

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

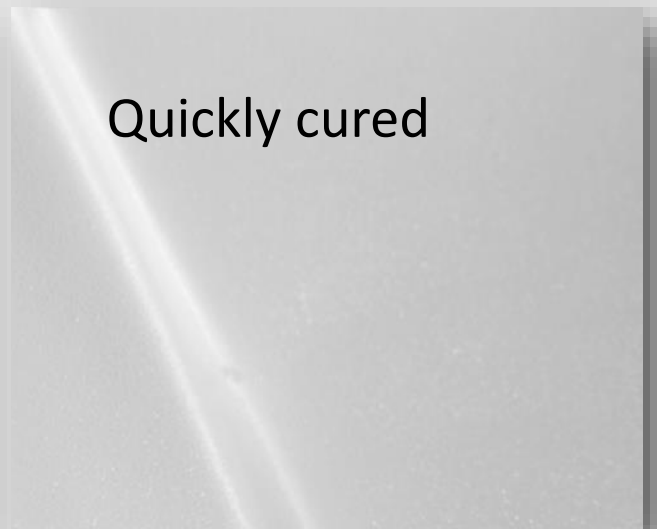
***If your aircraft is adorned by yellowed, cracked and broken window trim, side panels or headliner there is something you can do about it!***

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

***Spatial Interior for Mooney offers a simple, inexpensive and effective way to repair plastic. Whatever your airplane, this technique will 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, PlasticWeld two-part putty, 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))
- ♦ 10 1-foot lengths of 2 inch wide .016 soft aluminum foil sheeting backed with acrylic transfer tape
- ♦ 2 tubes JBWeld Plasticweld
- ♦ 100 color coordinated gray or tan #6 1/2 inch screws
- ♦ 7/64th bit to create proper size openings for #6 screws
- ♦ Plastic patch material

**Kit price: \$119 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 Plastic-Weld
- ♦ Scissors for trimming patch material and wallpaper seam roller for maximum acrylic tape adhesion
- ♦ Detail sander and coarse sanding papers.



- ♦ 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 repaired areas

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.



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 cutting or grinding tool keeping edge openings to a minimum. Scuff underside with coarse sandpaper and clean with Plastic Prep. Apply acrylic patches to totally cover the blemish while wrapping slightly to the front side.



Soft aluminum .016 foil and acrylic transfer tape very effectively cover typical blemishes from pulled through screws, aging and heat damaged plastics. Cut with a scissors, this easily formed material precisely profiles to the mating surface. Turn the page for edge repair suggestions.



Soft aluminum acrylic tape patches form easily to cover blemishes. Wrapping around edges adds the strength to eliminate cracking again. Filled with PlasticWeld, texture and colors creates a like-new look. **Typical cracks extending from screw holes do not need to happen. Use of a larger #6 screw can be tightened to touch, not press.**



Even molded areas like this door panel can be repaired in the same manner



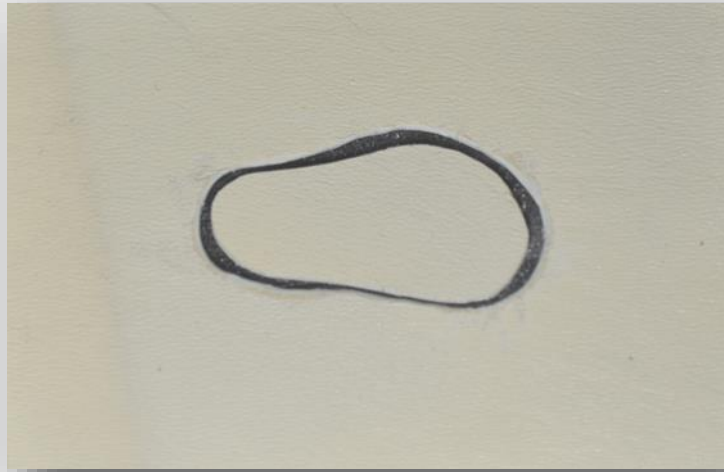
PlasticWeld when sanded smooth prepares blemishes to receive adhesion promoter, texture, color and protective finishes. Use minimal amount and thoroughly mix two-part epoxy massaging with moisture to keep from sticking to your fingers until achieving a consistent color.

Once applied and cured, excess material can be profiled with a slowly turning Dremel pointed grinding stone. Smooth finish can be completed by electric or hand sanding. Adhesion promoter will prepare the surface to receive finishes.

Time for Rust-Oleum light colored aerosol texture, color and protective finishes.







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



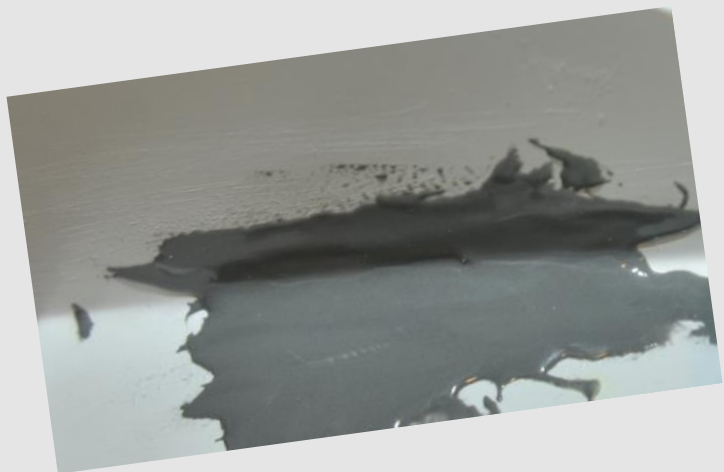
Even an opening as large as an ashtray can be remarkably removed.



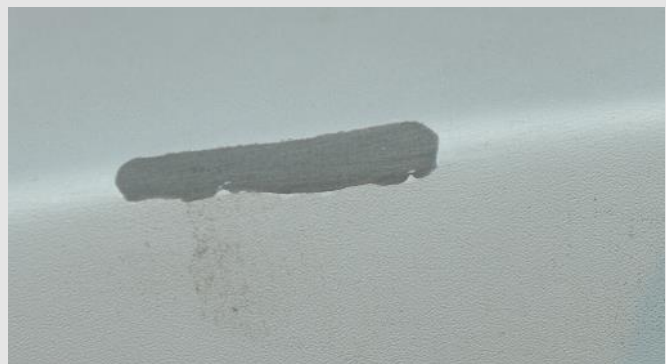
For a durable final finish, after colors have cured, apply recommended coats of U-Pol or equivalent UV protective sealer as directed by manufacturer. For lesser shine in repaired areas, apply final aerosol coating of Color Coat low luster clear.



Cracks in molded parts may not provide adequate space to secure soft aluminum patches. In these cases a 3M two-part epoxy enables repairing from the back side. Apply masking tape on the finish side creating the desired shape. Apply the mixed epoxy on the back side and allow to cure.



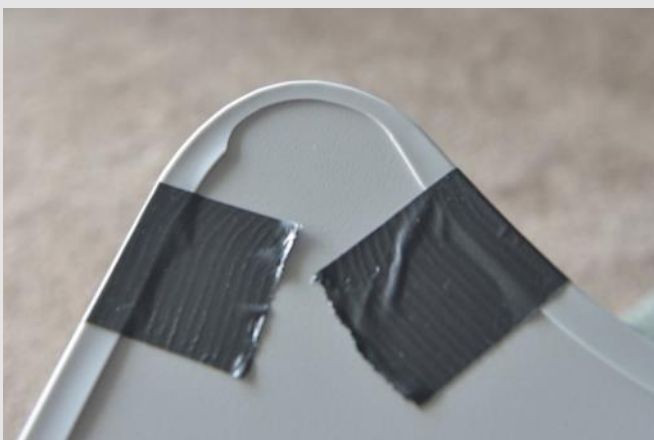
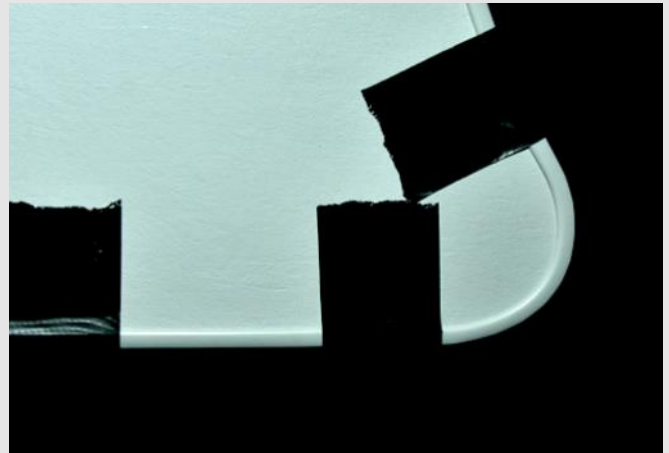
Removing masking tape reveals a flexible patch ready to receive finishes





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.



Stretching and trimming the back side enables a perfectly flush fit for tight inside and 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 filled and not used again.
- ♦ Inadequate blending of JBWeld — may not bond or fully cure
- ♦ ***Reoccurring open edge crack due to too short length of soft aluminum or not wrapping patch to the finish side.***
- ♦ Incomplete sanding of Plasticweld — 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 PlasticWeld. Filling a small hole requires very little
- ♦ Visible depression at repair site - caused by sanding with something other than a flat surface
- ♦ 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:

Jaeger Aviation:

Phone: 320-444-3042

Email: [bruce@jaegeraviation.com](mailto:bruce@jaegeraviation.com)

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

Indicate tan or gray color choice for your screw set.