Photography: Brad Ocock

Words: Brad Ocock

Plastic Polishing
01 Four-hundred grit on a random orbital sander.
02 Five-hundred grit on a dual-action sander.
03 Eastwood's Blue Compound on a string buffer at 1,800 rpm—keep it moving, don't be too aggressive and don't let the plastic get hot.
04 Finish it with a final polishing using Iverson's Metalsome for Plastic.

PLASTIC FANTASTIC

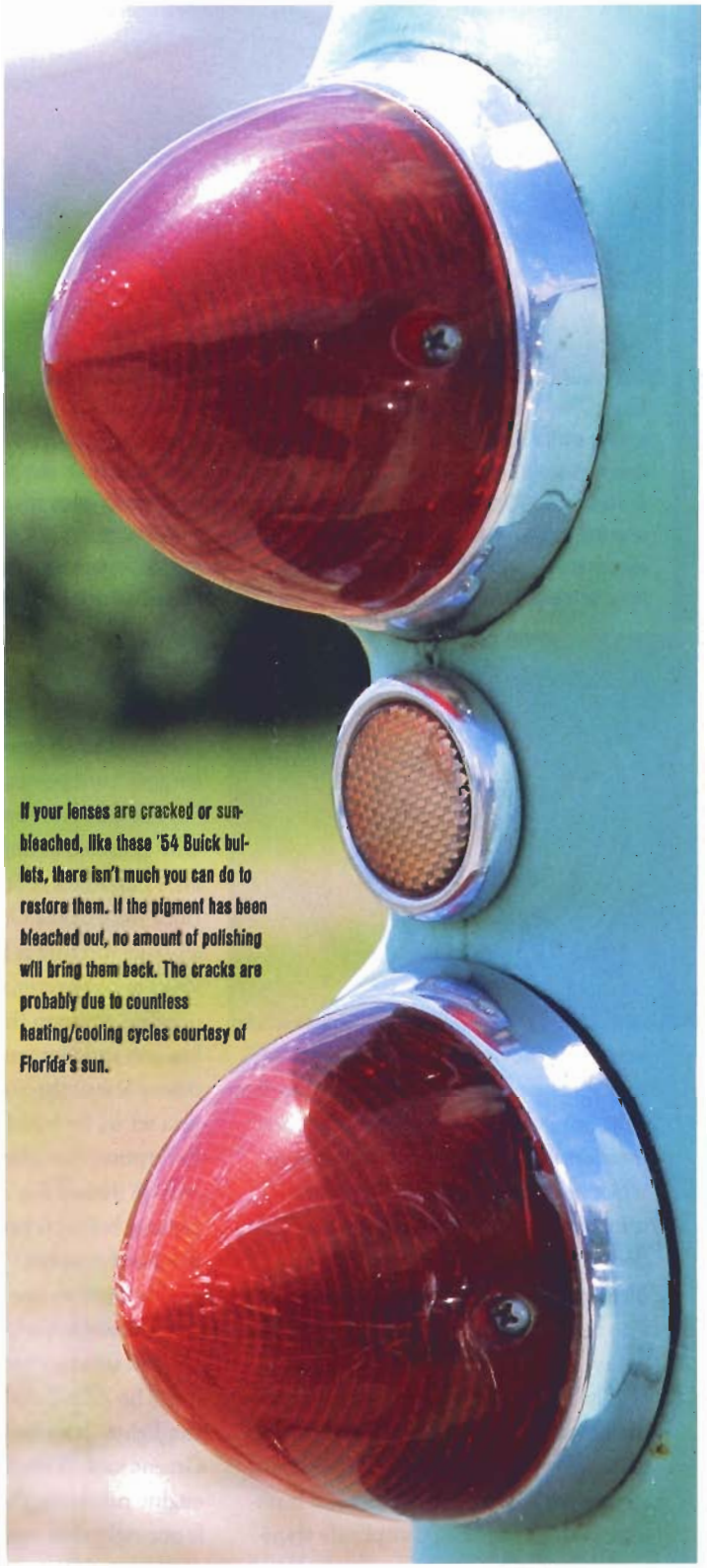
How to Restore Plastic Lenses

PLASTIC TRIM PIECES USUALLY DON'T FARE WELL AGAINST THE TEST OF TIME—NICKS, CRACKS, CHIPS AND SCRATCHES TEND TO MAKE THEM LOOK THEIR AGE. THANKS TO THE REPRODUCTION MARKET, YOU CAN BUY REPLACEMENT LENSES FOR THE MOST POPULAR MODELS, AND IF YOU'RE A FORD ENTHUSIAST, THANKS TO DENNIS CARPENTER, YOU CAN GET MANY PIECES FOR COMPARATIVELY UNPOPULAR FORD MODELS, ON ACCOUNT OF HIS ACCESS TO THE ORIGINAL FOMOCO TOOLING. BUT FOR THE GUY REBUILDING A '61 PLYMOUTH OR A '54 PONTIAC, YOU HAVE TO RELY ON USED ORIGINAL PIECES THAT, WELL, USUALLY LOOK THEIR AGE.

The most common problem with vintage plastic lenses is that the surface of the lens is so scratched it has a permanent haze about it, making the lens appear old and dull. And this is to say nothing of the nicks and deep gouges. But if the sun hasn't bleached the pigment out of the plastic, and the lens isn't cracked or chipped, the haze and scratches can be sanded out and the lens made to look new once again.

We recently did a story with Iverson Automotive (952/932-9026) on restoring and polishing stainless steel and aluminum trim (see "Trim Repair," SUPER ROD June '02), and while there, Iverson showed us his method for restoring plastic lenses. Polishing plastic lenses is nothing new, and most who are familiar with it are aware that a string-type buffing wheel and a mild buffing compound are usually used to polish plastic. Often, polishing is the only effort put forth to bring the lenses back, and the results are what you'd expect—not bad, but not good, either. Iverson goes the extra effort of a two-step sanding process, going down to a fresh surface and removing the imperfections, before putting the lenses to the buffing wheel. The result is a lens that looks right at home on a concours restoration. Not bad for pieces that often would otherwise end up in the trash can. SR

Product Profile
Iverson Automotive Dept. SPR, 14704 Karyl Dr., Minnetonka, MN 55345, 952/932-9026, 800/325-0480



If your lenses are cracked or sun-bleached, like these '54 Buick bullets, there isn't much you can do to restore them. If the pigment has been bleached out, no amount of polishing will bring them back. The cracks are probably due to countless heating/cooling cycles courtesy of Florida's sun.

01 The surface of this Olds taillight lens is scratched pretty thoroughly, leaving it with a dull, hazy finish. It's a nice, unbroken piece, but the finish looks worn. 02 George Iverson begins the plastic restoration by thoroughly cleaning the lenses with simple dishwashing detergent and scrubbing with a fine- to medium-stiff brush to get all the dirt and grime out of the recesses and grooves. Occasionally, he'll soak a lens in water overnight to loosen stubborn dirt. 03a-b After the lens is completely clean and dirt-free, Iverson removes the scratches by first sanding with 400-grit paper on a random orbital sander. Then he sands it a second time with 500-grit on a dual-action sander. Don't apply a lot of pressure, and be sure to keep it moving—you don't want to sand in any deep grooves or make an uneven surface. Some finishing or detailing in hard-to-reach areas may also need to be done by hand. When you've finished sanding, the entire surface of the lens will be hazy, but the deep scratches should be gone. 04 Lenses will always have the manufacturer's name or at least a part number molded into the surface. If you want to keep these markings, you'll have to be sure to sand around them, but you could just sand them out completely. That won't pass a concours judge, though, so these Olds lenses kept the name. 05 After all the old scratches are sanded out of the surface, it's on to the buffer. Iverson uses a slower buffing motor (1,800 rpm) with a string buffer and the Eastwood Company's "Blue" polishing compound to remove the fine sanding scratches left by the 500-grit. Be sure to keep the lens moving across the wheel, don't be too aggressive (keeping the pressure somewhat light), and don't let the lens get too hot. Plastic will develop a static electric charge while polishing. Just touch it with a little water if it bothers you. 06 Iverson finishes the polishing with a final layer of his Metalsome for Plastic compound, which gives the lens a protective coating and makes it shine like glass. This lens looks absolutely perfect—much better than just polishing it with rubbing compound and a rag. 07a-c The method works on any plastic lenses, including clear marker lenses. This lens shows some deep gouges in the plastic, and is so scratched it's almost opaque. As they appear here, they wouldn't look good even on a driver. Notice the surface of the plastic as Iverson sands—it's uniformly white, and you can see there is a fair amount of material being removed. After buffing it out, the lens is almost perfect, save for a slight stress crack in the lower right, and some light scratches showing through from the back surface of the lens. After the lens is mounted to the housing, those scratches on the backside will probably disappear (as will the little crack). If not, they should buff out. As shown in the first photo, this lens wouldn't even get a second look if you saw it at the swap meet. The finished product would sell quickly.