

How do you balance a ceiling fan so it won't wobble?

Last Updated: Saturday, January 3rd, 2015, Created: Sunday, September 30th, 2001

Oh how many times has the wobbling ceiling fan driven you crazy. Sometimes it is acceptable on one speed but not another. Sometimes it just click, click, clicks so badly that you can't get to sleep. Fixing it is easy, but not fast. There are a large number of things that could be wrong so work your way carefully through the list, one at a time. Do each one, test for wobble. Continue if necessary.

Screws: There are a couple of dozen screws on a ceiling fan. Tighten them all.

Flat Blades: The blades must be flat and some will warp from drying out, or from poor storage. Sight down each blade to see if it is flat, or take them all off and stack them up to see if one is warped. They are made as matches sets, so if you have a problem with one, buy a whole new set.

The Turning Plane: If one blade is higher or lower than the others, it will cause a turbulence and a wobble. Measure from the floor or ceiling to the tip of one blade, carefully spin the fan to check each blade. Some models will permit you to bend the blade bracket. If you cannot, then try using light weight shims under the blade screws to get them all turning in the same plane.

Weight Balance: If one blade is lighter or heavier than another, it will wobble, especially at high speeds. All the fan manufacturers sell balancing kits: a weighted test clip and some self adhesive weights. Put the clip on one blade right in the middle as in the photo. Try the fan on all the speeds and note how much it wobbles. If it wobbles less than without the weight, you will want to work on this blade. If it gets worse or doesn't change, try the next blade.

Once you have found a blade that responds to the weight clip, try moving the clip towards the tip, or back towards the motor, until you find the place that wobbles the least. Yes you have to move the weight a bit, turn the fan on, turn the fan off, move the blade and do it all again. I told you, a long slow but sure process.

When you find the best position on the blade, attach one of the permanent weights, or a quarter if you have no more weights to the middle of the blade at this position. Remove the clip and test for wobble. If it still wobbles more than you like, start the clip testing all over, blade by blade. You may need two or three weights, on the same or different blades. Long and slow, but you can get rid of that wobble.

Thanks to Royal Lighting of Toronto for the model fan we used on the show.

Keywords:

Lighting, Testing, Blades, Shim, Balancing, Tip, Ceiling, Mystery, Warp, Techniques, Fans, Problems, Ventilation