

How to Drill Holes in a Refrigerator

By Russ “el Ducko” Lambert

Drilling a hole in a refrigerator can be very intimidating. Certain people (*myself included*) have jumped in, drilled, and hit a refrigeration line almost as if doing that (*instead of missing them all entirely*) were the objective. The following is a guideline on what to do in order to have a reasonable chance of success. Only a few hand tools, patience, and perhaps a low-yield tactical nuclear weapon are needed in order to have a semi-professional-looking hole. Face it - a real professional would probably advise against this. ...but what do **they** know, anyway? (...certainly not sausage fermentation.)

A word on hole size- - make ‘em only as large as is needed for wires and air tubing, plus maybe a bit extra if you are making up internally with outside air. The rate that water is given off is small. There is certainly no need for more a 1” hole, two of them at most. Do NOT, as some people do, use a 3-1/2” hole saw unless you are building a wind tunnel. It is simply not needed.

First, Measure to figure out where the hole should be located. Mark with a pencil or pen. Granted, they never quite align, but no matter- this is for guidance only.

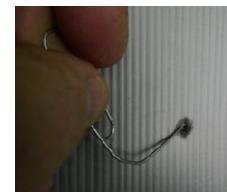
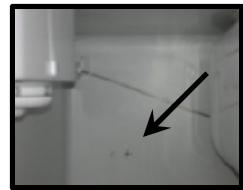


Next, take a hand-powered drill and insert a small bit into the chuck. Take a twist-wire from the kitchen, twist it onto the bit, and move it to about 1/8” from the tip. Position it on the mark where you want the hole, press slightly, and turn if necessary (*such as if you are penetrating sheet metal*). Penetrate only a little, in case there’s a refrigerant line inside. Enlarge the hole gently with a small screwdriver.

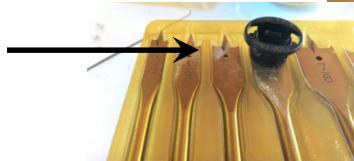


Straighten one leg of a paper clip 90 degrees. Stick it into the hole that you just drilled. Push it in until either you feel resistance from a refrigerant line (*Whew! You located it without drilling it!*) or until you hit the inside wall. Now, rotate the paper clip, probing in and out, making sure that there is no refrigerant line nearby. We’ll be drilling a 1” or less. If you find a line, just offset your next small hole so as to miss it, then repeat until you find a clear area.

Insert a larger drill bit into your hand-powered drill, 1/4” or less, drill through the backing, push gently through the insulation layer (“*just in case*”), until you hit the refrigerator’s inside liner. Then go ahead and drill slowly through the inside liner, until you drill through. How close to hitting the inside mark did you come? (*If you are within half an inch, you earn an extra 1000 points toward a “Big Boy Badge.” ...girls, too.*)



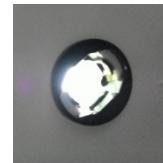
It's not really necessary, but it's a good idea to place a rubber grommet or two in the hole to dress up the edges. Here's one of the electrical grommets I used. I broke out the center portion and trimmed it up with a pocket knife. You'll need to use the grommet to determine the size hole to drill through the insulation backing and liner. Pick a spade bit that's just larger than the grommet's appropriate dimension, as shown at right.



Now, using your hands or the hand-powered drill only, turn the spade bit slowly to slice through the insulation backing and make the hole. When you get through the backing, go slowly through the insulation, just in case you missed detecting a refrigerant line.



Coming in from the outside, ream out the insulating material. Stop just as you hit the interior liner. Twist a few turns to scribe the plastic liner, then look inside and inspect from there. Insert the spade bit from inside the refrigerator, give it a couple of twists to scribe the hole's edges, then withdraw and finish the hole from the back. De-burr both holes with a pocket knife and insert both grommets. Hopefully you'll have a nice, clean, professional-looking installation.



Disclaimer: If this method doesn't work for you, remember those immortal words uttered by Sergeant Schultz (John Banner) of the "Hogan's Heroes" television show:

I know noth-think! NOTH-THINK!