

SNAPSHOT

ELIMINATING EJECTOR-PIN MARKS

EVERY MODELER NEEDS to know how to fill and smooth these annoying-but-necessary blemishes on scale model kits

Ejector-pin marks (aka, knock-out marks) are a small round byproduct of the injection-molding process and something modelers have to deal with regardless of subject. They can be raised or recessed, and you might encounter both kinds on a single part. In recent years, kit makers have gotten better at hiding ejector-pin marks in inconspicuous places, but, eventually, you'll need to remove some. Knowing how to remove and fill ejector-pin marks is a necessary skill for building your best scale models.

By Kenneth Childres



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The first and (usually) easiest to deal with are raised ejector-pin marks. They can be faint or quite prominent; these two are what you can normally expect.



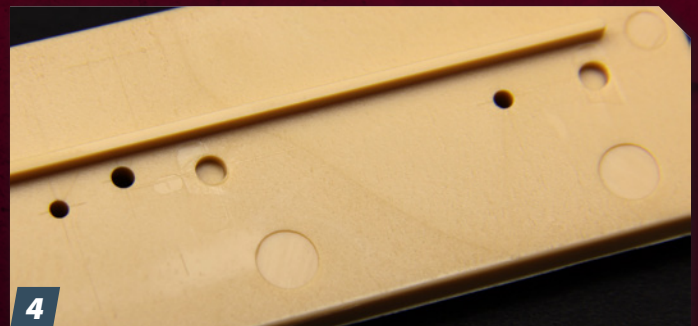
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To remove the marks, start with a flat modeling file. Because it's rigid, the flat file allows you to keep the surface true and even. Remember to hold the file flat and apply even pressure. When the mark is gone, finish with a fine-grit sanding stick.



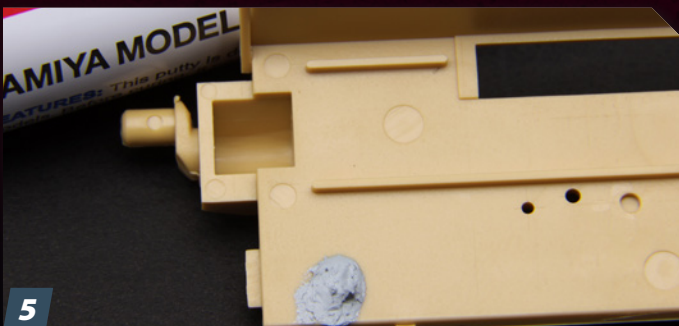
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All gone! Raised marks are typically the easiest to remove unless they're surrounded by detail. If the work area is tight, a flat chisel blade in a hobby knife can be used to carefully scrape the raised disk down rather than a file. Just be careful not to gouge the plastic.



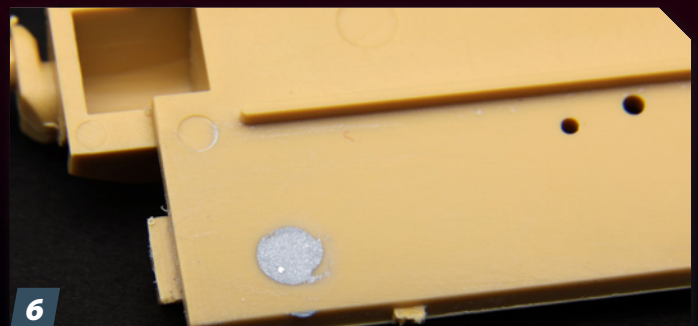
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Recessed knock-out marks such as these can be dealt with in several ways.



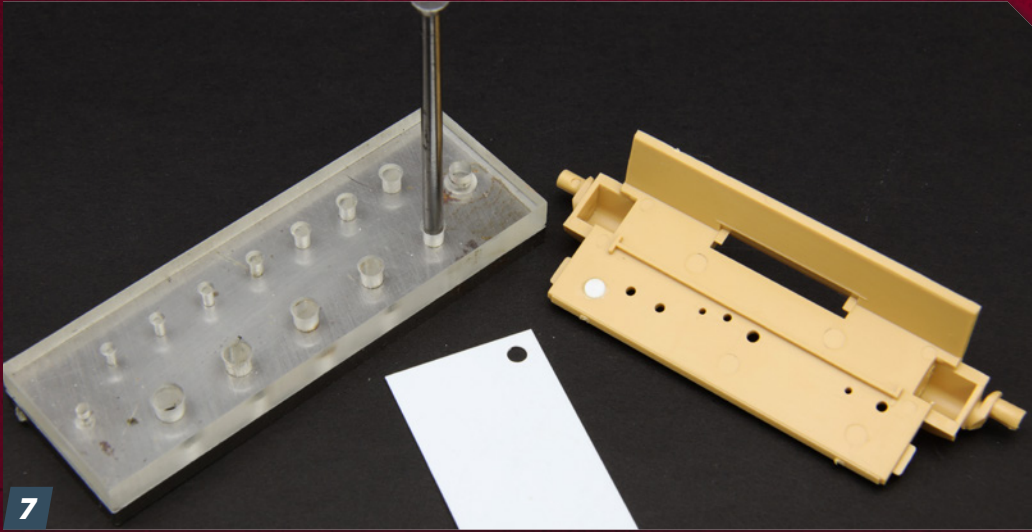
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First up: filling the recessed mark with putty. This method works best on relatively shallow ejector-pin marks. Currently my favorite brand of putty is Tamiya Basic Type (No. 87053). It sands easily and feathers nicely. Apply with a sculpting paddle, toothpick, or scrap plastic.

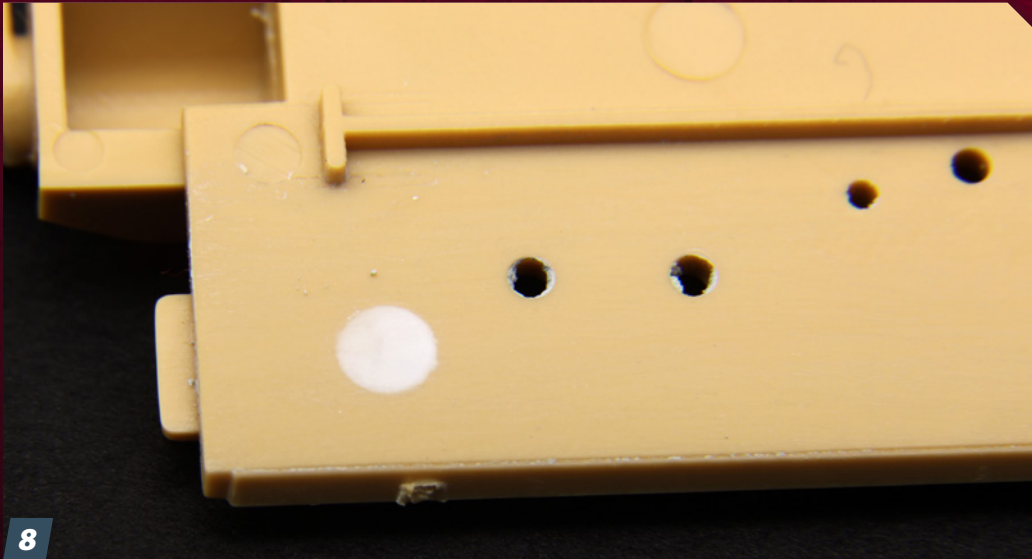


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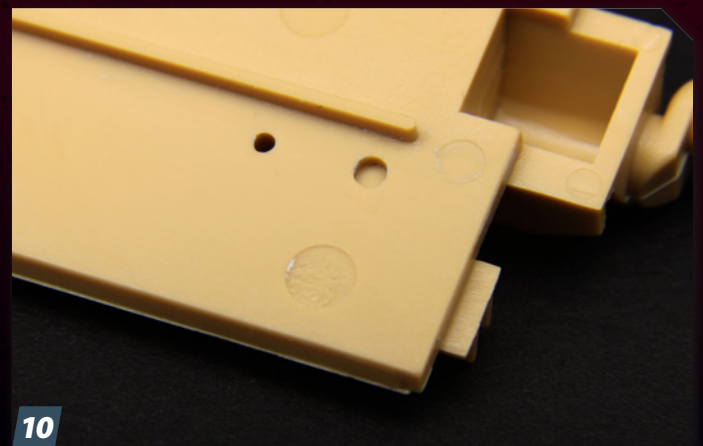
Putty sands easily. I typically use water on my sanding stick to help keep down dust. Also, in my experience, wet sanding seems to speed the process and provides a smoother finish to the putty.



Another method to fill recessed ejector-pin marks is to punch out an appropriately sized disc from styrene sheet and glue it into the recess. This option works well for deep knock-out marks. The only special tool needed is a punch-and-die set. Just insert the disc into the mark and cement in place.



Often, using a plastic disc to fill an ejector-pin mark needs little or no putty to finish, though you'll still probably have to sand it smooth. In the end, it leaves a clean and structurally sound filler.



Lastly, you can fill knock-out marks with superglue. I like to use a thick, gel-type superglue combined with an accelerator for fast and rock-hard filler.

The advantage to using superglue is it provides a fast and smooth finish once sanded. Use this method if you plan to paint a natural-metal finish because it can be polished as smooth as the plastic (porous filler putty can show up under such paint). **FSM**