

How to install a plate on a mirrored wall

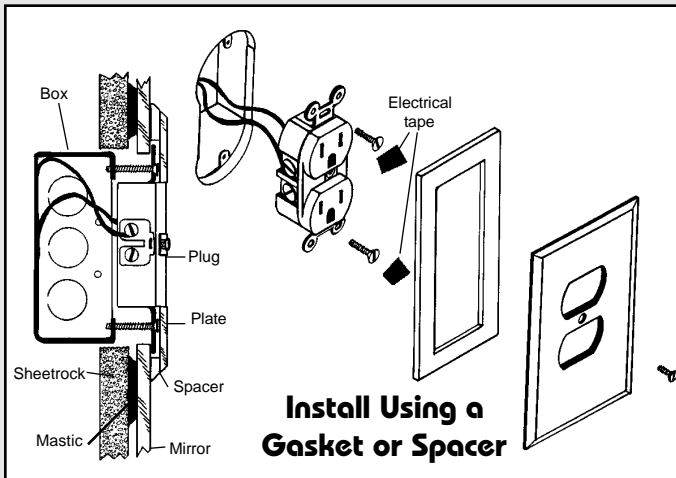


Fig. 1 - Installing a mirror plate with a gasket or spacer. Ears are left in place.

An instruction sheet telling you how to install a mirrored switch plate seems useless. Just put the screws through the plate and turn the screwdriver, right? Well, we're afraid it isn't quite that simple. Mirror plates are flat on the back, standard wall plates are not. We have to find a way to have plates sit flush against the wall. Basically, there are two acceptable ways to install a mirrored switch plate, we will show you both of them.

The first method is shown in Fig. 1. We've used a receptacle for our example, but this will work with any type of electrical device. Drill your mirror with a 2 x 4 cut-out (it should be a little

smaller for this type of installation). Before installing the mirror, remove the 3/4" screws holding the receptacle in place so you will be able to pull the plug through the panel (wrap the receptacle with electrical tape so hot leads don't come into contact with the mirror). You'll have to turn the receptacle sideways so it fits through the cutout.

In this type of installation you will leave the "ears" on the receptacle. The ears need to be there so they will sit on top of the mirror after installation. They will keep the receptacle firmly in place and prevent it from "floating" in the wall. This type of installation still has some minor problems. After the receptacle extension screws are tightened, there is pressure on the mirror from the ears. The hole is the weakest point of the panel. Even if you don't tighten the receptacle too much, your customer might, and every time something is plugged into the receptacle pressure will be applied to the panel.

The back of the switch plate will touch the ears and screws holding the receptacle in place, causing marks on the plate. These marks can be avoided by using a small piece of plastic electricians tape over the protruding screws. It is a good practice to use this tape anyway.

A plate won't sit flat on the wall unless a spacer or gasketed plate is used. The sketch shows that a spacer can be fit behind a plate and held in place by the screw that fastens the plate. The same effect can be had by using a plate with a gasket already mounted to it. If the plate is shimmed away from the wall and tape is used, it will not be touched by the ears of the receptacle and no marks occur when the screw is tightened.

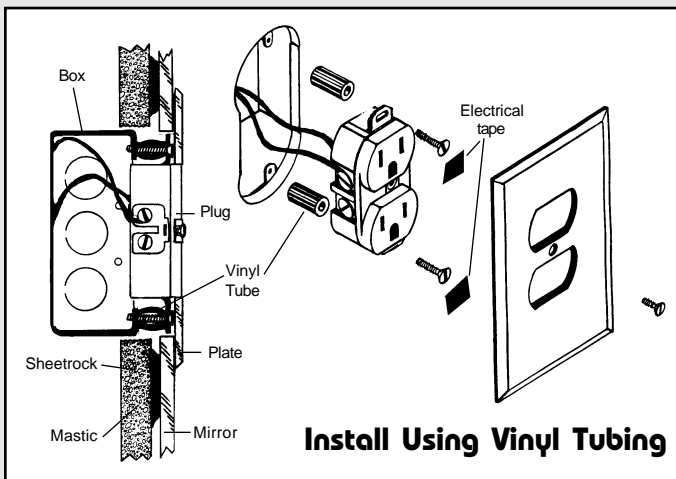


Fig. 2 - Installing a plate without a gasket. Note ears are cut off and vinyl tube is used as a spacer.

The second and recommended method of installing a wall plate is shown in fig. 2. Here, the "ears" are clipped off entirely. This, of course, eliminates the problems of pressure from the ears on the mirror and the wall plate not sitting flat when the screw is tightened. However, it does leave us with the problem of the "floating" receptacle that we mentioned before. Here's how you solve it. As in figure 2, use a flexible spacer around the extension screw. The screw should be tightened so its top surface is slightly below the surface of the mirror, but be careful.

If the screw is too far below the surface, the mirror plate may flex and show a distorted image. Again, put electrical tape on top of the screw heads. The flexible shim will compensate for the screw length. It allows the pressure of the screws to be transferred to the box in the wall and not to the glass. This method gives us more leeway when locating the cut-out in the panel because the ears don't have to be sitting on top of the panel. A larger hole (2 x 4-1/4) may be drilled which eases accuracy requirements still further. Another advantage of this method is that the installer is not forced into stocking spacers or gasketed plates. A standard plate may be used in this case.

There are several different ways of shimming a box screw. Some shops take a plastic anchor (found in nearly every mechanics tool box) and cut off the tip to use as a shim. You can buy Shim-ease™, which contains an extension screw and a very strong spring packed in sets of two. We offer vinyl tubing to do this job. It is available in 6 ft. lengths (#VT14) that you can cut on the job to suit the application.

Either of the above methods are used by mirror installers around the country. Method 1 allows you to reinstall the electrical device without doing anything to it, but you have the added cost of a gasket or spacer and pressure on the glass to consider. Method 2 requires additional labor to cut the ears off, but offers a "safer" installation. Weigh the advantages and disadvantages of each and choose the method based on your installation requirements.