

# Installation and Operation Manual For Hunter Ceiling Fans







# **CONGRATULATIONS!**

Your new Hunter ceiling fan is an addition to your home or office that will provide comfort and performance for many years. This manual gives you complete instructions for installing and operating your fan.

We are proud of our work. We appreciate the opportunity to supply you with the best ceiling fan available anywhere in the world.

Before installing your fan, record the following information for your records and warranty assistance. Please refer to the carton and the Hunter nameplate (located on top outside fan motor housing) for the proper information.

Model Name	
Catalog No	
Serial No	
Date Purchased	
Where Purchased	

Attach Your Receipt or a Copy of Your Receipt Here



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# IMPORTANT INFORMATION

## **A** CAUTIONS

- Read entire booklet carefully before beginning installation and save these instructions.
- To reduce the risk of personal injury, attach the fan directly to the support structure of the building according to these instructions, and use only the hardware supplied.

#### **A** WARNINGS

 To avoid possible electrical shock, before installing your fan, disconnect the power by turning off the circuit breakers to the outlet box and associated wall switch location. If you can-

- not lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- All wiring must be in accordance with national and local electrical codes. If you are unfamiliar with wiring, you should use a qualified electrician.
- To reduce the risk of personal injury, do not bend the blade attachment system when installing, balancing, or cleaning the fan. Never insert foreign objects between rotating fan blades.
- The fan blades cannot be placed lower than 2,3m from the floor.

 The installation site must have an all-pole switch with a minimum separation gap of 3 mm.

#### DO YOU NEED HELP?

To install a ceiling fan, be sure you can do the following:

- Locate ceiling joist or other suitable support in ceiling.
- Drill holes for and install wood screws.
- Identify and connect electrical wires.
- Lift 16 kg.

If you need help installing the fan, your Hunter fan dealer can direct you to a licensed installer or electrician.



# STEP 1 - GETTING READY

#### **GATHERING THE TOOLS**

You need the following tools to install the fan:

- Electric drill with 9/64" bit and masonry bit
- · Standard screwdriver
- Phillips-head screwdriver
- · Wrench or pliers
- Two M5 x 30 mm expansion anchors (for concrete ceilings only)

#### **OPTIONAL ACCESSORIES**

Consider using Hunter's optional accessories, such as a wall-mounted or remote speed control. Follow the instructions for installation and use included with each Hunter accessory.

For quiet and optimum performance of your Hunter fan, use only Hunter speed controls.

#### PREPARING THE FAN SITE

Reliable operation, efficiency, and maximum energy savings depend upon proper placement and attachment of the fan. For this reason, we have included a separate booklet — "Guide to Choosing and Preparing a Ceiling Fan Site" — to help you select the best location for your fan. The booklet also provides information to ensure your fan support and electric outlet box meet UL-approved safety codes for ceiling fans.

The instructions in this installation manual assume that you have used the "Guide to Choosing and Preparing a Ceiling Fan Site" to pick the fan location and make certain the proper fan support and outlet box are installed.

#### CHECKING YOUR FAN PARTS

Carefully unpack your fan parts to avoid damage. Check for shipping damage. If one of the fan blades is damaged, return all blades for replacement.

Hint: If installing more than one fan, keep the fan blades in sets, as shipped.



**Flush Mounting** (Figure 1a) fits close to the ceiling, for low ceilings less than 2,6 m high.

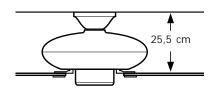


Figure 1a - Flush Mounting

**Standard Mounting** (Figure 1b) hangs from the ceiling by a connector pipe (included), for ceilings 2,6 m or higher. For ceilings higher than 2,6 m, you can also purchase Hunter extension rods. All Hunter fans use sturdy 2 cm inner diameter pipe to assure stability and wobble-free performance.

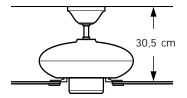


Figure 1b - Standard Mounting

**Angle Mounting** (Figure 1c) hangs from a vaulted or angled ceiling.

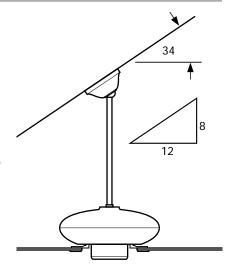


Figure 1c - Angle Mounting



# STEP 2 - INSTALLING THE CEILING PLATE

#### **A** WARNING

- To avoid possible electrical shock, before wiring fan, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- All wiring must be in accordance with national and local electrical codes. If you are unfamiliar with wiring, you should use a qualified electrician.

- 1. Drill two pilot holes into the wood support structure through the outermost holes on the outlet box. The pilot holes should be 9/64" in diameter and 4 1/4" (110mm) apart. See Figure 2a.
- Insert the 3 rubber isolators into the 3 round holes in the ceiling plate as shown in Figure 2b. Thread the lead wires from the outlet box through the opening in the middle of the ceiling plate.
- 3. Align two opposing oval slots in the ceiling plate with the pilot holes in the wood support structure. See Figure 2b.

#### **ANGLE MOUNTING**

For Angle Mounting be sure to orient the Ceiling Plate so that the arrows marked on the plate are pointing towards the ceiling peak. See Figure 2b.

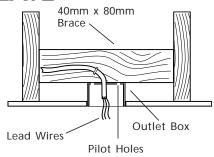


Figure 2a - Pilot Holes and Outlet Box location

4. Place a flat washer on each of the two 3" wood screws and pass the screws through two opposing oval slots in the ceiling plate, as shown in Figure 2c. You may substitute the 3" wood screws with the provided 1 1/2" wood screws for shorter depth installations. Be sure that enough of the screws enters the mounting surface to support the assembled fan.



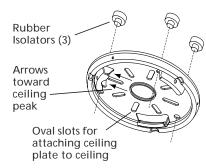


Figure 2b - Correct Position of Ceiling Plate for Angle Mounting and location of rubber isolators.

5. Tighten the screws into the 9/64" pilot holes.

**Note:** The rubber isolators in the ceiling plate should be compressed against the ceiling. Do not overtighten.

#### FOR CONCRETE CEILINGS

1. Locate the electrical supply mains in the ceiling.

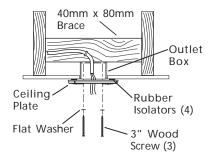
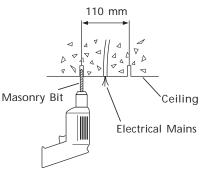


Figure 2c - Attaching Ceiling Plate to 40 mm x 80 mm Brace

**Note:** You must purchase the expansion anchors separately. Drill the holes in the ceiling to the depth and diameter recommended by the manufacturer of the expansion anchors.

2. Drill two holes 110 mm (4,32") apart on either side of the mains as shown in Figure 2d. The holes are for M5 x 30 mm expansion anchors.

 Drive the expansion anchors into the holes until the ends of the anchors are flush with the ceiling. See Figure 2e.



## Figure 2d - Drilling Anchor Holes

4. Hold the Ceiling Plate up to the ceiling and align two opposing oval slots in the Ceiling Plate with the expansion anchors. See Figure 2b. Be sure that the electrical mains protrude through the center opening in the Ceiling Plate by at least 150 mm.

continued



5. Drive the M5 x 30 mm screws into the anchors so that the Ceiling Plate is tight against the ceiling. See Figure 2f.

**Note:** The rubber isolators in the Ceiling Plate should be compressed against the ceiling. Do not overtighten.

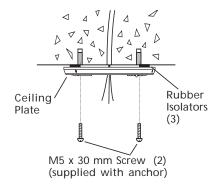


Figure 2f - Attaching Ceiling Plate to Ceiling

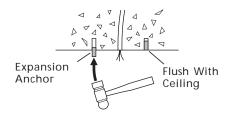


Figure 2e - Driving Expansion Anchors into Holes



# STEP 3 - ASSEMBLING THE FAN

## **⚠** WARNING

- To reduce the risk of fire, electrical shock, or motor damage, do not lift or carry the fan by the lead wires.
- To prevent damage to the wires on the bottom of the fan assembly, do not sit fan on hard surface. Use foam inside box as support.
- The pipe adapter has a special coating on the threads.
   Do not remove this coating; the coating prevents the pipe from unscrewing.
   Once assembled, do not remove the pipe.

#### LOW PROFILE MOUNTING

Refer to Figures 3a, 3b and 3c for the following steps.

- 1. Remove the Pipe Setscrew. **Note:** Save the Pipe Setscrew for possible future use in Standard or Angle Mounting. With the fan assembly resting level in the packing foam, first feed the wiring harness thorough the center of the upper canopy, followed by the lower canopy, then through the hanger bracket, and lastly through the low profile adapter. See figure 3a.
- 2. Fit the low profile adapter down inside the hanger bracket, aligning the flat section on the low profile adapter with the flat section in the hanger bracket. To clear the two screws that project into the hanger bracket, you may need to tip the flat section of the low profile adapter down slightly, while inserting it into the hanger bracket. See figure 3b.

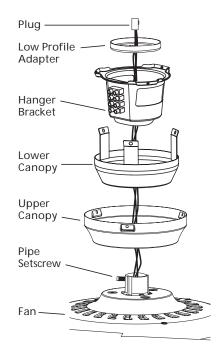


Figure 3a - Installing Low Profile Adapter

continued



3. Align the three slots in the low profile adapter with the three screw holes in the fan assembly as shown in Figure 3c. Thread one of the #8-32 x 3/4" SEMS screws into the threaded hole in the fan

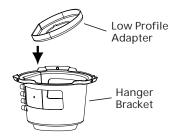


Figure 3b - inserting the low profile adapter

assembly and partially tighten it. Repeat for the other two screws. Once all three #8-32 x 3/4" SEMS screws are partially threaded into the fan assembly, center the lower canopy with the hanger bracket, making sure that the lower canopy is not captured between the fan

assembly and the hanger bracket. Tighten all three screws securely. After the three screws are tightened, the lower canopy should be free to rotate.

4. Proceed to **STEP 4-WIRING THE FAN**.

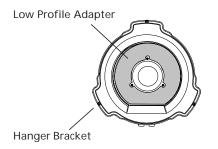


Figure 3c - Attaching the low profile adapter.

# STANDARD MOUNTING AND ANGLE MOUNTING

Included with the fan are:

- one 89 mm (3 1/2") long pipe,
- · one wedge

- one positioning screw located on the Trilobular™ ball assembly, and
- · one locking pin.
- 1. With the fan assembly resting in the packing foam, feed the wiring harness from the fan through the pipe.
- 2. Screw pipe into fan assembly until tight.

**IMPORTANT!** Fully tighten pipe setscrew as indicated in Figure 3d.

- 3. Thread the wiring harness first through the upper canopy, the lower canopy, and then the hanger bracket, resting them on the motor housing.
- Thread the wiring harness through the Trilobular™ ball and slide the ball onto the pipe, resting it on the fan assembly.
- Thread the wiring harness through the wedge and slide the wedge onto the top part of the pipe. Align the openings in the wedge

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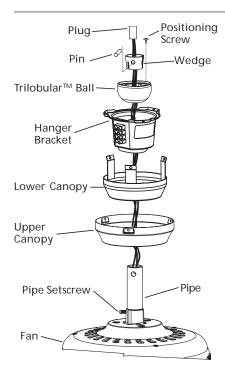


Figure 3d - Inserting Pipe through Canopy and Trilobular  $^{\text{TM}}$  Ball

with the matching holes on the pipe as shown in Figure 3e. Insert the pin into the two holes in the pipe so that the pin is centered evenly in the hole, see Figure 3e.

- 6. Align the cutouts in the Trilobular™ ball with the pin.
- 7. Slide the Trilobular™ ball up the pipe until it hits the pin.
- 8. Insert and tighten the positioning screw into the Trilobular™ ball. See Figure 3f.

# Pin Wedge Pin Wedge Trilobular™ Ball 3 1/2" Pipe

Figure 3e - Pipe & Trilobular™ Ball assembly components

# **A** WARNING

 Failure to complete the steps above properly could result in the fan falling.

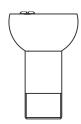


Figure 3f - Pipe, Wedge, Pin & Trilobular™ Ball assembly.



# STEP 4 - WIRING THE FAN

#### **A** WARNING

- To avoid possible electrical shock, before wiring fan, disconnect power by turning off the circuit breakers both to the outlet box and to its associated wall switch location. If you cannot lock the circuit breakers in the off position, securely fasten a prominent warning device, such as a tag, to the service panel.
- All wiring must be in accordance with national and local electrical codes. If you are unfamiliar with wiring, you should use a qualified electrician.
- Failure to complete the sub steps 1-3 below could result in the fan falling.

#### **A** WARNING

To reduce the risk of fire, electrical shock, or motor damage, do not lift or carry the fan by the lead wires.

- 1. Disconnect the power by turning off the circuit breakers to the outlet box and associated wall switch location.
- 2. Carefully lift the fan assembly and position the hanger bracket with the ceiling plate as shown in Figure 4a.
- 3. Rotate the hanger bracket until the three tabs on the hanger bracket are fully engaged in the three slots in the ceiling plate. See Figure 4b. Being careful to not allow the hanger bracket to rotate, temporarly install one of

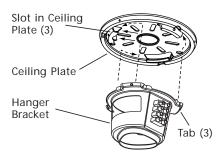


Figure 4a - Aligning the Hanger Bracket with the Ceiling Plate

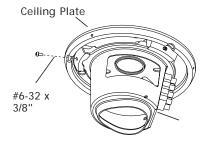


Figure 4b - Temporary installation of one #6-32 x 3/8" screw.



the three #6-32 x 3/8" screws through the hole in the ceiling plate and into the threaded hole in the hanger bracket to prevent the hanger bracket from rotating. See figure 4b.

# CONNECTING FAN TO ELECTRICAL SOURCE

Use Figures 4c, 4d and 4e for reference in making the following electrical connections.

- 1. Connect the supply mains to the terminal block mounted on the hanger bracket.
- 2. Connect the safety earth (green/yellow) wire to the terminal marked (1).
- 3. Connect the blue neutral wire to the terminal marked "N."
- 4. Connect the brown line wire to the terminal marked "L."

**Note:** An additional "L" terminal is provided for separate control of the light kit, if a separate supply line is provided for that purpose.

Connect the motor leads to the harness assembly attached to the hanger bracket and terminal block. See Figure 4c, 4d and 4e.

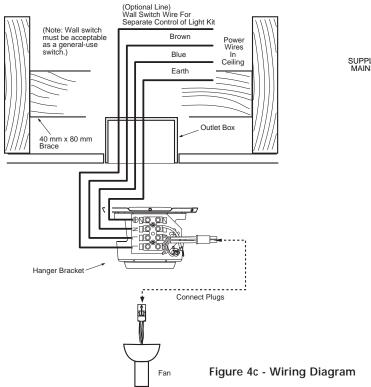
**Note:** Unless there is a separate line for the light kit, connect the black/white wire and the brown wire from the motor housing to the same "L" terminal.

# A CAUTION

Be sure no bare wire or wire strands are visible after making connections.

continued





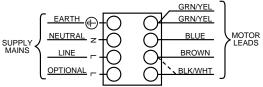


Figure 4d - Terminal Block Connections

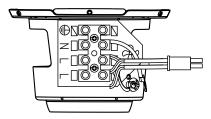


Figure 4e - Hanger Bracket & Terminal Connections



# STEP 5 - INSTALLING THE CANOPY

# **A** WARNING

- When removing the #6-32 x 3/8" screw that was temporarily installed in STEP 4 -WIRING THE FAN, do not allow the hanger bracket to rotate in the ceiling plate as this could cause the fan to fall.
- Failure to complete substeps 1 through 3 could cause fan to fall.
- Being careful to not allow the hanger bracket to rotate in the ceiling plate, remove the single #6-32 x 3/8" screw that was installed in STEP 4 - WIRING THE FAN, sub step 3.
- Raise the lower canopy up over the hanger bracket and align the three holes in the lower canopy with the three holes in the ceiling plate and the three threaded screw holes on the hanger bracket as shown in Figure 5a. You may need to slightly spread the tabs apart on the lower canopy to align them with the holes on the ceiling plate and hanger bracket.
- 3. Install and securely tighten the three #6-32 x 3/8" screws.
- 4. Raise the upper canopy and align the three screw holes in the upper canopy with the three threaded holes in the ceiling plate. Install and tighten the three #6-32 x 1/4" screws as shown in Figure 5b.

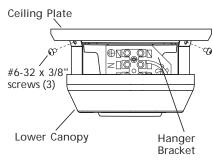


Figure 5a - Attaching Lower Canopy and Hanger Bracket to Ceiling Plate

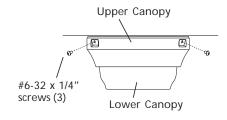


Figure 5b - Attaching Upper Canopy



# **STEP 6 - ASSEMBLING FAN BLADES**

Hunter fans use several styles of fan blade irons (brackets that hold the blade to the fan).

- Your fan may include blade grommets. If your fan has grommets, insert them by hand into the holes as shown in Figure 6a.
- 2. Attach each blade to blade iron using three blade assembly screws as shown in Figure 6b. Some fans feature a decorative medallion as

iron and medallion as shown in Figure 6c.

Figure 6b - Attaching Fan Blade to Blade Iron

well as a blade iron. Insert the assembly screws into the blade iron, through the blade and into the medallion, with the blade sandwiched between the blade iron and medallion as shown in Figure 6c.

- If you used grommets, the blades may appear slightly loose after screws are tightened. This is normal.
- 3. Remove the blade mounting screws and rubber shipping bumpers from the motor.

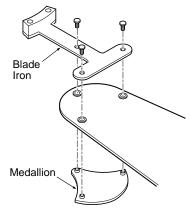


Figure 6c - Attaching Fan Blade to Blade Iron using Decorative Medallion

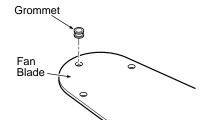


Figure 6a - Inserting Grommet into Fan Blade

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4. For each blade assembly, insert one blade mounting screw through the blade iron as shown in Figure 6d, and attach lightly to the fan. Insert the second blade mounting screw, then securely tighten both mounting screws.

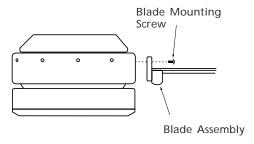


Figure 6d - Attaching Blade Assembly to Hub of Fan Assembly



# STEP 7 - INSTALLING THE LIGHT BULBS

Your fan may include a light fixture.

If you are not installing a light fixture, turn to OPERATING YOUR HUNTER FAN for additional instructions.

# **A** WARNING

- To reduce the risk of burns or other personal injury, do not attempt to rotate the spotlights until after the spotlights have cooled down.
- To reduce the risk of burns and eye damage or electrical shock, disconnect power and allow bulb to cool at least 5 minutes before replacing. Do not touch hot bulb. Do not look directly at lighted lamp.

#### For Spotlights:

- 1. Loosen the locking screws as shown in Figure 7.
- 2. Rotate the spotlights to the desired position and tighten the locking screws.
- 3. Install one 230V 60W halogen e27 base light bulb into each of the spotlights.

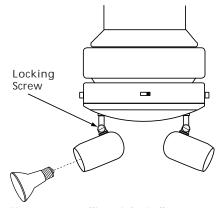


Figure 7 - Installing Light Bulbs

# INSTALLING ACCESSORY LIGHT KITS

To install the light kit, follow the instructions included with the kit for wiring, mounting, and assembly.



# **OPERATING YOUR HUNTER FAN**

Control switches are identified by the following symbols as shown in Figure 8a.

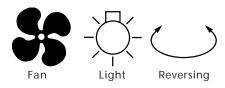


Figure 8a - Control Switch Symbols

- 1. Turn electrical service "on" at main panel.
- 2. The Fan Pull Cord controls power to the fan. It has four settings in sequence: High, Medium, Low and Off.
  - Pull the cord slowly to change settings.
  - Release slowly to prevent the cord from recoiling into the

- blades, possibly resulting in damage to blades or pull cord.
- 3. Ceiling fans work best by blowing air downward (counterclockwise blade rotation) in warm weather to cool the room with a direct breeze. In winter, having the fan draw air upward (clockwise blade rotation) will distribute the warmer air trapped at the ceiling around the room without causing a draft. Refer to Figure 8b.

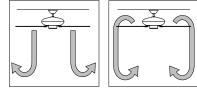


Figure 8b - Air Flow Patterns

To change the direction of air flow, turn the fan off and let it come to a complete stop. Push the reversing switch on the fan as shown in Figure 8c. Restart fan.

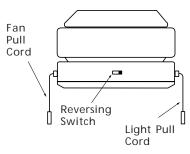


Figure 8c - Fan Cord, Light Cord and Reversing Switch

4. If your fan wobbles when operating, use the enclosed balancing kit and the accompanying instructions to balance the fan.



# CLEANING AND MAINTENANCE

Caring for finishes: For cleaning, a soft brush or lint-free cloth should be used to prevent scratching the finish. A vacuum cleaner brush nozzle can remove heavier dust. Surface smudges or an accumulation of dirt and dust can easily be removed by using a mild detergent and a slightly dampened cloth. An artistic agent may be used, but never use abrasive cleaning agents as they will damage the finish.

Caring for blades: Wood finish blades should be cleaned with a furniture polishing cloth. Occasionally, a light coat of furniture polish may be applied for added protection and beauty. Painted and high-gloss blades may be cleaned in the same manner as the fan finish.

If you need parts or service assistance contact your Hunter Fan retailer or visit our WEB site at:

http://www.hunterfan.com



# **TROUBLESHOOTING**

INCODEESTIOOTING					
<b>PROBLEM</b> Nothing happens; fan does not move.	<ul><li>PROBABLE CAUSE</li><li>1. Power turned off, fuse blown, or circuit breaker tripped.</li></ul>	<ul><li>SOLUTION</li><li>1. Turn power on, replace fuse, or reset breaker.</li></ul>			
	Loose wire connections or wrong connections.	<ol> <li>Loosen canopy, check all connections according to STEP 4 - WIRING THE FAN (turn power off before checking).</li> </ol>			
	3. Pull cord switch not "on".	3. Pull the pull cord switch.			
	4. Reversing Switch partially engaged	4. Disconnect power to the fan and slide Reversing Switch fully to one side or the other.			
Noisy operation.	Blade assembly screws and / or blade mounting screws loose.	1. Tighten screws until snug.			
	2. Blade cracked.	2. Replace all blades.			
	3. Using non-approved speed control.	3. Change to approved speed control.			

continued



#### **PROBLEM**

Excessive wobbling.

Note: When switching from medium to low speed, you may notice some fan wobble. When the fan stabilizes at low speed, wobble will disappear.

#### **PROBABLE CAUSE**

- 1. Unbalanced blades.
- 2. Loose blades or blade medallions.
- 3. Fan not secure on hanger assembly.
- 4. Fan hanger ball not seated in Hanger Bracket.

#### **SOLUTION**

- 1. Use balancing kit included with fan.
- 2. Tighten all screws.
- 3. Turn power off, support fan very carefully, loosen canopy and hang correctly.
- Turn power off, support the fan very carefully, and check that the hanger ball is properly seated.

If you have tried these troubleshooting solutions and still have trouble, visit our Web site at http://www.hunterfan.com.



Hunter Fan Company 2500 Frisco Avenue Memphis, TN 38114 USA