

# ***Do-it-yourself plastic repair kit by Jaeger Aviation***

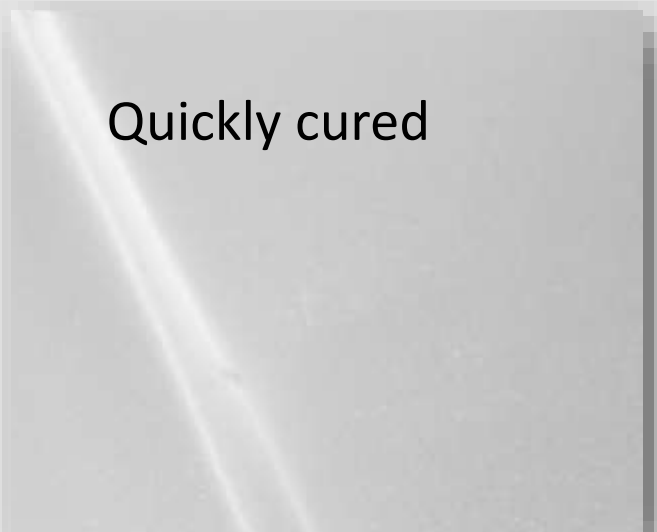
***If your aircraft is adorned by yellowed, cracked and broken window trim, side panels or headliner there is something you can do about it!***

***In the past, upholsters were forced to cover deteriorated plastics, fabricate custom parts or get new ones. Today, there's another choice.***

***Jaeger Aviation offers a simple, inexpensive and effective way to repair plastic. Whatever your airplane, this technique can make a difference.***

***Complete explanation is contained in the pages that follow. You can be proud of your airplane once again for an investment of your time and a very few dollars. Repair one piece or many — the choice is yours.***





***As there is more than one repair technique, review this entire manual before starting.***

Attempts with fiberglass, epoxies, special adhesives and some so-called miracle cures were all disappointing. Fabric covering also has its faults. Though new parts may be an option, cost and difficulty with fitting are issues.

Discovery of an acrylic transfer tape, thin flexible soft aluminum, 3M epoxies and SEM finishes provide quick and practical solutions. Your plastic can have new life.

The series of photos and explanations in this manual detail simple and effective ways to recondition broken and discolored plastics.

Kit materials include:

- ♦ This on-line Illustrated information manual ([jaegeraviation.com](http://jaegeraviation.com))
- ♦ 4 feet of 4-inch wide .016 soft aluminum foil sheeting backed with acrylic transfer tape
- ♦ 3M EZ Sand two part kit
- ♦ 100 color coordinated gray or tan #6 1/2 inch screws
- ♦ 7/64th bit to create proper size openings for #6 screws (not included)
- ♦ Plastic patch material for large blemishes and stir sticks for EZ Sand
- ♦ Optional silicone rubber edge trim and adhesive to cover unfinished and repaired edges is not included (\$1.50 per foot)

**Kit price: \$139 plus shipping**

## Additional required materials and suggested tools:

- ◆ Hand tools for removal of interior plastics
- ◆ Cleaning supplies, Scotch Brite scrubbing pad, SEM 38353 Plastic Prep aerosol to assure bonding of finishes, soft clean cloths and masking materials
- ◆ Dremel tool with grinding, cutting and brushing bits for profiling plastic holes, cracks and blemishes as well as rough finishing of cured EZ Sand
- ◆ Scissors for trimming patch material
- ◆ Detail sander with coarse sanding papers
- ◆ Coarse hand sandpaper



- ◆ SEM 38353 Plastic Prep
- ◆ Bulldog or equivalent adhesion promoter
- ◆ Rustoleum light colored texture finish
- ◆ Etching primer for visible soft aluminum edges
- ◆ SEM Color Coat aerosol color finishes
- ◆ U-Pol or equivalent UV resistant clear protective coating
- ◆ SEM 13023 low luster clear protective top coat finish for desired look

Remove plastics from your aircraft. Eyeball vent headliners containing wiring, vents and lights may best be reconditioned in place.



With eyeball vent headliner in place, apply plastic prep aerosol and scrub with Scotch Brite pad. Wipe with soft cloth and mask as needed. Before applying aerosol finishes, repair blemishes as described in the following pages.



Like new look without removing wires, vents, hoses or consulting a mechanic. Let's visit about replacing speaker cover fabric.



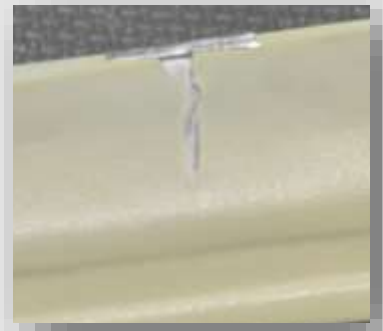
Contact Jaeger Aviation to review options for replacing louver vents on early models

## *Plastic repair procedures*



After scrub cleaning, profile every blemish with a Dremel narrow wire brush. For deep screw holes, use a pointed grinding stone. Keep edge openings to a minimum. Scuff underside with coarse sandpaper and clean with Plastic Prep. For cracks or openings extending to an edge, cut acrylic patches with scissors to cover the area extending 1/2 inch or more beyond the blemish with length to slightly wrap to the front side. Roll and firmly press the patch in place eliminating any air bubbles. Bend any overlapping edge 90 degrees and trim to approximate 3/16th inch. With pliers, complete crimping edges pressing tight against the finish side. The resultant surface void can be filled with EZ Sand and visible patch will be covered with a decorative silicone rubber edge trim.





Fill surface voids with EZ Sand. Once cured, profile with slow turning Dremel pointed grinding stone and sandpaper.

For minor blemishes or those in molded areas, repair can be simplified by loose fitting masking on the front side and applying EZ Sand from the back. Follow manufacturer's instructions. Finish with slow turning Dremel pointed grinding stone and sandpaper.



**Cracks extending from screw holes do not need to happen. Use of a larger #6 screw tightened to touch, not press will make a difference.**

Repaired areas will no longer have the texture of original plastics and color is needed. After Plastic Prep cleaning and use of metal primer over any visible aluminum patch, apply Bulldog or equivalent adhesion promoter. Return a textured surface with a light colored Rustoleum aerosol texture spray. Following brief curing time, apply two coats SEM aerosol finish with the color of your choice. Seal your repaired plastics and colored finish with a UV resistant clear coat such as U-Pol. Achieve that desired final look with a SEM low luster clear.







For major repairs or large open edges, filler plastic material provided with the kit may be helpful.

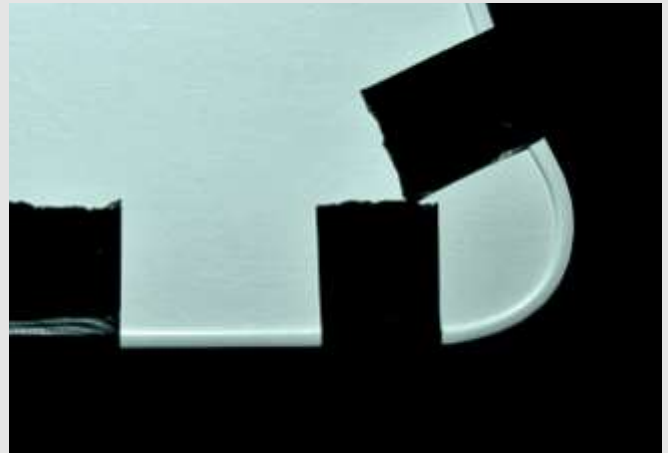


Even an opening as large as an ashtray can be remarkably removed.



Window trim and other unfinished edges can be enhanced by installing optional color coordinated silicone rubber trim. Available in tan (shown) or light gray.

Film of silicone adhesive is applied to only the back side. Then hold temporarily with duct tape for a brief cure time.



Slight stretch eliminates buckling and trimming the back side enables a perfectly flush fit for tight inside or outside corners.

Silicone rubber edging works well in numerous areas like this joint.



For warped plastics or large blemishes, contact Jaeger Aviation for additional procedure and material suggestions.

## Common errors:

- ◆ Not following plastic repair manual suggestions
- ◆ Inadequate initial inspection and profiling — may lead to disappointing discovery of additional cracks when finishing
- ◆ Many screw holes can be permanently filled.
- ◆ Incomplete blending of 3M EZ Sand will not cure
- ◆ ***Reoccurring open edge crack due to too short length of soft aluminum or not wrapping patch to the finish side.***
- ◆ Incomplete sanding of EZ Sand may result in visible edges after finishing. Additional light coats of Rustoleum texture aerosol can enhance the finished look.
- ◆ Need for excess sanding — apply the minimum amount of EZ Sand. Filling a small hole requires very little. Any remaining void can be filled again.
- ◆ Visible depression at repair site - caused by excess hand sanding rather than with a flat tool.
- ◆ Less than 1 full minute of vigorous shaking Color Coat aerosol can result in an uneven finished color.
- ◆ Cracks protruding from screw holes are created. Do not reinstall screws in repaired areas or force into position by overtightening. #6 screws will hold without pressing.

No need for special skill, expensive tools or parts: just a desire to make your Mooney look better. You can do-it-yourself.

For the answer to your questions or to order a kit, contact:

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Website: [www.jaegeraviation.com](http://www.jaegeraviation.com)

Indicate tan or gray color choice for your screw set.