

Rear Window Defogger Repair

The rear window defogger has to be the most under-appreciated car accessory. Like its cousin the windshield wiper, it may lay dormant for months before being called upon to do its job. When the time finally comes, the defogger is expected to perform flawlessly and with little fanfare. It's only when it doesn't work that our attention is drawn to this simple electrical device.

Unlike the windshield wiper, the rear window defogger requires very little maintenance to ensure its proper operation. If the owner exercises a reasonable amount of care during glass cleaning, the defogger grid should outlast the rest of the car.

If this were a perfect world, that would be the end of our story. Pets, small children, and sharp objects are also a part of our world, however, and the defogger has little protection against them.

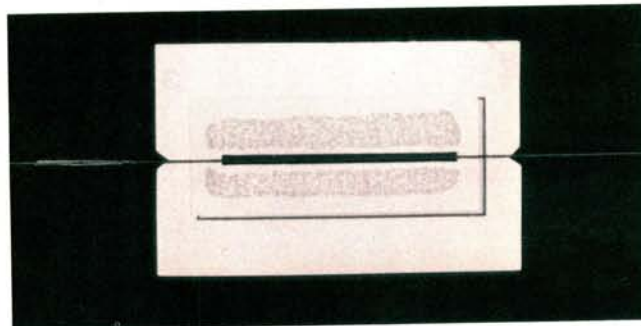
Rear window defoggers on station wagons and hatchbacks are especially vulnerable. How many times have you seen someone put all of his earthly posses-

sions in the trunk and then slam the hatch to make it all fit? The defogger grid on the wagon in our photos had been broken in seven places.

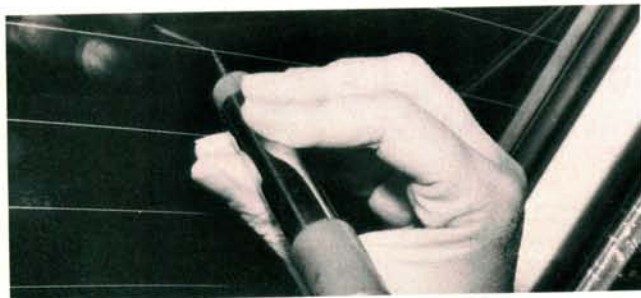
Defogger grid repair kits have previously been available in multiple-use packaging through new car dealers. Single-use kits are now available from auto parts outlets. The kits include an application template, brush, and a metallic paint whose color matches that of most defogger grids. Professional looking results are easily attainable with these kits. It's also a lot cheaper than replacing the glass.

Before you dive head-first into repairing that inoperative defogger, make sure that the grid is the source of the problem. Use the following procedure to test the grid and its supply wiring:

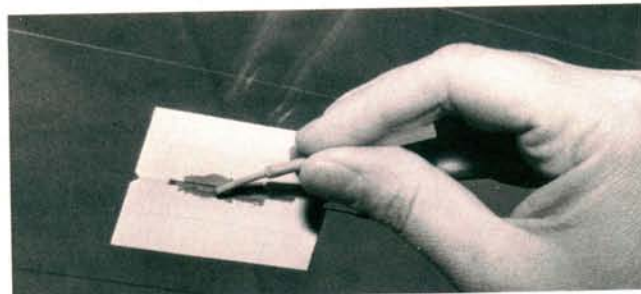
- Turn the defogger on.
- Attach the negative lead wire of a voltmeter or test light to the ground side of the defogger grid. Don't use the body of the car for your ground.
- Starting at the opposite side of the grid, touch each line carefully in several places with the voltmeter's positive lead.
- The meter should read approximately 12 volts at the far side, six volts in the center, and decrease to zero as you approach the ground side.
- A reading of 12 or zero volts at the center of a line indicates a break in that line.



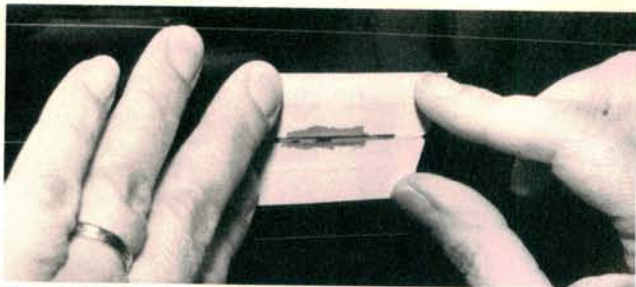
Remove the paper backing from the template, then center it over the break. Use the notches on the sides of the stencil to align it on the grid line. Press it firmly into place. Treat the stencil with care if you have more than one line to repair and must reuse it.



Don't create another problem while you're fixing this one. The grid lines are fragile so use care with sharp points. Just a light touch will tell you if you have continuity. Circle the breaks with crayon on the outside of the glass as you find them.



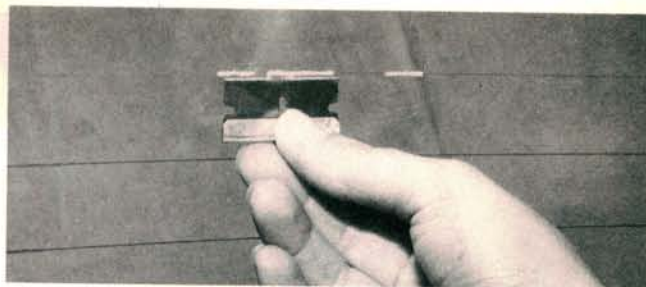
Shake the paint bottle, then apply a light first coat. Let the paint dry for at least a minute or until it's tack free. Apply the paint a total of three times, more if it's a really bad break. Clean the brush with lacquer thinner if you plan to use it again.



The paint should overlap the break by about one-half inch on either side. Wait twenty minutes after the last application, then carefully remove the stencil. Move the stencil to the next break and repeat the procedure.

A few general words of warning and you're on your own:

- The glass should be thoroughly cleaned before work is started. Household glass cleaner works well.
- For best results, ambient temperature should be above 60 degrees. If the car has been outside, bring it inside long enough for the glass to reach this temperature. The paint should be at this temperature also.
- Shake the paint bottle between each application to keep it well-mixed. The heavier metallic particles have a tendency to settle to the bottom of the bottle.



Wait 24 hours after applying the paint before turning the defogger on for the first time. The grid line in the repaired area may be slightly wider than the rest of the line. The dried paint may be carefully trimmed with a razor to make the repair almost undetectable.

- Keep the paint bottle tightly closed between applications. The acetate ingredients in the paint will evaporate quickly.
- Avoid breathing the paint fumes unless you want to end up like Jim on *Taxi*. Apply the paint in a well-ventilated area.

Available from:

Loctite Corp.
Circle No. 200