

Do-it-yourself plastic repair kit by Jaeger Aviation

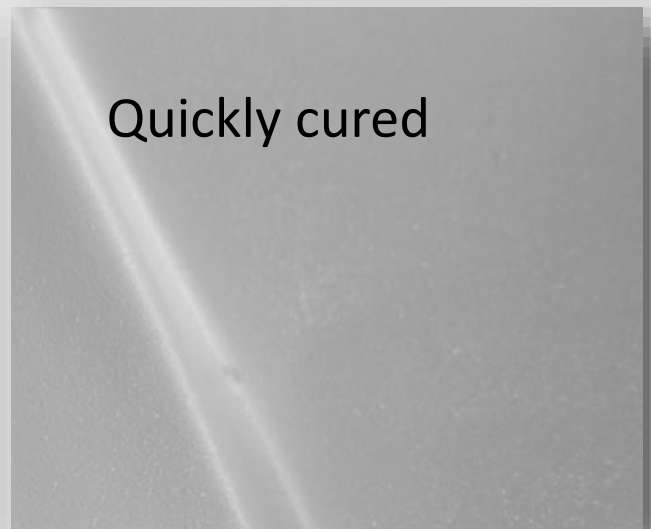
If your aircraft is adorned by yellowed, cracked and broken window trim, side panels or headliner there is something you can do about it!

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 foil, JBWeld two-part putty, paintable caulk and SEM finishes provide quick and practical solutions. More than just a repair, an entire area is reinforced.

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)
- ♦ 8 1-foot lengths of 2 inch wide .016 soft aluminum foil sheeting backed with acrylic transfer tape
- ♦ 12 square inch plastic filler
- ♦ 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

Kit price: \$99 plus shipping

Additional needed 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 and soft clean cloths
- ◆ Dremel tool with grinding, cutting and brushing bits for profiling plastic holes, cracks and blemishes
- ◆ Scissors for trimming patch material and wallpaper seam roller for maximum acrylic tape adhesion
- ◆ Electric detail sander with medium grit paper
- ◆ Coarse sandpaper and masking tape



- ◆ Bulldog or equivalent adhesion promoter
- ◆ DAP Dynaflex paintable caulking for flexing edge repair.
- ◆ Dupli-Color Truck Bed aerosol texture coating
- ◆ SEM Color Coat aerosol primer and color finishes
- ◆ Jammin Clear or equivalent protective clear coat
- ◆ SEM 13023 low luster clear protective top coat finish

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



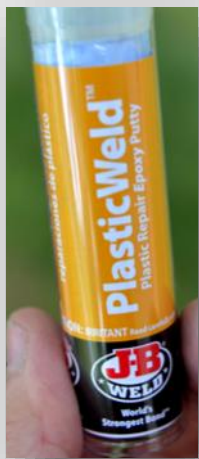
After scrub cleaning, profile every blemish with a Dremel pointed grinding bit keeping edge openings to a minimum. Acrylic patch repair creates a void to be filled. Prepare underside by scuffing with coarse sandpaper and cleaning with plastic prep.



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. Round corners for better adhesion.



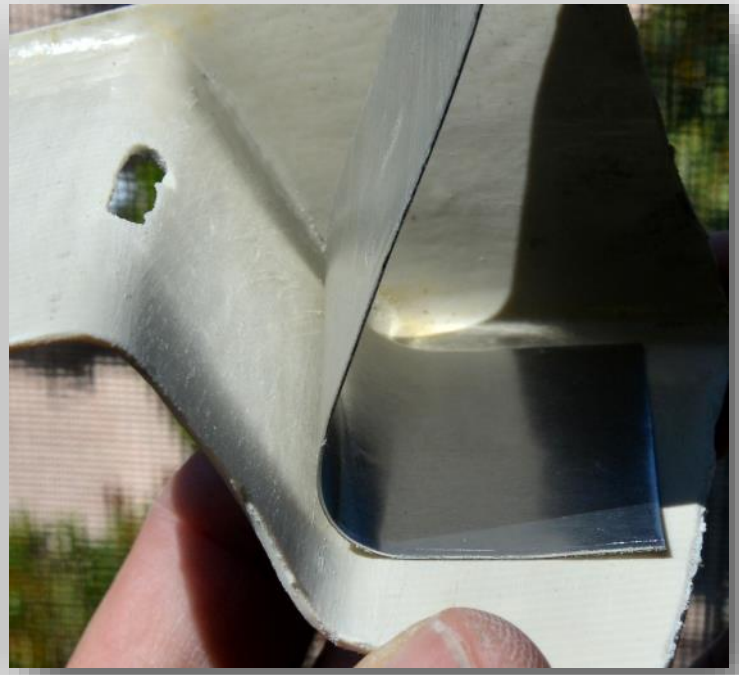
Blemishes totally removed with Dremel grinding bit keep openings to a minimum. Backside sanded and prepped, foil patches quickly cover blemishes.



PlasticWeld fills voids and when sanded smooth is ready 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, sand until all PlasticWeld is removed from the original surface.



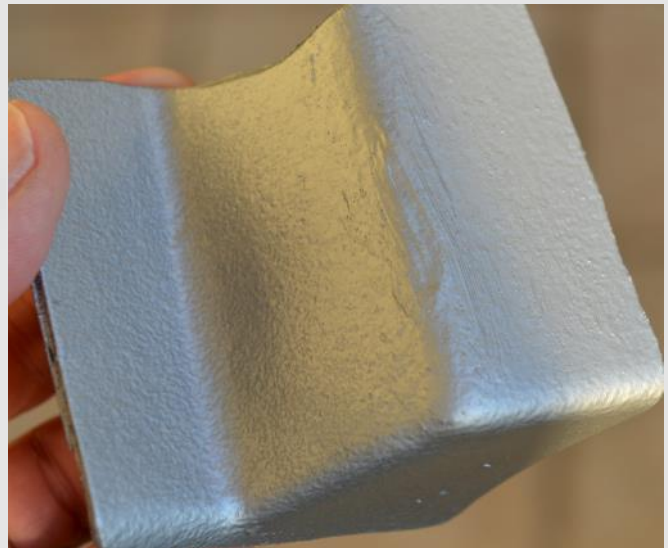
Truck bed aerosol texture applied to repairs further enhances the area. Multiple coats will assist in filling any remaining blemishes. Coat with primer to assure consistent luster



Soft aluminum acrylic tape patch forms easily to precisely cover blemishes. PlasticWeld totally fills voids and when sanded leaves a near invisible repair.



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



Disappointing reoccurring cracks due to flexing during install, can be eliminated by use of a paintable caulk ,such as DAP Dynaflex 230. Applied directly from the tube and profiled with stiff shortened bristles from a 1 inch paint brush, provides a finished look. Complete the job with primer, aerosol truck bed, colors and protective top coats.

The accompanying photo shows a difficult to repair crack filled with Dynaflex 230 caulk.



Cured Plasticweld can be finished with a detail sander. Fine sanding by hand is also a good technique. A Dremel wire wheel at low RPM works well in a depressed area.



To assure cracks do not return, make certain plastics are not forced into place. Rather trim the curved edge of a door panel or simply eliminate unneeded screws. Baggage door liner problems can be resolved by fitting a new one.

Typical cracks extending from screw holes do not need to happen. Use of a larger #6 screw holds very well without tightening fully. ***Do not force any plastic into place.***

Clean sanded areas with SEM plastic prep aerosol and wipe with soft cloth. Apply two light coats of Bulldog or equivalent adhesion promoter. Allow curing time according to manufacturer instructions.



Sanded areas will require texture. Vigorously shake the Tri-Color Truck Bed texture aerosol for 1 full minute. Amount of needed texture depends on smoothness of sanded area. Practice on a test surface will help. When comfortable with your technique, complete one or more texture applications. For pleasing results, the blemish must be no longer visible before applying finish. color. Use of a primer will provide a consistent finish.



Apply Transtar primer or equivalent to assure a consistent luster finish.



Apply minimum of two finish color coats.

For a durable final finish, apply recommended coats of Jammin Clear protective sealer or equivalent as directed by manufacturer. For lesser shine in repaired areas, apply final aerosol coating of Color Coat low luster clear.



Window trim and other unfinished edges can be enhanced by installing optional color coordinated silicone rubber trim. Available

in tan (shown) or light gray



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 after repair
- ◆ Inadequate blending of JBWeld — may not bond or fully cure
- ◆ Failure to select a caulk for an edge repair that may require flexing leading to a disappointing reoccurring crack.
- ◆ Incomplete sanding of Plasticweld — may result in visible edges after finishing. Additional light coats of truck bed aerosol will enhance the finished look.
- ◆ Need for excess sanding — apply the minimum amount of JBWeld. 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.
- ◆ Inconsistent final finish luster caused by failure to apply primer.
- ◆ Cracks protruding from screw holes are created. Do not reinstall screws in repaired areas or force into position by overtightening. #6 screws will gently hold in place.

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

Website: www.jaegeraviation.com

Provide tan or gray color choice for your screw set.