Ask Jon Eakes

Fixing a squeaky ceramic floor?

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A squeaky ceramic floor is a particularly difficult problem because you really cannot fix it from the top down, and if you don't fix it, it will eventually break the grout if not the floor tiles because of the movement of the floor.
Squeaking is caused by something rubbing, often the floor boards rubbing on a nails. You will have to get below the floor to work on it, finished ceiling or not. Contrary to a hardwood floor where we could work to pull the floor down tightly to the floor joists, here we need to not move the ceramic floor at all but simply give it a rigid connection between the subfloor and the joist. In the photos you can see the gap that is causing the squeak, the space just above the middle joist on our model. There are basically three possible solutions.
Put in cedar shims to fill the space. Apply carpenters glue to the shims first so that they will not work their way back out. Be very careful to put them in snugly but not to drive them in enough to raise the floor above because that will crack the tiles just as surely as they will crack with continual movement.

You could screw on metal brackets or a wood 2x2 support. In both cases, attach them first to the floor with sheet metal screws. Why sheet metal screws? Because they have large heads that will not sink into the wood, or you can even add washers to prevent them sinking into the wood or to adjust the total length. Also because they have the widest threads of all screws and grip the best when they cannot be long.

In the 2x2 be sure that the hole through the 2x2 allows the screw to slip, so that the 2x2 will be screwed tightly up to the floor. Then screw the brackets or the 2x2 to the joist. This will assure that you do not raise nor lower the floor itself, but simply support it where it is. Adding glue to the 2x2 will make the fix even more solid. Make sure that the length of the screw is just right; as long as possible without hitting the tile. If you are not sure how thick the floor is, or how it is made, peek alongside a heating floor register and you will find a typical cross-section of your floor.
If there is more than one layer of wood on the floor, drill through the lower layers so that the screw will bite only into the last layer just below the tiles. Drive the screw gently but firmly, you don't want to strip it free and loose the grip.

Keywords:
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