

CEILING FAN FAQ's - Wobble-Whir-Humm

The primary function of ceiling fans is to move air so you feel more comfortable, cooler in summer and warmer in winter utilizing minimal energy to achieve this. All fans move air. How much air is circulated, how efficiently, how quietly, with how much annoying wobble, and how long the fan lasts are questions wise consumers should ask before selecting a ceiling fan. Higher quality is measured in more than just dollars and cents. At first glance all fans may appear to look alike...they're not! Here are some things to look for and compare before purchasing a ceiling fan:

Why inexpensive fans are noisy fans

Inexpensive fans generally lack proper noise-reducing components such as isolation rings and rubber cushions between metal parts. These special noise silencers help stop the transference of noise through the fan to the ceiling where it is magnified. Inexpensive fans usually do not have these components because they add extra costs to manufacturing. Noise is generated because the fan in general is poorly engineered and manufactured using short-cuts.

Why fans can break down prematurely

A common cause of breakdown in inexpensive fans is the on/off switch. The internal mechanism can become faulty or the switch chain may be pulled out of the housing. For a fan to operate efficiently and effectively, the motor size must be engineered to match the blade pitch and blade length. Inexpensive fans may have inadequate size motors which can cause over-heating and motor burn-out. In many instances, lower quality fans may not have enough blade pitch to effectively move air. The greater the blade pitch, the more movement of air... but remember, the greater the pitch, the greater the need for a larger motor!

Why Ceiling Fans?

Aesthetic appearance of quality workmanship, the silent, rhythm of motion, and the economic benefits in heating make the ceiling fan one of the world's most useful appliances. It may seem odd to call a ceiling fan an appliance. It doesn't make coffee, sew a dress, or cook. But by definition an appliance is an instrument, apparatus, or device developed for a particular use. The fan fits. The ceiling fan enhances our environment and adds comfort. It meets a need.

Very few items found in the home can match a ceiling fan's combination of outward beauty, functional effectiveness, and dependability. A quality ceiling fan increases the beauty of any home or apartment. It can also lower heating and cooling bills which makes a ceiling fan an investment that pays for itself. Ceiling fans make air behave, and a properly directed and main air flow can have either a cooling or warming effect. Everyone experienced the cooling effects of a light breeze. As air moves across, it evaporates body moisture, making one feel cooler and more comfortable. With a ceiling fan generating cooling breezes in your home, you can set your air conditioning thermostat at a higher, more economical level. You save money without sacrificing comfort.

Ceiling fans are more than a cooling device. It can also more effectively distribute heat throughout your home. Warm air rises, cool air can become trapped near floor level. This accumulation of air layers can be a problem during colder months, in rooms with high or domed ceilings. A ceiling fan breaks up the cool and warm layers, making the overall room temperature uniform. By simply flipping a switch to reverse the fan's normal, warm air is moved across the ceiling and down the walls. This distributes room heat without creating a cooling draft. The result is that warm air is where you need it - at the level you live in, not on the ceiling. So, in winter you can lower your furnace thermostat by several degrees, again saving energy dollars. Ceiling fans can also guarantee proper airflow in solar and other alternative fuel heating environments. The noiseless

operation and variable running speeds make ceiling fans an unobtrusive, efficient and beautiful appliance.

Use and Maintenance of Ceiling Fans

How Can I stop my Fan from Wobbling?

Your ceiling fan may exhibit wobble during operation due to some kind of irregularity in the blades. We suggest the following procedure be followed to remedy this situation:

- Be sure all blades are screwed firmly into the blade holder, that all blade holders are tightly secured at the fan. Wobbling may be checked simply by use of a household yardstick. Place the yardstick vertically against the end with the outside leading edge of a blade. Turn the blades slowly back to view the remaining blades. If a blade isn't in alignment, it may be gently bent up or down to be in line with the others. If this doesn't solve the wobble problem, use a dynamic blade balancing kit.

To Balance your Fan Using a Balancing Kit

1. To balance the blades, run the fan on high speed, down draft.
2. Before using balance kit, switch positions of 2 adjacent blades (replace blade 'a' where blade 'b' was and put blade 'b' where blade 'a' was.) If this improves the balance of fan, leave as is and proceed to step 3. If this makes balance worse, change blades back and proceed to step 3.
3. With the fan stationary, attach the balancing clip firmly on the leading edge of one blade halfway between at&127 the outer edge of the blade and the blade bracket.
4. Run the fan and observe the wobble. Stop the fan and move the clip to the next blade. Again run the fan and observe the wobble. Repeat this for all blades.
5. Move the clip back to the blade where you noticed the least wobble. This time attach the clip to the leading edge of the blade near the blade bracket, run the fan and observe the wobble. Stop the fan and move the clip outward toward the end of the blade in small increments until you find the position where the fan runs best.
6. Peel the protective paper off of one of the self adhesive weight strips, and stick it firmly on the top of the blade along the center line, opposite the clip. Remove the clip and start the fan. If the fan wobble was not completely stopped, you may be able to further improve it by repeating all of the above steps. Adding another weight to whichever blade is indicated by your second test, in addition to the one you put on the first time, may solve the wobbling problem.

Maintaining your ceiling fans

An anti-static agent can be used, but no cleaning agents which can damage the finish.

An occasional coat of furniture polish may be applied to the wood protection. Polish will also enhance the wood.

Never saturate a cloth with water to clean your ceiling fan. Water introduces the possibility of electrical shock and blade warpage. Always be certain the fan control is in the off position before attempting to clean.

Can my blades be the cause of a wobble?

For a fan to perform efficiently it is very important that the blade be flat throughout. Most manufacturers have programs to investigate keeping warpage to a minimum. "Balanced" blades; that is, blades that are electronically matched at the factory; are sold as balanced four or five blade set depending on the design of the fan. For this reason, never interchange blades between fans.

Why do consumers purchase ceiling fans?

Ceiling fans are purchased for three main reasons:

- | | | |
|------------|------|---------------------|
| 1) | | |
| 2) | Heat | Cooling Reclamation |
| 3) Fashion | | |

COOLING

The idea of "Wind Chill".

A ceiling fan moves counter-clockwise to cool and provides a breeze that makes the air feel cooler, even though they don't actually lower the temperature. With a ceiling fan working, 78 or 80 degrees can be as comfortable as 72 degrees--leading to big energy savings.

This savings could add up to as much as 40% during the summer. Even at high speed, a ceiling fan typically uses less energy than a 100 watt light bulb .. and less than a 25 watt bulb at low speed.

HEAT RECLAMATION

Warm air rises, so the warmest air is trapped near the ceiling and wasted. Set on its lowest speed IN REVERSE-- so there will be no wind chill effect--the ceiling fan pushes warm air down from the ceiling. In effect, homeowners reclaim lost heat--and lost heating dollars. You can turn the thermostat down and save up to 10% on heating bills while keeping the home warm and comfortable.

Fans move clockwise to move warm air down from ceiling.

FASHION

Ceiling Fans also enhance the character of any room or home. With the variety of styles and models available today, finding one to fit your decor is easy. Ceiling fans add that extra "finished" decorative touch that helps make a beautiful statement in any room.

Can a ceiling fan improve comfort in almost every room in the home? ...YES!

- Bedrooms - There are many nights when the air conditioning can simply be turned off providing greater energy savings with no loss of comfort.
- Bathrooms - Eliminates mildew by drying towels and showers quickly. This is a perfect application for a ceiling fan, even though bathrooms are often quite small.

- Kitchens - Quickly disperses heat, smoke, and short span blades for these rooms. cooking odors making the kitchen more pleasant for the cook.
- Recreation Rooms - Keeps active people comfortable without adjusting the air conditioning and thereby upsetting temperatures else where in the home.
- Living Rooms - Maintains even temperatures by dispersing heat from windows. Also disperses cigarette smoke and heat from large gatherings.
- Sunrooms and Atriums - Circulates and distributes solar heated air throughout the home and-reduces the risk of overheating sensitive plants.
- Dining Room - By using medium speed upward airflow, diners can be kept comfortable in the typically smaller area without cooling the meal.
- Rooms with Fireplaces - Circulates and distributes heated air through other parts of the home reducing furnace usage.
- Vaulted Ceiling Rooms - Eliminates heat stratification for improved winter comfort and reduced energy bills.

Energy Saving Tips

Conservation has become a way of life in America. Since the gas crunch in the mid-1970s, Americans have learned that wasting energy is wasting money. Yet not all suggested methods are practical, and some just do not work. True conservation is not found in a series of quick cure tips, such as occasionally turning off a light switch or making sure the refrigerator door is sealed. Often, these practices save so little money they seem to waste the effort it takes to perform them. If you are interested in saving substantial amounts of energy, you should consider energy conservation investments. Investments that result in no loss of personal comfort yet add to the value of a home.

Ceiling fans are a solid energy saving investment for the added beauty and elegance to any setting that no other method can match, and will be a valuable part of any home energy conservation.

Ceiling fans make air behave. A properly directed fan that directs the main air flow can have either a cooling or warming effect. Everyone has experienced the cooling effects of a light breeze. As air moves across, it evaporates body moisture, making one feel cooler and more comfortable. With a ceiling fan generating cooling breezes in your home, you can set your air conditioning thermostat at a higher, more economical level. You save money without sacrificing comfort.

Ceiling fans are more than a cooling device. It can also more effectively distribute heat throughout your home. When warm air rises, cool air can become trapped near floor level. This accumulation of air layers can be a problem during colder months, especially in rooms with high or domed ceilings. A ceiling fan breaks up the cool and warm layers, making the overall room temperature uniform. By simply flipping a switch to reverse the fan's normal operating direction, warm air is moved across the ceiling and down the walls. This distributes room heat without creating a cooling draft. The result is that warm air is where you need it - at the level you live in, not on the ceiling. So, in winter you can lower your furnace thermostat degrees, again saving energy dollars. Ceiling fans can also guarantee proper airflow in solar and other alternative fuel heat.

Remember, ceiling fans conserve energy only if you help them.

It is important to remember that a ceiling fan can be an energy saving device only if a home is properly weatherized. The following list of energy saving tips is provided so you may weatherize your home and increase the effectiveness of a fan. In other words, using these tips in conjunction with your ceiling fan(s) will help you conserve energy and reduce heating and cooling bills.

Weather Stripping/Caulking. Proper weather stripping and caulking are essential for treating cracks around windows and other openings where heat and air conditioning can escape.

Thermostat. In the winter your thermostat should be set at least 5 degrees lower when you are sleeping or away from your home. In summer, set your thermostat at 78 degrees (for air conditioning). For homes with sick or elderly persons alternate your thermostat by ten degrees of the above recommended mark. The easiest way to do this is with a programmable thermostat.

Heat-Producing Items. During the months when air conditioning is in operation, keep lamps, candles, away from thermostats. The heat they create will make the air conditioner work harder, cooling more air than is necessary.

Cooling System. Filters for these systems should be replaced as needed. Keep the outdoor portion of your air conditioner pump clear of leaves, grass, or dirt accumulations. Disconnect electricity at circuit breaker or fuse box before cleaning. Doors should be closed in unused rooms. Consider alternate devices such as ceiling fans to increase the efficiency of your present cooling unit. Use energy efficient models when replacing existing systems.

Area Maintenance. Keep the space all around your home clean. Dust, lint, and litter can cause operating problems and hazards.

Heating. If there are several thermostats in your home, energy can be saved by keeping the temperatures low in the rooms frequently not used. Also, close doors between heating zones. There is no need to heat or cool space that is not used. Use only enough heat in these areas to avoid freezing in the winter. Water vapor present in the air helps to make life more comfortable at lower temperatures. There is a definite advantage to using ceiling fans because the air holds heat longer, allowing the fan to circulate it. Freestanding fan units can be obtained to add to the arrangement and efficiency of the heating system. Set the operating level according to the manufacturer's recommendations. For more efficiency, place a sheet of aluminum between the wall and any radiators. It will reflect the heat back into the room where it can be circulated more evenly by your fan. If you use radiator covers, make sure they are not trapping and losing heat.

Drying Clothes Outdoors. Even if you own a dryer, hanging clothes outdoors to dry in warm seasons should be done.

Closing Appliance Doors. Family members should not leave refrigerator or freezer doors open for long, extra seconds the door is left open increases the power the interior needs to maintain it's proper temperature.

Entertainment Equipment. TV's, radios, records, cassette decks, etc., should be turned off when not in use.

Better Lighting Sources. When replacing home lights, remember that fluorescent tubes produce more light for less energy consumed. The U.S. Department of Commerce a extended service or "long life" light bulbs are actually better than the ordinary variety.

Attic Insulation. The attic should be checked, and a recommended amount of insulation should be present.

Floors and Foundation Walls. These areas checked. Adequate insulation must be present under floor basement, in crawl spaces, and along foundation walls. installation ceiling fan operation by reducing unwanted drafts.

Windows and Doors. Storm windows, doors, or glass helps to keep the heat and air conditioning in where it belongs.

Exterior Walls. Added insulation should be considered when remodeling or re-siding your house.

Seal up Cracks. Stone, stucco, and brick exterior develop energy wasting cracks. Repairs can be made with caulking compound.

Teach Children to Save. A child is never too young, a few simple steps of energy conservation. Teach all family members to enter and leave the house quickly, in both winter and summer lingering in the doorway valuable heating and cooling are lost every time- the door is opened.

Wear a sweater and save. Wear warm , loose clothing and sweaters to save energy and money. They point out that when you regularly wear a sweater, the thermostat can be lowered by 3 degrees, thereby saving as much as 10 % on energy coupled with the air purification capabilities can add up to real energy savings.

Clothes dryers, washers, and dishwasher should be fully loaded when they are operated.

Ceiling Fans: A Proud History

Personal cooling devices have been around ever since some heated anthropoid discovered that waving a palm leaf in the face produced the agreeable sensation of a refreshing breeze. This historical first "wind chill" was duplicated by the royalty and wealthy persons of early Assyria and Egypt who employed a small army of slaves and servants waving huge leaves to make them feel cool on hot days.

Hand fans, still seen today, came into being around the birth of Christ. The Akomeogi, the Japanese folding fan, dates back to sixth century, A.D. A century or so later, the popular Chinese dancing fan, Mai Ogi, appeared with its ten sticks and a thick paper mount depicting the family crest. In India, a large fan of peacock feathers symbolized eternal vigilance of the ruler.

The hand fan was introduced to Europeans in the Middle Ages and soon became popular. By the mid 1750s in Paris alone, there were 150 master fan makers. At about this time, the world's greatest inventors started to grapple with the problem of designing mechanically powered, personal wind-generating machines. Some of the more successful of these machines have appeared in the Smithsonian - the official magazine of the Smithsonian Institute in Washington, D.C.

Successful use of mechanical fans was developed in the factories of the Industrial Revolution. Workers sweating at working got the idea of attaching wooden or metal blades to the whirl shafts overhead that were used to drive the machinery. The cooling breeze was evidently so satisfying that within a few years factories on a hot summer day were in danger of having their work blown away as long rows of line-shaft fans howled over the workers.

Thomas Edison introduced the first viable large scale use of electrical power. The ceiling fan had come of age. Electricity had been considered as a fan power source. But electricity was little more than a parlor game.

Diehl is generally considered the father of the modern electric fan. One of the giants of the electrical industry, Diehl was the genius head of Messrs. Diehl and Company. One of Diehl's greatest projects, and one which eventually led to the development of the ceiling fan, was the engineering of a motor suitable for use in Singer sewing machines.

In 1882, with great fanfare, Diehl introduced his "invention of the electric ceiling fan." His device was a bubble-blade adaptation of the well known belt driven fan with self-contained electric motor; the latter, a modification of his machine motor. By the end of the 1880s, "The Diehl Electric" was sweeping the country. At the same time the introduction of electric lights, electric street cars, and dozens of home electrical appliances were bringing the use of electricity to cities and towns across the country. The hundreds of generators and transmission stations made power inexpensive and readily available. Inventors scrambled to make their fortunes.

Philip Diehl continued to make major improvements, innovations, such as reducing motor size and adding lights the Diehl "Electrolier," or electrified combination chandelier ceiling fan, the ultimate development in ceiling fan usefulness and soon the idea also became common property, and by the turn of century the ceiling fan was everywhere. It wasn't long before it and sales, had traveled around the world.

By the late 1920s, no self-respecting restaurant, drug store, ice cream shop, elegant dining room, or even "speakeasy" was without a ceiling fan as part of their decor and ventilating system.

Quality fans allow their use in virtually any room of the home, day or night. And all this is possible with a fan that draws less electricity than 100-watt light bulb.

An Investment with a Big Return

What's more, a ceiling fan, unlike other decorative efforts, is a moveable investment. Those who live in apartments can still enjoy the comfort, elegance, and energy saving benefits that a ceiling fan provides without the worry of losing their investment should they decide to move. Unlike wallpaper and most floor coverings, which must be left behind and are big investments with little return, the ceiling fan is a decorating touch that can be packed right along with the boxes and furniture when the next moving day comes.

Ceiling fans can solve other problems, too. For instance, while searching for unique gift ideas, every so often we all get lucky and find just the right item for that special person. Available in a wide range of styles and colors, ceiling fans can be a most unique idea that is also practical, an important consideration in today's world. A ceiling fan would be a great gift for the kids on their way to college for their dorm rooms where temperatures are frequently uneven and uncontrollable.

Reference:

<http://www.hansenwholesale.com/fanfaqs.html>