

Making Custom Paint Scrapers

by John Leeke



Using custom-made, curved scrapers to remove paint from moldings will cause much less damage to the wood underneath than ordinary scrapers or putty knives. And, it is easy to modify off-the-shelf scrapers into the exact profiles needed. You can even consolidate all the curves and profiles of a particular molding onto one blade, which will save time by eliminating the need to change scraper heads.

Shop for molding scrapers with a variety of blade shapes. Some scraper sets have several heads that are mounted on the same handle (see Figure 1). Others come with a handle for each profile. I prefer the blades that attach with a carriage bolt through the shaft and handle. That kind does not require a tool to change the blades. The other kind of scraper I've used holds the blade in place with a washer and hex nut, which requires a wrench for blade changes.

Once you have the basic scraper set, you can shape custom profiles. I have about 50 now. After you learn to make scrapers, you may want to salvage steel from old saws instead of customizing store-bought scrapers.

Scraper Basics

The typical scraper has a stiff 1/16- to 1/8-inch-thick blade. I sharpen my scrapers with a single bevel forming a cutting edge along one face. Usually it's a 60- to 70-degree angle, depending on how hard the paint is and how much working room is available.

I use this angle range because it gives me the most control over the amount of paint removed at one time (see Figure 2). I start with the handle nearly parallel to the molding and cut into the softened paint very aggressively. If I keep the scraper at the same angle, it will eventually gouge the wood. Instead, I raise the handle to bring the

heel of the bevel closer to the wood, which keeps the leading edge from gouging. You can gauge the depth of the cut by the height of the handle. Hold the handle low for fast removal of heavy buildup and high for final cleanup.

The 30- to 40-degree angle typically ground on blades by manufacturers is too acute to permit control over the depth of cut. Those scrapers are more likely to damage the wood. Edges ground at that angle also do not hold up to the abrasive pigments in the paint as long as more obtuse angles.

Not all of the edges of the scraper are sharpened to cut. Some are rounded off. They rub against the wood, guiding the blade without damaging the wood. I call these "safe edges..."

Scraper Design

Ideally, each edge of the scraper will have a different contour. That way, you can limit the need to switch tools. Most moldings require at least two edges, and you can easily combine two or three edges on one blade (see Figure 3).

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Two additional features help elimi-

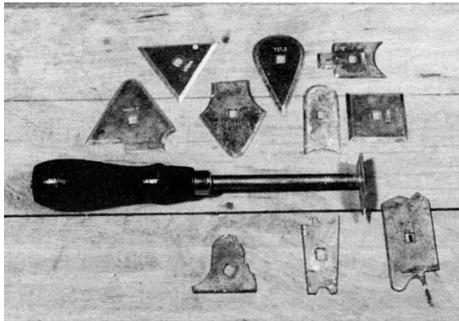


Figure 1. Above the scraper handle are off-the-shelf profiles. Those below the handle were custom made.

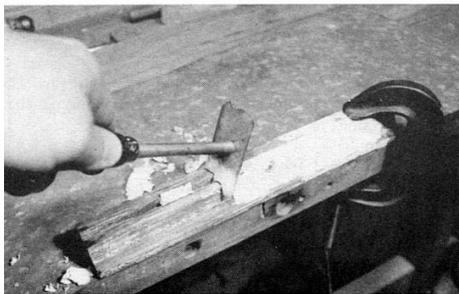


Figure 2. Lowering and raising the handle controls the cutting edge of the blade.

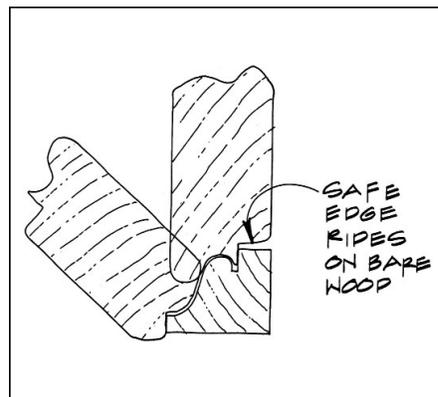


Figure 3. A combination of sharp cutting edges and rounded "safe" edges reduces the danger of gouging wood that has already been scraped clean.

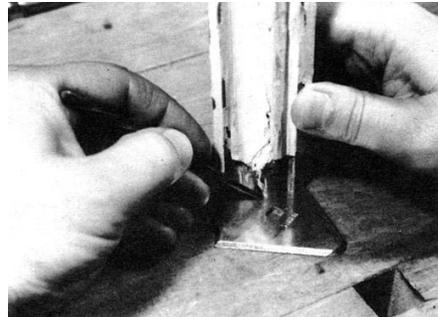


Figure 4. Scribe the shape of the molding onto the blade. Remove the paint from the end of the bevel so you get the true profile that is not distorted by paint buildup.

nate the need to pick up another scraper. I usually add a straight edge to each blade for scraping the flat surfaces found on most moldings. I'll also add a convex edge with a curve that is somewhat tighter than the tightest curve in the profile. This makes it easy to dig paint out of depressions and nail holes.

Making Blades

For steel to make blades, I started out reshaping the blades that came with a set I found at my local paint dealer. You could look for Molding Scraper #1240, which has a handle with five blades (Embee Corp., Springfield, OH 45501), or try Properp Molding Scraper MS-200, a handle with one blade (NAC Industries, Inc., P.O. Box 19757, Portland, OR 97219).

I used these scrapers when I started modifying blades. Now I use steel from old saw blades. An old two-man cross-cut saw provides steel that is soft enough to grind and file easily, yet tough enough to hold an edge longer than the modern blade sets.

Follow this three-step process to make blades.

Trace the profile onto a blade. Cut the molding off at 90 degrees and remove paint near the end. Then use a steel scribe to scratch the profile onto the blade (see Figure 4).

Grind away the excess metal. Use a bench grinder or portable hand-held grinder. Thin stones with rounded edges help get into tight concave curves. Cool the metal frequently in a cup of water so heat buildup doesn't draw the temper or soften the metal.

If I'm making several blades at once, I set up my band saw with a metal-cutting blade to remove excess metal quickly. Using the grinder, I take away material right up to the line, occasionally laying the blade against the molding to check for a good fit.

When the shape is right, add the bevel, and round off safe edges with a file. I use a half-round, metal-cutting mill file for most of the edges. But for sharp concave curves, I use a rat-tail or chain-saw file.

Test the blade. By scraping some

paint off the molding, I see where improvement can be made. I tune up the blade for best performance by sharpening and adjusting the angle of the bevel with a file. Then I polish the safe edges with very fine sandpaper.

I've found that I can usually recover the hour or two it takes to make a blade when there is more than 20 feet of molding to strip. A set that includes a handle and five or more blades suitable for reshaping will run you \$15 to \$20, and when you have a lot of molding to strip, that's not much money.

Using the Scraper

Using the scraper correctly is just as important as cutting an accurate profile. On cross-grained wood or curved moldings, the grain rises to the surface or dips down into it. Scraping against the grain can pull it up, leaving a rough surface—like petting a cat against the nap of its fur.

Scrape with the rising grain. To do this, you may need an additional scraper that is a mirror image of your original, so you can scrape in both directions.

Keep the bevel flat and the edge sharp to retain control of the cut and improve the quality of work. Sharpen often with a flat file on convex edges and rounded file on concave edges.

Keep the sharpening files near the scraper set. I will touch up a scraper every half hour. Working with sharp scrapers gives you maximum productivity.

Removing heavy paint buildup down to bare wood is tedious work, but worth it considering the better performance of the new paint and the original look of crisp clean lines and shadows. After all, the purpose of paint removal and recoating is to protect the wood underneath. ■

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