

Make Your Own RUBBER PARTS

PART 10 — REPRODUCTION OF A DOOR SILL WEATHERSTRIP

EDITOR'S NOTE: Part 10 concludes our "Make Your Own Rubber Parts" series for the time being. In the past several months we have demonstrated just about every type of rubber casting technique we can think of. As more time becomes available in the months to come, we expect to be working on production of metal/rubber composites and large parts such as running board mats. We will appreciate reports from readers on rubber reproduction projects.

The rubber project this month came about because of the need for a unique weatherstrip for the bottoms of the doors on one of our sedans. The weatherstrip is a flat piece with two sections, one at an angle of 45 degrees to the other. Figure 1 illustrates the function of the strip. As the door closes fully, a bead on the sill presses against the angled section of the strip, bending it toward the vertical position, thus providing a dust and weather-tight seal at the bottom of the door.

We could find no comparable seal on the

market and decided that its reproduction would make a good exercise for our "Make Your Own Rubber Parts" series.

First we salvaged the best piece of the old weatherstrip we could find and took dimensions from it. We came up with the sketch shown in Figure 2 as a close approximation to the cross-section of the original part.

Next we fabricated a mold out of three strips of wood as shown in Figure 3. We made the mold out of wood pieces 36 inches long which will make a mold of sufficient length to yield one strip for a front door (30 inches) or strips for both back doors (17½ inches each).

The mold was assembled by nailing the narrow strip at left to the center strip with the top edge projecting 1/16" above the top. The piece at the right was assembled to the center section with wood screws so that the mold could be taken apart to remove the rubber part later.

All interior surfaces of the mold were sanded smooth and given three coats of shellac. The rest of the story is told in captioned pictures on the pages to follow.

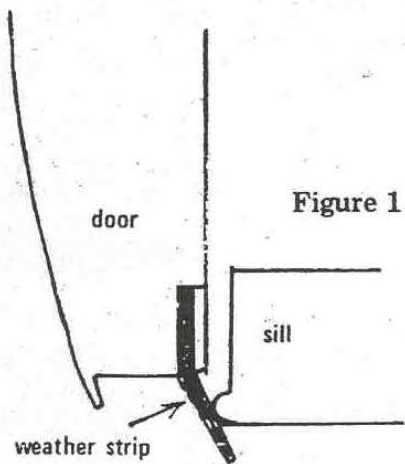


Figure 1

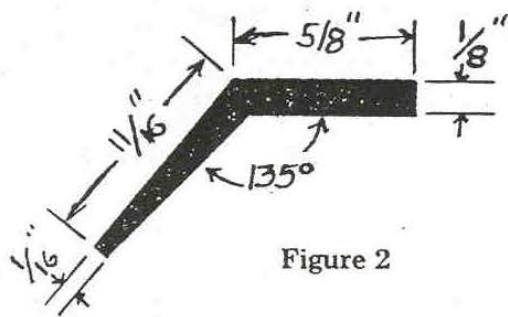


Figure 2

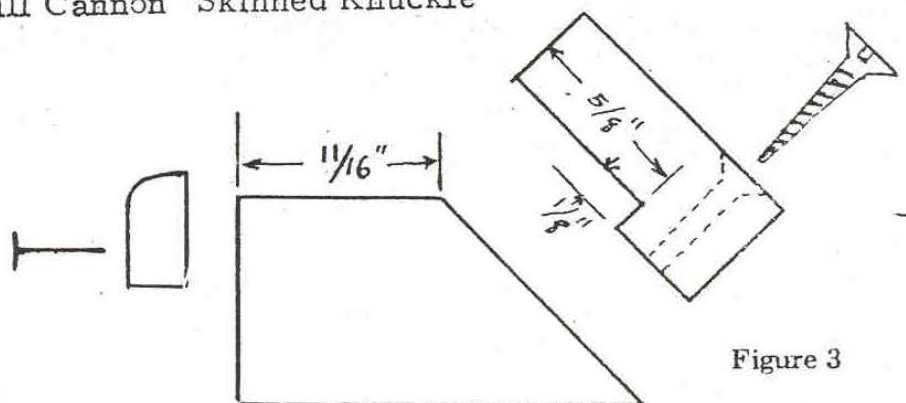
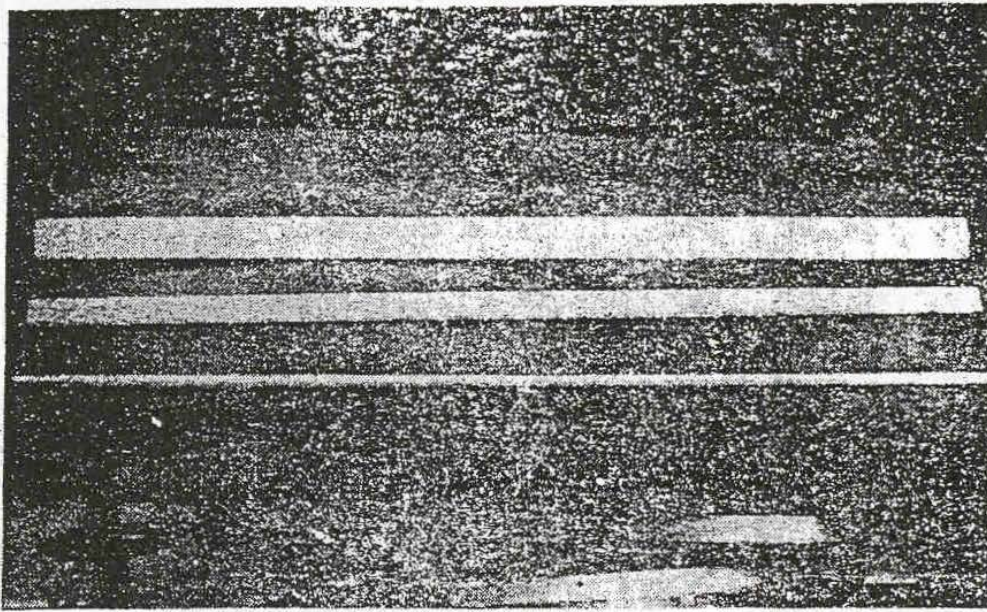
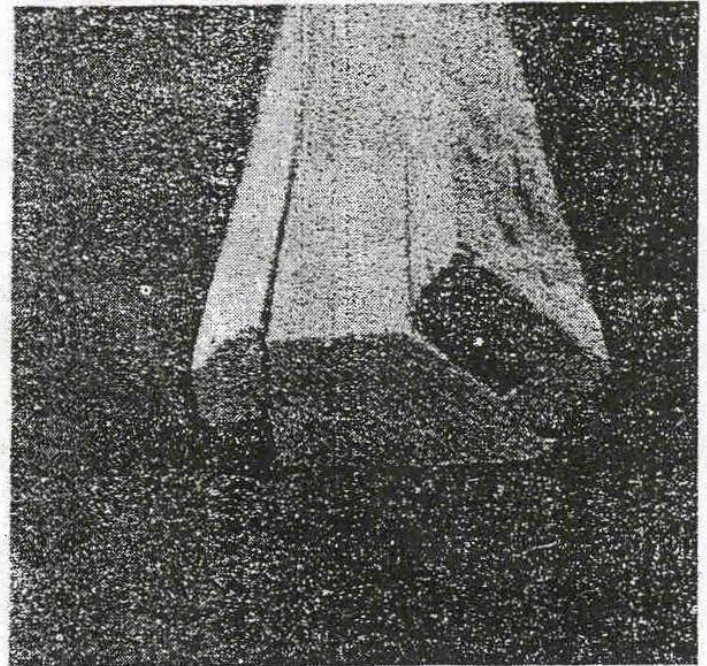
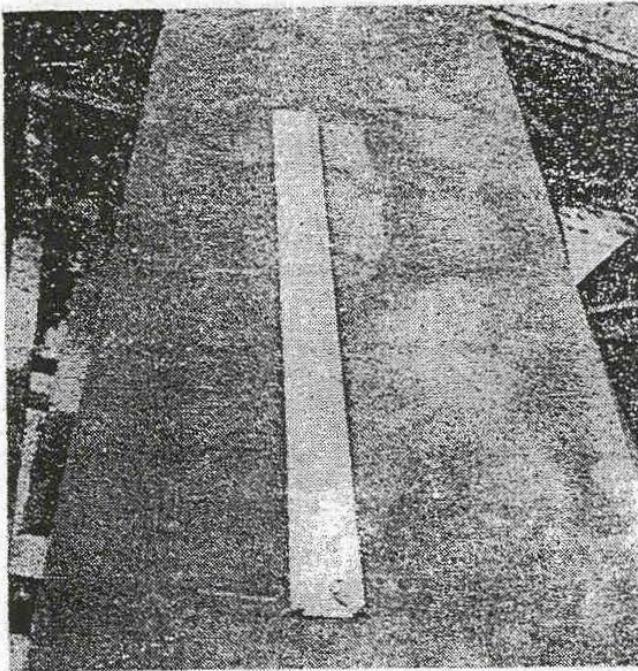


Figure 3

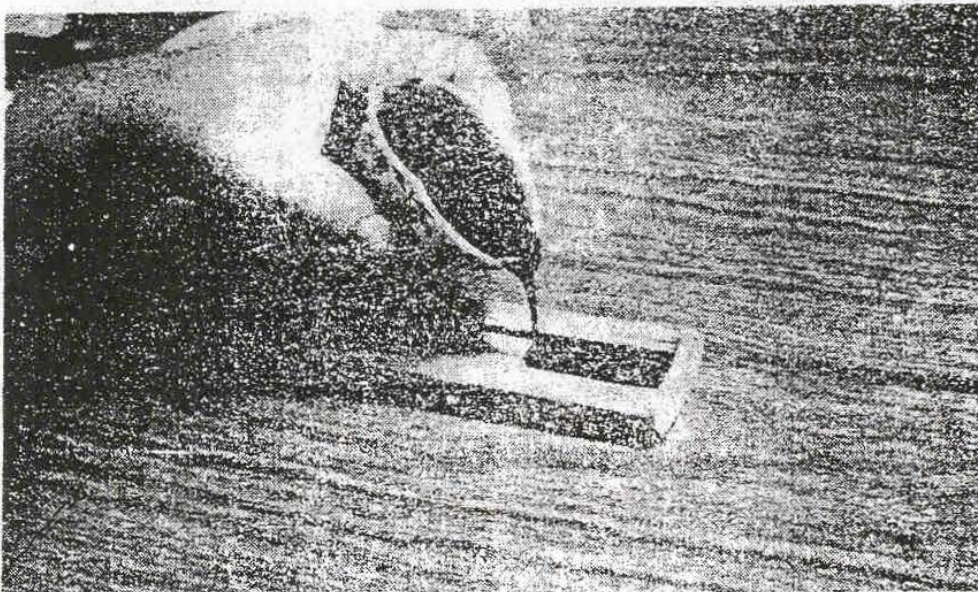


LEFT: The three wooden pieces which make up the mold have been laid out on the workbench. All parts of the mold which contacts the rubber have been sanded and shellacked. The smoother the mold, the better the finish on the final product:



CENTER LEFT: The completed mold.

Center Right: Close up view of the end of the mold.



LOWER LEFT: Pouring the mold using Devcon Flexane 80 liquid. The ends of the mold have been dammed with masking tape. All parts of the mold are coated with release agent, of course.