

MIRRORED HANDLE REPLACEMENT **PROCEDURE**

I. Preparation

It is best if the door is removed from its hinges and placed on a workbench of suitable height. Be sure to provide the door with adequate support as it is possible to flex and crack the mirror.

Caution: Liberty installed the glass using globs of adhesive sporadically placed leaving numerous voids between the glass and fiberboard backing. It is entirely possible when installing the new handle that its location will land over one of these voids which will increase the risk of cracking. Do not over-power the work.

Once the door is down and firmly supported, the mirrored handle can be removed in several ways. The best way perhaps is to use a flexible putty knife that has been sharpened and a product called "GOO GONE" which is available at most hardware and retail stores. Saturate the area around the handle with Goo Gone and gently work the putty knife and liquid under the handle to loosen the adhesive. This may take a while but continue to apply the liquid and slowly insert the putty knife. With the old handle removed, use the Goo Gone to clean up any remaining adhesive. Be careful removing the old handle that you don't scratch the glass. It is a lot of work to buff out scratches in glass!

II. Layout

Here you will want to locate the new handle over the location of the old thus being able to hide some of the blemishes you have may caused in the removal process. Use a very fine Scripto pen to do your layout. Mark the centerline of each hole both horizontally and vertically. The spacing between screw holes on most handles is 3 inches. You may find that locating the vertical centerline 1 1/2" from the edge to be acceptable. If you have two doors installed side-by-side you will want to make sure that the new handles are located at the same height and distance from the edge. Otherwise, your eye will quickly spot the difference.

III. Tools and Supplies

The most important part of this procedure is drilling the holes in the glass. Of utmost importance here is having the right tools to do the work. There are a variety of drill bits offered for drilling glass with different shapes and surface treatments (round with diamond tips, spear shaped with carbide tips, etc.). The best and safest bit to use is a prismatic glass drill as shown in Fig. 1. This type of drill has several advantages over all the others. First, they are made of carbide giving the drill longer life for drilling many holes. Secondly, they have a sharp point giving you more control in precisely locating the hole where you want it. And thirdly, the three cutting blades do an excellent job of moving the waste up and out of the hole. They are not cheap but if you have several holes to drill, this type of bit will soon pay for itself – especially if you crack a mirror using another type of bit!!!

Things you will need to drill the holes include:

- Glass Drill Bit
- Wood Drill Bit
- Hand Held Drill
- Painter's or Plumber's Putty
- Turpentine
- Patience and a Steady Hand

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Fig. 1

The use of a sleeve in the hole is discussed in Section V. The size of the drill bits needed to do the job is dependent upon the size of sleeve you are using. For example, if the O. D. of the sleeve is 1/4" then a 1/4" wood drill bit should be used and the size of the glass drill should be 5/16" or 3/8". Use of a slightly larger glass drill will reduce the risk of the wood bit making contact with the glass. As for the wood drill bit, any type can be used but you may find that a brad point or Forstner bit may do a better job.

IV. Drilling The Holes

Begin by placing the putty around the holes to be drilled. What you want to do is form a dam around the hole to contain the turpentine. Pour the turpentine into the dam and don't be stingy as the turpentine provides the lubricant for the drill. As you drill, make sure the bit stays lubricated. Place the drill point on the centerlines (where they cross) and begin drilling slowly and carefully. The sharp point of the prismatic drill should preclude any wandering of the bit and give you the proper location

Caution: Do not force the drilling process. The weight of the drill should be sufficient to drill the hole. Also, do not attempt to drill the hole at high speed. Nothing more than a low to medium speed should be adequate.

Continue drilling with the glass drill until the hole is through the glass. At this point you are into the hardboard backing. Change bits in the hand drill to a wood bit and continue to drill through the wood.

Caution: Make absolutely sure that the wood drill bit does not touch the glass. If it does, you will be amazed at how quick things will happen and you won't be happy with the results! Also, don't "slam dunk" the drill chuck against the mirror as you drill through the wood. Again, let the weight of the drill do the work with only slight pressure on your part.

V. Hardware

The cabinet hardware is of your choosing. In **Fig. 2**, the hardware of choice is Baldwin and was sourced from www.baldwinbrassoutlet.com. The figure shows all of the components used in the installation. A description of these components follow:

- **Tubing:** The tubing is used as a sleeve and is installed in the drilled hole. Its function is to absorb the compression developed as the cabinet screw is tighten. The tube size is of your choice. In Fig. 2, 1/4" soft copper tubing is shown. You can use other materials such as brass or aluminum. The tube of choice will be the one that has the greatest wall thickness.
- **Handle:** The type and style of handle is of your choice. If you choose to use the crystal pull shown in Fig. 2, make sure that the handle is not in a bind as you tighten the cabinet screws because it is possible to break the crystal pull.
- **Base Plate/Escutcheon:** It is not absolutely necessary to include an escutcheon in your install but it is recommended. The plate shown in Fig. 2 was chosen for two reasons; ornamental and protection of the glass. The plate receives the compression/clamping force of the cabinet screw and prevents that force from being transferred to the glass.



Fig. 2

V. Hardware Cont.

- **Heavy Felt Washer:** The felt washer serves two functions; to cushion the escutcheon from the glass and to hide the reflection of the back side of the escutcheon in the mirror. The felt can be sourced from most large retailers and hobby/craft shops.
- **Cabinet Screws:** The screws that come with the handle/pull may not be of sufficient length to engage enough threads in the pull. Longer screws are available at Lowe's, Home Depot, Ace Hardware, etc.
- **Finish Washer:** This washer is not absolutely needed but is recommended. Depending on the size of the sleeve you use, the head of the cabinet screw may not be large enough to properly seat on the end of the sleeve. In Fig 2, a stainless steel washer was used.
- **Loctite:** A drop of this is placed on the end of the threads of the cabinet screw to prevent the screw from loosening after installation.

VI. Installation

To assemble the hardware, begin by installing the sleeve/tubing in the hole.

Important: It is imperative that the length of the sleeve be such that it stands proud of the back face of the door as well as the face of the mirror. The objective is to have the sleeve long enough so that it engages both the escutcheon and finish washer without contact to the mirror. Try to strive for a length that when the assembly is installed there is little if any compression of the felt washer.

It is probably a good idea to use spray adhesive on the sleeve before inserting it into the hole. After you are satisfied with the sleeve installation, you may want to consider filling the inside of the sleeve with a compound such as wood patch, caulk or any other product that will harden. The purpose of the compound is to take the "slop" out of the assembly so that the handle/pull does not wiggle once the installation is complete. If you choose to do this, cover the end of the threads of the cabinet screw before it is inserted into the compound.

The installation is completed by:

- Placing the finish washer on the screw
- Inserting the screw through the sleeve
- Removing the tape from the end of the screw if applied
- Placing the felt washer over the end of the sleeve and against the mirror
- Placing the back plate/escutcheon over the screw
- Placing a drop of Loctite on the exposed threads
- Engaging the screw with the threads in the handle/pull
- Tightening the cabinet screw to snug up the assembly
- Waiting for the compound inside the sleeve to set before applying force to the handle/pull.

VII. Finished Product



Fig. 3

VII. Finished Installation Cont.

Fig. 3 shows the installation complete. You will notice that the felt washer was not cut to proper size and does not sufficiently cover the backside of the escutcheon. As such, the backside is visible through the mirror. It is hard to get a clean, smooth cut on the felt. You can use the escutcheon as a template and draw a line with a white fabric marking pencil (available where fabric is sold – JOANN’S, etc.). A pair of sharp scissors works well for cutting the felt if you can hold the felt in place. To get the center hole in the felt, a punch designed for leather was used with some success. The center hole should be large enough to go over the sleeve.

VIII. Final Note

It is gratifying to see the mirrored handles replaced with something that is handsome, functional, and dependable. Be aware, however, that this procedure is not a panacea. “S#@! Happens” and certainly can when one is dealing with glass and/or mirrors. Because of this, it is highly recommended that you try out this procedure on some scrap glass and not start on one of your doors until you are satisfied you have the hang of it. It is far more costly to break a mirror and replace it than to break a piece scrap of glass.

GOOD LUCK!

Disclaimer: This article has been written solely for the benefit of fellow PREVOST owners. The author assumes no responsibility for the use of or results obtained in following this procedure.

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