USE AND CARE GUIDE

421N. CRYSTAL CEILING FAN

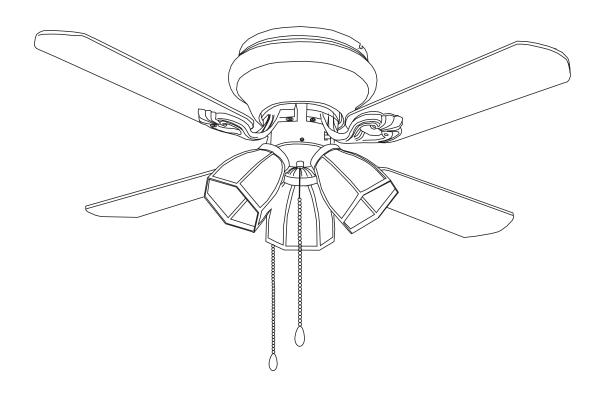


Table of Contents

Table of Contents	2
Safety Information	3
Warranty	4
Pre-installation	
Specifications	4
Tools Required	
Hardware Included	5
Package Contents	6
Installation	7
Assembly	8
Hanging the Fan	
Attaching the Fan Blades	11
Installing the Light Kit	12

Operation	13
Pull Chain Operating Instructions	13
Reverse Switch Operating Instructions	13
Care and Cleaning	14
Troubleshooting	14
Service Parts	16

Safety Information

- To reduce the risk of electric shock, ensure electricity has been turned off at the circuit breaker or fuse box before beginning.
- All wiring must be in accordance with the National Electrical Code "ANSI/NFPA 70-1999" and local electrical codes. Electrical installation should be performed by a qualified licensed electrician.
- The outlet box and support structure must be securely mounted and capable of reliably supporting a minimum of 35 lbs. Use only UL-listed outlet boxes marked "FOR FAN SUPPORT."
- 4. The fan must be mounted with a minimum of 7 ft. clearance from the trailing edge of the blades to the floor.
- 5. Avoid placing objects in the path of the blades.
- 6. To avoid personal injury or damage to the fan and other items, be cautious when working around or cleaning the fan.
- 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.
- 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 one side of the outlet box and the ungrounded conductor on the other side of the outlet box.
- All setscrews must be checked and retightened where necessary before installation.



WARNING: To reduce the risk of electrical shock or fire, do not use this fan with any solid-state fan speed control device. It will permanently damage the electronic circuitry.



WARNING: To reduce the risk of personal injury, do not bend the blade arms (also referred to as flanges), when installing the brackets, balancing the blades or cleaning the fan



WARNING: Do not insert foreign objects between rotating fan blades.



WARNING: To reduce the risk of fire, electric shock or personal injury, mount the fan to the outlet box marked acceptable for fan support with the screws provided with the outlet box.



CAUTION: To reduce the risk of personal injury, use only the screws provided with the outlet box.

Warranty

We warrant the fan motor to be free from defects in workmanship and material present at time of shipment from the factory for a period of lifetime after the date of purchase by the original purchaser. We also warrant that all other fan parts, excluding any glass or acrylic blades, to be free from defects in workmanship and material at the time of shipment from the factory for a period of one year after the date of purchase by the original purchaser. We agree to correct such defects without charge or at our option replace with a comparable or superior model if the product is returned. To obtain warranty service, you must present a copy of the receipt as proof of purchase, All costs of removing and reinstalling the product are your responsibility. Damage to any part such as by accident, misuse, improper installation or by affixing any accessories, is not covered by this warranty. Because of varying climatic conditions this warranty does not cover any changes in brass finish, including rusting, pitting, corroding, tarnishing or peeling. Brass finishes of this type give their longest useful life when protected from varying weather conditions. A certain amount of "wobble" is normal and should not be considered a defect. Servicing performed by unauthorized persons shall render the warranty invalid. There is no other express warranty. We hereby disclaim any and all warranties, including but not limited to those of merchantability and fitness for a particular purpose to the extent permitted by law. The duration of any implied warranty which cannot be disclaimed is limited to the time period as specified in the express warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you. The retailer shall not be liable for incidental, consequential, or special damages arising out of or in connection with product use or performance except as may otherwise be accorded by law. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion or limitation may not apply to you. This warranty gives specific legal rights, and you may also have other rights which yary from state to state. This warranty supersedes all prior warranties. Shipping costs for any return of product as part of a claim on the warranty must be paid by the customer.

Pre-Installation

SPECIFICATIONS

Fan size	Speed	Volts	Amps	Watts	RPM	CFM	N.W.	G.W.	C.F.
	High		0.50	60	158	4670	7.00	0.401	
42 in.	Medium	120	0.40	25	110	3281	7.92kg (17.45lb)	9.42kg (20.76lb)	2.72cu.ft.
	Low		0.26	10	60	1847	(=,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(=====	



NOTE: These are approximate measures. They do not include amps and wattage used by the light kit.



TOOLS REQUIRED

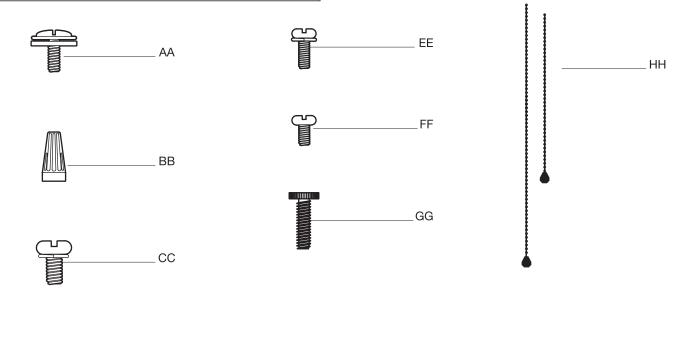


Pre-Installation (continued)

HARDWARE INCLUDED



NOTE: Hardware shown to actual size unless noted otherwise in the table below.

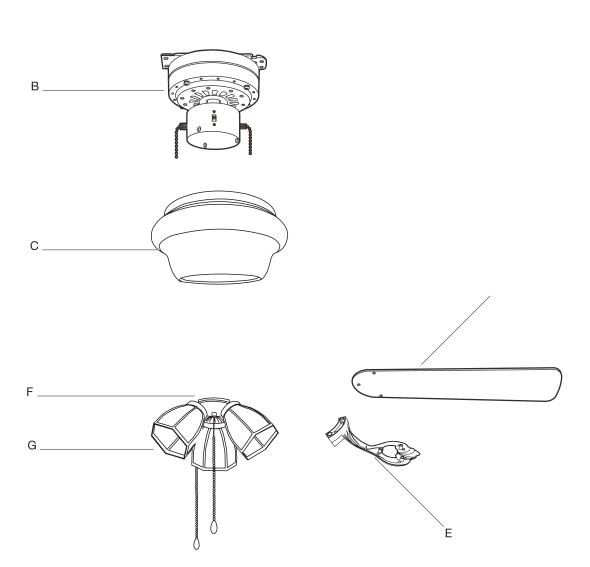


Part	Description	Quantity
AA	Blade attachment screw and fiber washer	16
BB	Plastic wire nut (not to scale)	3
CC	Mounting plate screw and lock washer (not to scale)	5
DD	Motor housing screw and lock washer (preassembled)	4
EE	Blade arm screw and lock washer	11
FF	Light kit mounting screw (preassembled)	3
GG	Light holder thumbscrew (preassembled)	4
НН	Pull chain and fob (not to scale)	2

Pre-Installation (continued)

PACKAGE CONTENTS





Part	Description	Quantity
Α	Mounting plate	1
В	Fan motor assembly	1
С	Motor housing	1
D	Blade	5

Part	Description	Quantity
Е	Blade arm	5
F	Light kit	1
G	Crystal shade	1

Installation

MOUNTING OPTIONS

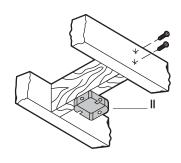


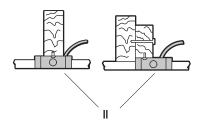
WARNING: To reduce the risk of fire, electric shock, or personal injury, mount the fan to an outlet box marked acceptable for fan support using the screws provided with the outlet box. An outlet box commonly used for the support of lighting fixtures may not be acceptable for fan support and may need to be replaced. If in doubt, consult a qualified electrician.

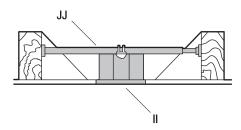
If your ceiling fan does not have an existing UL-listed mounting box, then install one using the following instructions:

- Disconnect the power by removing the fuses or turning off the circuit breakers.
- Secure the outlet box (II) (not included) directly to the building structure. Use appropriate fasteners and materials (not included). The outlet box and its bracing must be able to fully support the weight of the moving fan (at least 35 lbs.). Do not use a plastic outlet box.

The illustrations below show two different ways to mount the outlet box (II) (not included).







To hang your fan where there is an existing fixture but no ceiling joist, you may need an installation hanger bar (JJ) (not included) as shown above.

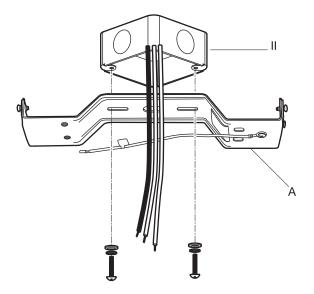
Assembly — Hanging the Fan

Attaching the mounting plate to the electrical box



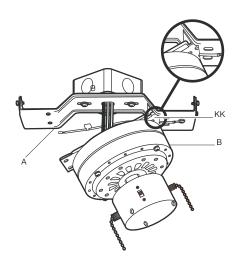
WARNING: To reduce the risk of fire, electric shock or other personal injury, mount the fan only to an outlet box or supporting system marked acceptable for fan support and use the mounting screws provided with the outlet box.

Attach the mounting plate (A) to the outlet box (II) (not included) with two screws and washers provided with the outlet box (II). Ensure the mounting plate (A) is tight and secured.



2 Hanging the fan from the mounting bracket

 Carefully lift the fan motor assembly (B) and insert the T section of the motor mounting plate (KK) into the slot in the mounting plate (A).



Assembly — Hanging the Fan (continued)

k White conductor

3 Making the electrical connections



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



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

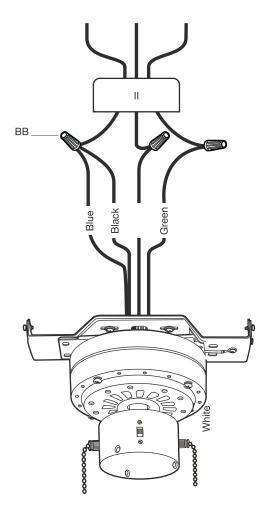


WARNING: To reduce the risk of fire or electric shock, do not use this fan with any solid-state speed control device.

If you feel you do not have enough electrical wiring knowledge or experience, have your fan installed by a licensed electrician.

Follow the steps below to connect the fan to your household wiring. Use the plastic wire nuts (BB) with your fan. Secure the wire nuts (BB) with electrical tape. Make sure there are no loose strands or connections.

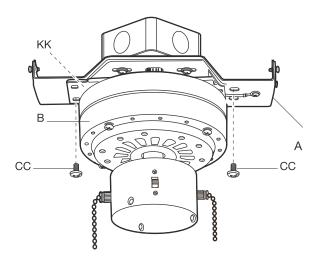
- Connect the ground conductor of the 120V supply (this may be a bare wire or a wire with green colored insulation) to the green ground lead(s) of the fan.
- Connect the fan motor white wire to the supply white (neutral) wire using a plastic wire nut (BB).
- Connect the fan motor black wire and the blue wire to the supply black (hot) wire using a plastic wire nut (BB).
- Turn the wire nut connections upward, spreading them apart so the green (ground) wire and the white wire will be on one side of the outlet box (II), the black and blue wires will be on the other side, and push carefully up into the outlet box (II).



Assembly — Hanging the Fan (continued)

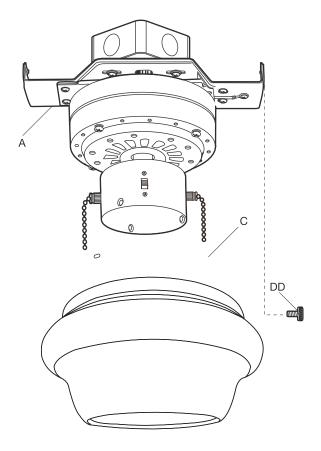
4 Finishing the fan installation

 Swing the motor assembly (B) up into position under the motor mounting plate (KK). Secure the motor mounting plate (KK) to the mounting plate (A) with the screws and lock washer (CC) provided.



5 Attaching the motor housing to the mounting plate

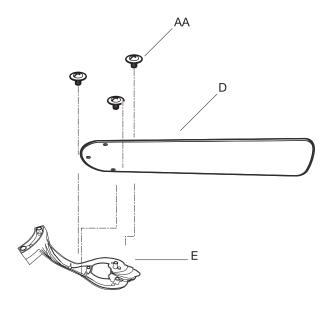
 Carefully lift the motor housing (C) onto the mounting plate (A), properly align the holes and tighten the motor housing (C) with the four screws and lock washer (DD) supplied.



Assembly — Attaching the Fan Blades

6 Attaching the blades to the blade arms

- Attach the blades (D) to the blade arms (E) using the three blade attachment screws and fiber washers (AA). Start a screw and fiber washer (AA) into the blade arm (E), but do not tighten.
- Repeat for the two remaining blade attachment screws and fiber washers (AA).
- □ Tighten each screw securely starting with the center screw. Make sure the blade (D) is straight.
- □ Repeat these steps for the remaining blades (D).

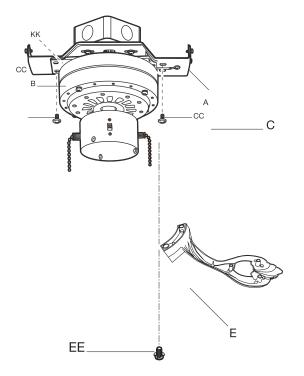


7 Fastening the blade assemblies to the motor



WARNING: To reduce the risk of personal injury, do not bend the blade arms (E) while installing, balancing the blades (D), or cleaning the fan. Do not insert foreign objects between rotating fan blades (D).

- Align motor holes to blade arms (E) and secure with screws and lock washer (EE) provided; tighten screws securely.
- Repeat this procedure for the remaining blade arms (E).



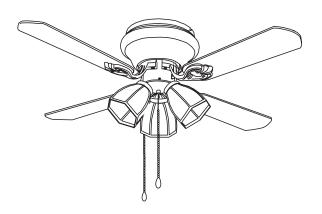
Assembly - Installing the Light Kit

Attaching the light kit to the switch housing



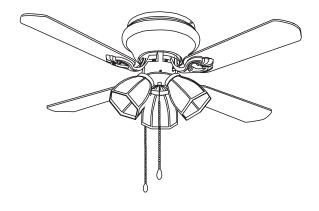
CAUTION: Before starting installation, disconnect the power by turning off the circuit breaker or removing the fuse at the fuse box. Turning power off using the fan switch is not sufficient to prevent electric shock.

- Remove the three light kit mounting screws (FF) from the light kit (F) and keep these screws.
- While holding the light kit (F) under your fan motor assembly (B), locate two single white and blue wires in the switch housing labeled "FOR LIGHT". Make the polarized plug connections:
 - White to white
 - Blue to black
- Carefully push all wires back into the switch housing. Install the light kit (F) onto the switch housing with the three light kit mounting screws (FF) provided. Be sure to tighten all screws.



9 Installing the light bulb and glass shade

- Install 1 x 60W (or CFL equivalent) Medium base bulb (not included).
- Mount the Crystal shade (G) to the light kit (F) by unscrewing partially the thumbscrews (GG) on the light kit (F). Then insert the Crystal (G) and gently tighten the thumbscrews (GG) by hand evenly to the Crystal (G). Do not overtighten.



Operation

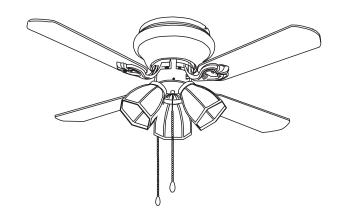
PULL CHAIN OPERATING INSTRUCTIONS

Attach the two pull chains and fobs (HH) to the pull chains located on the switch housing (LL). Turn on the power and check the operation of the fan.

The pull chain controls the fan speed as follows: 1 pull - High, 2 pulls - Medium, 3 pulls - Low and 4 pulls - Off.

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

To turn the light kit on or off, pull the chain (HH) that is attached to the switch housing (LL).



REVERSE SWITCH OPERATING INSTRUCTIONS

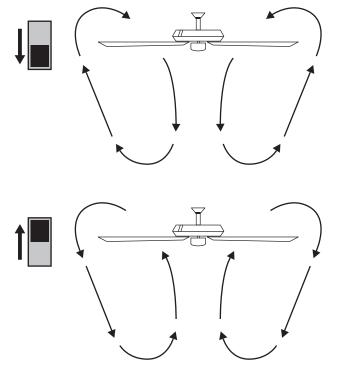
The reverse switch is located on the surface of the switch housing. This switch controls directions: forward (switch down) or reverse (switch up).



NOTE: Wait for the fan to stop before reversing the direction of the blade rotation.

Warm weather - (Counterclockwise Direction) A downward air flow creates a cooling effect. This allows you to set your air conditioner on a warmer setting without affecting your comfort.

Cool weather - (Clockwise Direction) An upward air flow moves warm air off the ceiling. This allows you to set your heating unit on a cooler setting without affecting your comfort.



Care and Cleaning

Do

- 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.
- 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.
- (Optional) Apply a light coat of furniture polish to the metal blades.
- (Optional) Cover small scratches with a light application of shoe polish.

Do not

- Use water when cleaning. Water could damage the motor, or the wood, or possibly cause an electrical shock.
- Apply oil to your fan or motor. The motor has permanently-lubricated sealed ball bearings.

Troubleshooting



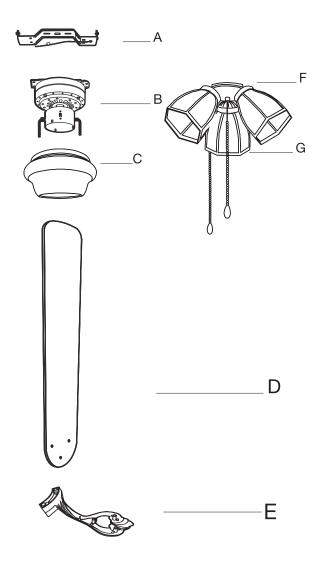
WARNING: Make sure the power is off at the electrical panel box before you attempt any repairs. Refer to step 3 "Making the electrical connections" on page 9.

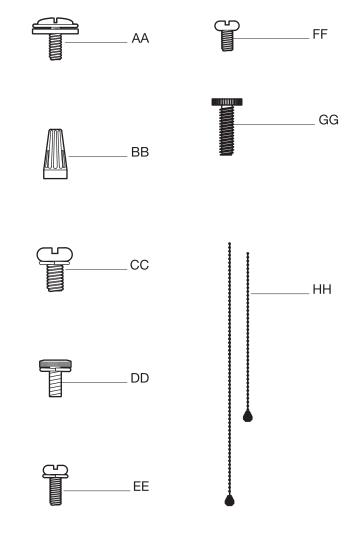
Problem	Solution				
	□ Check the main and branch circuit fuses or breakers.				
The fan will not start.	□ Check the line wire connections to the fan and switch wire connections in the switch housing.				
	□ Make sure all motor housing screws are snug.				
	□ Make sure the screws that attach the fan blade arm to the motor hub are tight.				
	Make sure the wire nut connections are not rattling against each other or the interior wall of the switch housing.				
The fan sounds noisy.	□ Allow a 24-hour "breaking-in" period. Most noises associated with a new fan disappear during this time.				
	If using the ceiling light kit, make sure the screws securing crystal shade are tight. Check that the light bulbs are also secure.				
	☐ Make sure there is a short distance from the ceiling to the canopy. It should not touch the ceiling.				
	 Make sure your ceiling box is secure and that rubber isolator pads are used between the mounting bracket and outlet box. 				

Troubleshooting (continued)

Problem	Solution
The fan wobbles.	Verify that all blades and blade bracket screws are secure (most fan wobble problems are caused by loose parts). Once the fan is properly installed, run the ceiling fan for 10 minutes to let the fan self-adjust. If wobble occurs after running the fan for 10 minutes, verify blade level using the following process: - Select a point on the ceiling above the tip of one of the blades, then select any fan blade and measure from the center of the selected blade to the point on the ceiling. Rotate the fan until the next blade is positioned and repeat the measurement using the same point from the ceiling for every blade. Measurement deviations should be within 1/8 in. - If all deviations are less than 1/8 in. and the fan continues to wobble, please call Customer Service to order a complimentary Blade Balancing Kit.
	complimentary replacements of your brackets.

Service Parts





Part	Description
Α	Mounting plate
В	Fan motor assembly
С	Motor housing
D	Blade
Е	Blade arm
F	Light kit
G	Crystal Shade

Part	Description
AA	Blade attachment screw and fiber washer
BB	Plastic wire nut
CC	Mounting plate screw and lock washer
DD	Motor housing screw and lock washer (preassembled)
EE	Blade arm screw and lock washer
FF	Light kit mounting screw (preassembled)
GG	Light holder thumbscrew (preassembled)
НН	Pull chain and fob