

Plast-aid Plastic Repair Kit

INNOVATION
OF THE MONTH

MOST MOTORCYCLES HAVE a lot of expensive plastic parts with fragile mounting tabs that are very easy to break. But nothing in my extensive glue collection ever gave me a satisfactory repair. The part would typically re-break in the same spot, and worse, the edges would no longer have a clean fracture but be coated with old glue!

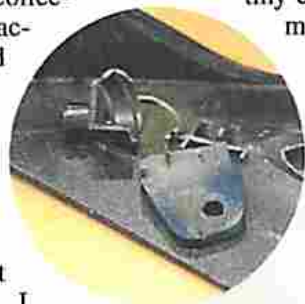
At last, there's a solution! Plast-aid® fixes just about any broken plastic. I learned about this stuff from Stu Oltman, MCN's Downtime Files editor. One day in Stu's garage we were reinstalling the fairing on my bike when I discovered that two of its mounts were completely broken.

Without hesitation, Stu pulled the Plast-aid kit from his toolbox. He poured some of the white sand-like powder into a special cup and then added a bit of liquid catalyst and stirred. In a few minutes, he had something the consistency of toothpaste. While I held the pieces in place, he smeared the paste around the broken area. Within 15 minutes I was putting the fairing back on the bike, marveling at how solidly it attached.

I ordered some the next day and have used it nearly a dozen times since. My shop light tipped over and completely broke the hinge holding one of the folding lights. I attached the broken hinge piece using Plast-aid, and formed a ridge over the break. It's far sturdier now than before it broke. I also used it to fix the 40-year-old visors on a car

I'm restoring, as well as a cracked light fixture on its dash. It's amazing!

The product comes from Plast-aid Corporation in Estes Park, CO. I love tiny companies like this. They make just one thing—and nobody else makes anything like it. It began in 1996, when Randy



Amen and his partner started experimenting with the stuff used by orthopedic surgeons to bind new joints to old bones, then chemically modified its properties to create the perfect material for fixing a large variety of jobs. They test marketed it in Colorado hardware and specialty stores. Soon a few regional and national dealers started to carry it. Today, you can even buy it on Amazon.com, although I prefer to buy it direct from their website, as it allows the small company to keep all the profit. The 1.5 oz. kit is \$9.95 and 6 oz. is \$19.95. I recommend the larger size. Once you try it, you'll find more and more uses for it.

The secret behind Plast-aid's strength is that it bonds both chemically and mechanically. Chemically, monomers in the Plast-aid create molecular bonds

with compatible plastics to literally become part of the material to which they're applied—they never separate. Plast-aid is chemically compatible with PVC (polyvinyl chloride), making it ideal for plumbing repairs; ABS (used in the majority of motorcycle bodywork), acrylic, styrene, and many others. To test compatibility, just put a drop or two of the Plast-aid catalyst liquid on the piece you want to glue. If it gets sticky, it's compatible.

If it's not chemically compatible, it can still work mechanically. Similar to a very good epoxy, Plast-aid adheres to any rough surfaces, seeping into the microscopic crevices, nooks and crannies and binding them together.

The key to Plast-aid's versatility is the curing process. Once you combine the sand-like powder and the liquid, the thickening process begins. At first it's like thin glue, ideal for molding super hard plastic parts. If you wait a few minutes, you have a putty-like adhesive. A bit longer and it's moldable like clay, before it hardens into a durable, waterproof plastic. Along the way, you can mix in paint to change its color.

Plast-aid contains methyl methacrylate and has quite a smell, so use it in a well-ventilated area. Don't worry if you get it on your hands as it falls off once it's dry. My only very minor complaint is with the bottle: it's glass, with a fairly wide lip, and the liquid does not pour out precisely. —Steve Larsen

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