

# Jewelers with spunk beat out the spelunker

by TOM ARNOLD

Somewhere, deep below the earth's surface, is a giant dark cavern. It is miles deep, miles long, and miles wide. This subterranean cave, unseen by any human, not even the cave-exploring spelunker, is filled with at least 88 zillion earrings - and none of them match.

It must be true because every woman I've met has lost several. And every woman you know has, I'm sure, lost several. Since these earrings must go somewhere, the underground theory is as good as any.

(By the way, since women sometimes remove an earring before talking on the telephone, there is also the theory that this is all a telephone company plot of some kind.)

Somehow, jewelers don't spend as much time, or get as much money, as they could as a result of all these losses. Certainly the lady with the empty hole in one ear can be sold another pair. But in addition to this, the aggressive jeweler can offer to reproduce the one she lost.

Unless it's a hollow ball or a stone earring, you might consider casting a duplicate of the one she has left (quickly, before it is also lost).

Whether you cast yourself or have someone else do it, you must first make a mold. A rubber mold can be used thousands of times - this is very handy because you can bet that the lady in question will continue losing earrings.

Of course, rubber molds are necessary whenever you want to cast more than one of any kind of jewelry piece or small sculpture, not just earrings. Cuff links, studs, matching rings, bracelet links, and many more things are reproduced using rubber molds.

Here's how to make a mold for very little money and a high degree of accuracy.

## The Ingredients

The item to be duplicated must be able to withstand a certain amount of heat and pressure. A plastic animal would not be suitable, but a seashell would be perfect.

You'll need the following materials:

1. Gum Rubber. It comes in sheets and is sold by the pound at any jewelry supply house. The sheet comes with a plastic covering to keep it clean. The stuff will keep for years if you keep it in a cool dry place.
2. Aluminum Plates. I bought mine from a used metal dealer. They only cost a few dollars and he cut and drilled them for me, .25-inch [ 6mm ] thick sheet aluminum 6 inches by 8 inches [ 150 x 200 mm ] with a .5-inch [ 12.5mm ] hole drilled in each corner.
3. A Mold Frame. This is also available from your friendly jewelry supply house. Over the years, I've acquired several sizes, but the handiest seems to be for molds 1 inch [ 25 mm ] thick, 2 inches [ 50 mm ] wide and 3.5 [ 87.5 mm ] inches long. This is an inside measurement.
4. Aluminum Foil. The ordinary kitchen variety.
5. A Very sharp Knife. The scalpel type available at a surgical supply house, hobby store, or jewelry supply house. Get some extra blades while you're there.

6. Four 3-inch [ 75 mm ] long bolts which fit snugly into the holes drilled in your aluminum plates. You also need eight washers and four nuts. You can pick these up at any hardware store.

## The Method

1. Glue or solder a bit of the brazing rod to the model (the item to be duplicated).
2. Cut eight 2-inch by 3.5-inch [ 50 x 85.5 mm ] pieces of rubber without removing the plastic coating. It cuts quite easily with ordinary scissors.
3. Place the mold frame on a piece of aluminum foil, and put four pieces of the rubber in it. Remove the plastic sheets from the rubber first.
4. Place the model in the center of the mold frame on the rubber.
5. Stack the remaining four pieces of rubber on the model, one at a time, pressing each down firmly. Don't forget to remove the plastic. Place another piece of aluminum foil on top of the last piece of rubber.
6. Assemble everything as shown in the drawing.
7. Tighten the bolts evenly until the rubber is compressed in the mold frame. Do not try to clamp the plates down completely. A few pounds of pressure is sufficient for now.
8. Place the whole thing in an oven preheated to 350°F [ 176° C ] .
9. Remove and tighten the bolts down as far as possible and put it back in the oven for 50 minutes more.
10. Remove it from the oven and allow to cool to room temperature.
11. When cool, take the bolts out, disassemble, and remove the block of vulcanized rubber.
12. With your scissors, trim off the excess rubber, and then cut the mold in half as shown and remove the model. A jagged cut insures that the two halves of the mold will go back together exactly as they came apart.
13. The job is done and you can now send the mold to a commercial casting house for reproduction or do it yourself if you've the facilities for casting.

Your new rubber mold can be used thousands of times and will last for years This is very important because next month the lady will be back to you again. You'll know by the way her head lists to port that she's just lost her starboard earring. And now you know why the rubber is sold by the pound.

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