mounting screws provided with the outlet box.
AVERTISSEMENT: Afin de réduire les risques d'incendie, de choc électrique ou de blessures corporelles, ils doivent être montés sur des éléments de charpente structurale ou sur des boîtes de sortie marquées d'un support de ventilateur acceptable de 15,9 kg (35 LB) ou moins. Pour l'installation de la boîte de sortie, utilisez les vis de montage fournies avec la boîte de sortie"
- **CAUTION:** To reduce the risk of injury, use only the screws provided with the outlet box in conjunction with the lock washers.
- **WARNING:** To reduce the risk of personal injury, do not bend the blade bracket when installing the brackets, balancing the blades, or cleaning the fan. Do not insert foreign objects in between rotating fan blades.
- **CAUTION:** To reduce the risk of electric shock, disconnect the electrical supply circuit to the fan before installing the light kit.
- **WARNING:** To reduce the risk of fire or electric shock, this fan must be installed with a general use, non-dimmable, single gang, isolating wall control/switch.
- **WARNING:** To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.
AVERTISSEMENT: Ne convient pas à des régulateurs de vitesse à semi-conducteurs.
- **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 cannot be built into this product. These factors must be supplied by the person (s) installing, caring for and operating the unit.
- **CAUTION:** The light source is designed for this specific application and can overheat if serviced by untrained personnel. If any servicing is required, the product should be returned to an authorized service facility for examination or repair.
- **WARNING:** Do not use corrosive detergents for cleaning.
- **WARNING:** To reduce the risk of fire, electric shock, or injury to persons, do not use replacement parts that have not been recommended by the manufacturer. (e.g. Parts made at home using a 3D printer).

SAFETY PRECAUTIONS

CARRO

- **CAUTION:** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- **CAUTION:** Children should be supervised to ensure that they do not play with the appliance.
- **WARNING:** If unusual oscillating movement is observed, immediately stop using the ceiling fan and contact the manufacturer, its service agent or suitably qualified persons.
- **CAUTION:** The replacement of parts of the safety suspension system device shall be performed by the manufacturer, its service agent or suitably qualified persons.
- **WARNING:** Attachments to the ceiling such as hooks or other devices shall be secured with sufficient strength to withstand 4 times the weight of the ceiling fan.
- **CAUTION:** The mounting of the suspension system shall be performed by the manufacturer, its service agent or suitably qualified persons.
- **NOTE:** Before installing the fan, please check and inspect all of the fan components and make sure they have all been received in good condition. Contact the manufacturer if there are any missing, damaged, or broken parts.
- The total weight of the appliance is 5.44 kg (12 lbs).

Care & Cleaning

CARRO

1. Check the support connections, brackets, and blade attachments twice a year. Make sure they are secure. Because of the fan's natural movement, some connections may become loose over time. It is not necessary to remove the fan from the ceiling.
 2. Clean your fan periodically. 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.
 3. (Optional) Apply a light coat of furniture polish to the wood blades.
 4. (Optional) Cover small scratches with a light application of shoe polish.
- DO NOT:**
1. Use water when cleaning. Water could damage the motor, or the wood, or possibly cause an electrical shock.
 2. Apply oil to your fan or motor. The motor has permanently lubricated sealed ball bearings.
- WARNING:** Power off the fan before performing maintenance or cleaning the fan.

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Fan Diagram

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Fan Blades

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Downrod

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Mounting Bracket

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Canopy

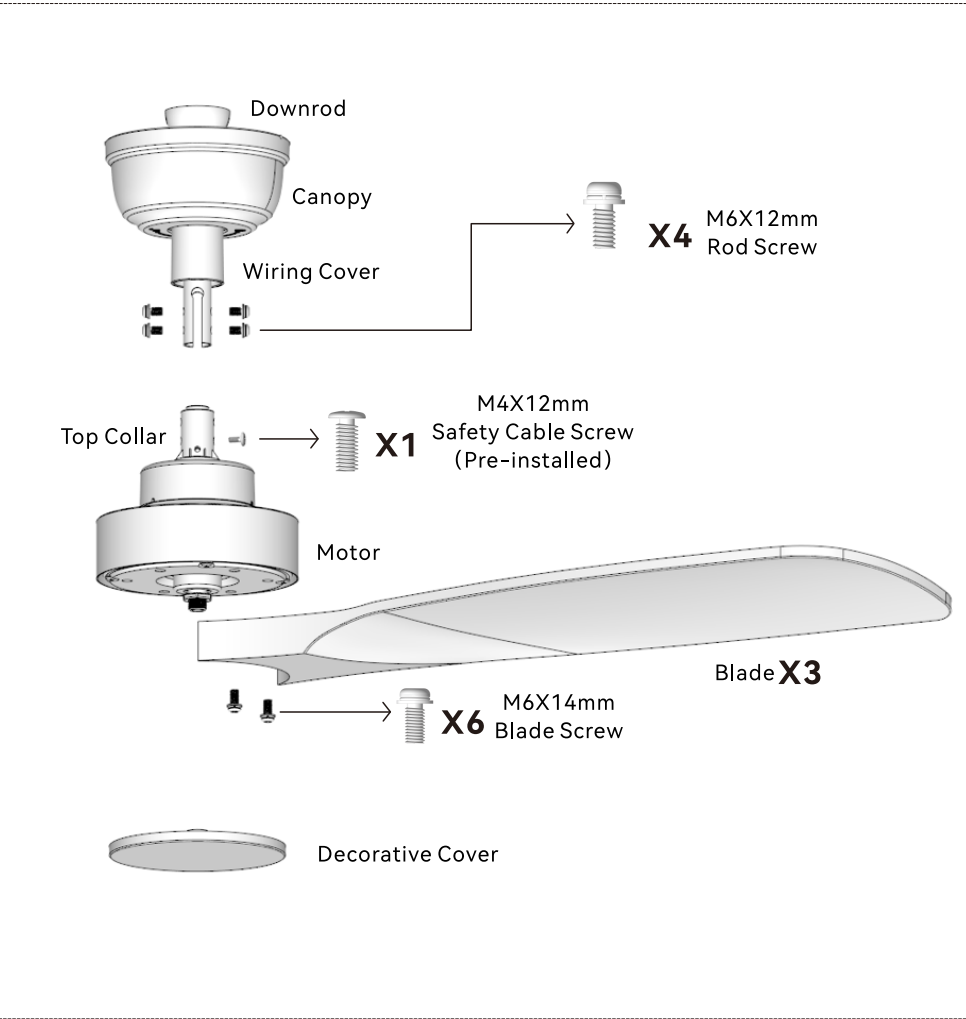
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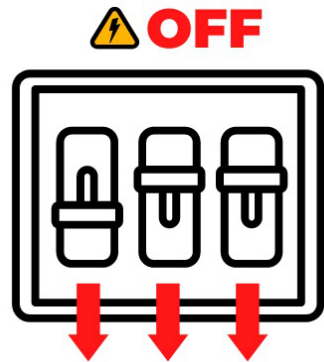
Decorative Cover / Power On

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Troubleshooting

Before installing, please check to make sure you have received all the necessary components for installation. Some extra hardware may also have been included.





WARNING: To avoid serious injury or death, turn off the power at the circuit breaker before installing the fan.

Tools you'll need



Phillips screwdriver



Step ladder

1. Install the Fan Blades

Locate 6 blade attachment screws in the hardware pack. Make sure each blade matches the corresponding place of the motor hub and tighten with the screws as shown in Fig. 1.1.

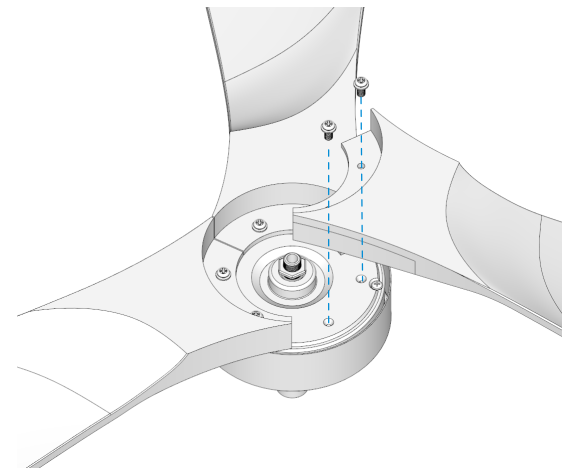


Fig. 1.1

 **X6** M6X14mm
Blade Screw

2. Attach the Downrod

2.1 Assemble the downrod as shown in Fig. 2.1. Insert the downrod through the canopy and wiring cover.

Note: If you choose to install a safety cable onto your ceiling fan, you will also need to run it through the downrod.

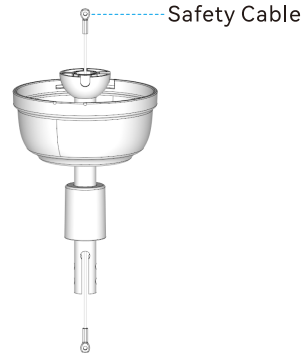


Fig. 2.1

2.2 Thread the motor wires through the downrod, pull out the slack from the motor wires and safety cable upward, and insert the downrod into the collar on top of the motor assembly. Align the holes at the bottom of the downrod with the holes in the collar on top of the motor housing.

Remove the pre-installed safety cable screw. Install the safety cable and re-insert the previously removed screw back through the hole, but do not tighten yet. Check the top collar to make sure the holes are aligned to install the four rod screws (included in the package), and securely tighten down all the screws to ensure a proper connection as shown in Fig. 2.2.

Slide the wiring cover down until it rests on top of the motor assembly as shown in Fig. 2.3.

Note: Before sliding the downrod over the collar on top of the motor assembly, make sure to remove the end of the safety cable from the downrod.

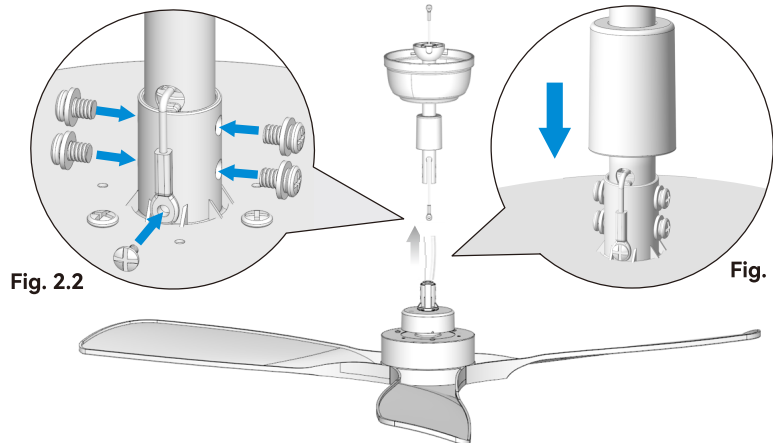


Fig. 2.2

Fig. 2.3

3. Install the Mounting Bracket

Install the mounting bracket to the ceiling box, as shown in Fig. 3.1 below. Rotate the mounting bracket in different directions so that the bracket mounting holes match the screw holes of the ceiling box.

Note: This mounting bracket is a standard cable box. If the mounting bracket is installed at the outlet box, it should be installed on the outlet box with two screws matching the outlet box itself, as shown in Fig. 3.1.

WARNING: DO NOT use plastic outlet box. Use only U.L. listed outlet boxes marked "Acceptable for Fan Support of 15.9 kg (35 lbs) or less".

This bracket can also be mounted to a wooden ceiling beam. In that case, use the four ST5x24mm wood screws to lock the corresponding holes on the left and right sides of the bracket as shown in Fig. 3.2.

Note: The wooden ceiling beam must meet the tensile test of 30kg for installation.

It is also possible to install the mounting bracket directly to a concrete ceiling and use four anchors (not included) to lock the left and right corresponding holes of the bracket to the ceiling.

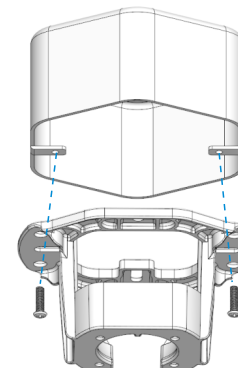


Fig. 3.1

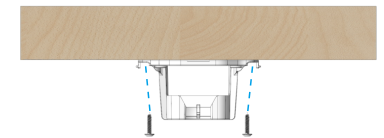


Fig. 3.2

If you have an angled or vaulted ceiling (see Fig. 3.3)

1. When installing the mounting bracket, the bracket groove should be facing upward, as shown in Fig. 5.4. Do not install the bracket with the groove facing downward, as shown in Fig. 3.5.

2. You will need a longer downrod.

3. The maximum angle is 27 degrees.

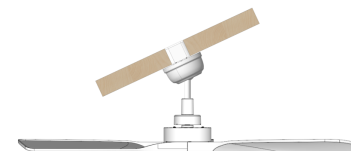


Fig. 3.3

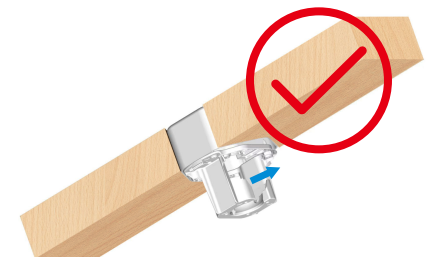


Fig. 3.4

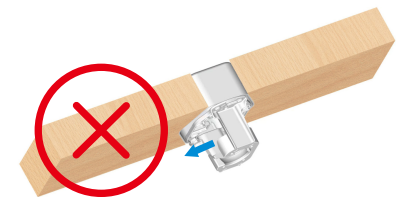


Fig. 3.5

4. Hang the Fan

WARNING: To reduce the risk of fire, electric shock, or other personal injury, mount the fan only to an outlet box or supporting system marked acceptable for fan support and use the mounting screws provided with the outlet box.

WARNING: Check to see that all connections are tight, including ground, and there are no visible bare wires at the wire nuts (except for the ground wire).


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

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

4.1 Install the ball end of the downrod into the opening of the mounting bracket. Rotate the downrod until the tab on the mounting bracket is securely seated in the slot in the downrod ball, as shown in the enlarged image in Fig. 4.1.

⚠ WARNING

The fan and/or downrod should not rotate in the mounting bracket when installed correctly. Failure to properly align the slot in the downrod ball with the tab on the mounting bracket may result in the fan falling, causing serious injury or death.



4.2 Attach the other end of the safety cable to a secure location. Fasten the safety cable to the ceiling using a screw and washer (not included), as depicted in Fig. 4.2.

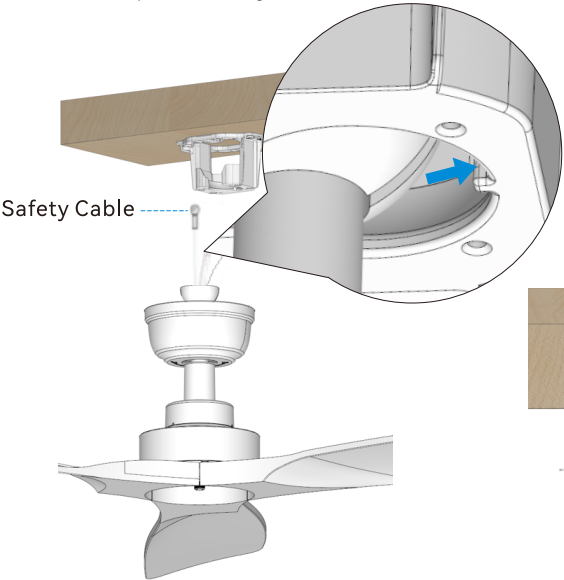


Fig. 4.1

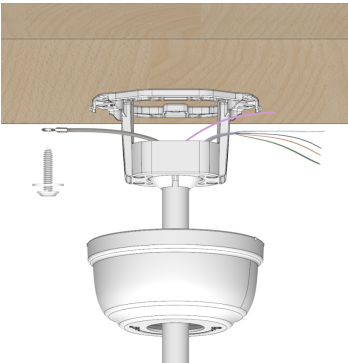
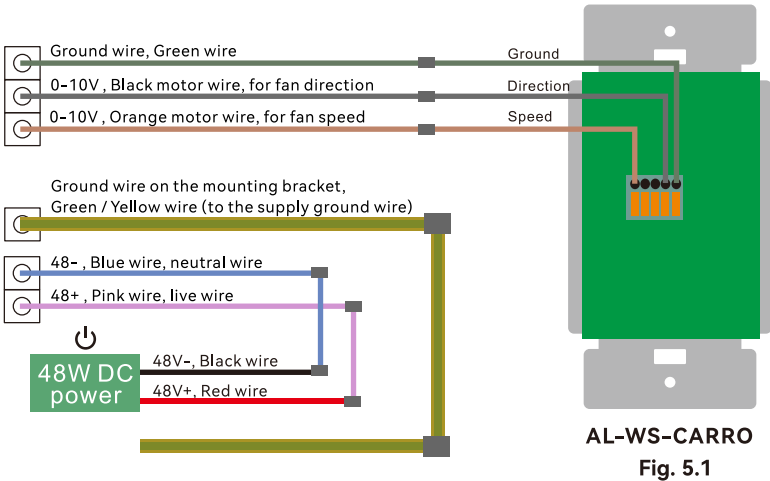


Fig. 4.2

5. Connect the Wiring



Consult Fig. 5.1 to identify the different colored motor wires running through the downrod. Connect the wires based on their color coordination. Pair the respective colors and ensure the connections are properly secured.

6. Install the Canopy

There are two types of canopies and two ways to install them. Please follow the instructions below before installation.

A: The screws of the mounting bracket are exposed.

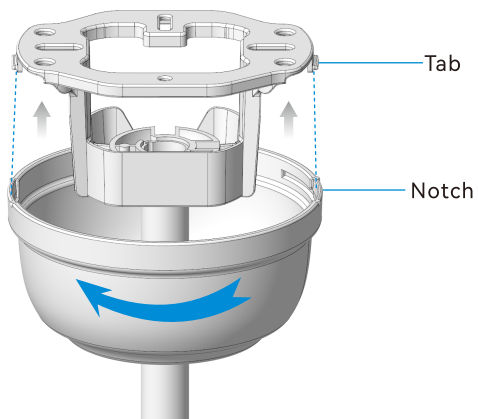
Make sure all wires are tucked into the canopy. Raise the canopy to the mounting bracket and align the holes in the canopy with the two mounting bracket screws. Then, turn the canopy in the direction of the arrow shown in Fig. A until the mounting bracket screws engage from the larger slots of the canopy to the smaller ones. Tighten the screws securely to fix the canopy onto the mounting bracket.



(A)

B: There are no screws on the mounting bracket.

Make sure all wires are tucked in the canopy. Raise the canopy to the mounting bracket and align the two notches inside the top of the canopy with the two tabs on the top of the mounting bracket. Attach the canopy by lifting and twisting it until it stops.



(B)

7. Install the Decorative Cover

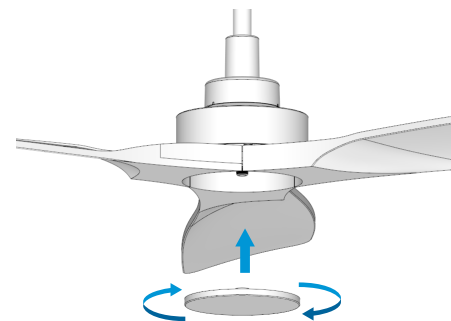


Fig. 7.1

Rotate the decorative cover until it is locked to the motor shaft tightly.

⚠ WARNING

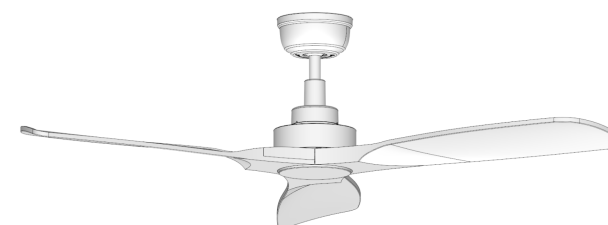
To prevent SERIOUS INJURY or DEATH, make sure that the decorative cover is properly secured.



8. Power On

At this time, the ceiling fan has been installed. Turn on the power supply from the circuit breaker of the main switch or the room where the ceiling fan is installed. Once the power is on, verify that all the functions of the fan are working correctly.

Note: Please be aware that this ceiling fan may produce noticeable operating sounds at specific wind speeds. This is a normal operating characteristic and does not indicate any issues with its functionality.



Try these troubleshooting steps before contacting Customer Service. For additional operation, maintenance, and troubleshooting information, please contact our customer service center.

SYMPTOM	POSSIBLE SOLUTION
Fan not spinning	① Make sure the fan is getting power. ② Check your circuit breaker or fuse panel and wall switch for functionality. ③ Check to make sure the fan wires are correctly connected to the house wires. ④ Use a multi-meter and test the wiring harness to see if there is any electrical output. ⑤ All the pin wiring on the circuit board must be inserted tight and in the correct position. ⑥ Make sure the fan blades spin freely. ⑦ If you're using a wall control, check the power to the breaker from your control and try working your ceiling fan manually. (Normal switch only for the fan power on/off)
Fan not working	① Make sure the whole fan is powered.
The fan is noisy and wobbling	① Check if the blade screws are NOT rubbing against any part of the motor housing. ② Check the pin wires are NOT connected against any moving parts. ③ Check the down fan cup is NOT hitting the motor. ④ Confirm the canopy is NOT touching the ceiling while the fan is in operation. ⑤ Check the down rod is NOT slanted. ⑥ Tighten any loose screws on the fan blades, motor coupling, down rod, brackets and mounting hardware. ⑦ Confirm the hanger ball is firmly seated in the mounting bracket. ⑧ The ceiling beam must meet the minimum tensile test strength of 30kg for installation. ⑨ Make sure the blades and brackets are NOT bent or deformed. ⑩ Verify the wire connections are not rattling against each other. ⑪ Verify the fan blades are not cracked. If the fan blades are cracked, replace the damaged blades with a new blade set from the same brand as your ceiling fan to ensure compatibility.
Fan turning on or off by itself	① Confirm the circuit breaker is not malfunctioning. ② Verify the wire connections are not frayed. ③ Cut the fan power for 10 minutes then power on again. ④ All the pin wiring on the circuit board must be inserted tight and in the correct position.