## HOW TO REPARE A DENT



Sometimes your car will receive a dent or gouge that's too small to justify the expense of a full body shop repair but too big to simply ignore. You can cut your repair costs by doing the body work yourself.

Body filler used correctly can result in a well done repair. There's not a body shop out there that doesn't use a little body filler. In the old days, body filler was made of lead, but the resulting loss of brain cells and reproductive acuity sent the use of this material packing. Aside from a very few holdovers, body filler is a plastic resin that is sandable, and adheres well to metal, and lasts a long time.

We'll show you how to properly use body filler to repair a dent. The main ingredient you'll need is patience. A rushed body repair never ends well. Take your time and you'll have great results.

#### What You'll Need:

- sandpaper 150 grit, 220 grit, 400 grit wet/dry
- body filler (with hardener, usually included)
- glazing and spot putty
- rigid plastic spreader
- flexible plastic spreader
- automotive primer
- patience, patience, patience!

## **PREPARING THE SURFACE**



Before you can fill your dent, you'll need to remove the paint. Body filler doesn't stick well to paint, so you need to sand it down to bare metal. For this job, you can use a heavier grit sandpaper like a 150-grit. You want to get the paint off fast, and you'll be smoothing things out later anyway.

Even though your dent may be only a couple of inches long, you'll need to remove more paint than that. At least 3 inches beyond the dent is needed (you'll see why later). So you'll be taking at least 6 inches of paint off the car.

If you look at the example pictured, you'll see some small circles on the surface. Sometimes it's a good idea, especially if you are dealing with multiple dents, to mark the location of the damage so you know where to focus your repair easily. You should also note that the pictured body panel has evidence of an old repair on it (the beige colour areas are old body filler).

#### **MIXING THE FILLER**



Body filler is a two-part epoxy that you have to mix yourself. You add the hardener (comes in the tube) to the base filler, which starts a reaction to harden the filler. The filler will harden pretty quickly, allowing for less than 5 minutes of working time. In the case of most brand fillers, the base is gray and the hardener is red, so you aim for a nice pink tone in the mixture. You can mix the hardener on pretty much anything clean. Just remember that it'll be more or less ruined afterward. This batch was mixed on a cardboard sandpaper package. A nifty reusable filler batcher is a plastic takeaway tub. The filler won't stick to plastic, so when you're done you can pop the old filler right out cleanly.

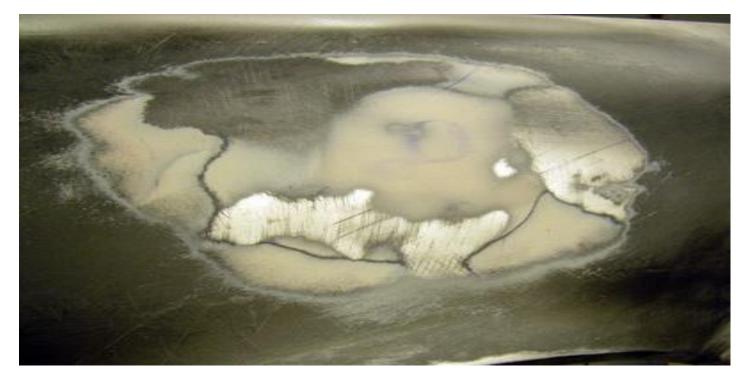
Follow the directions on the filler can to mix the proper amount of hardener with filler. Mix the two using a rigid plastic spreader. Don't forget you have a limited working time once you mix it!



Remember, once you've mixed the filler, you have less than 5 minutes to get it on the damaged area.

Using a flexible plastic spreader, spread filler in an area at least 3 inches outside of the actual damage. You'll need the extra space to properly smooth and feather the hardened filler. Don't worry about being too neat with it. You'll be sanding away any ugliness once the filler hardens.

## SANDING THE FILLER



Once the filler has completely hardened -- the time will vary by temperature, humidity and brand of filler used, check the box -- you're ready to start sanding.

With your sandpaper wrapped around a sanding block (rubber sanding blocks are best and can be purchased in auto shops or b&q ect), start sanding the filler using 150-grit sandpaper. Sand lightly and evenly over the entire surface of the repair with broad circular strokes. Sand past the edge of the filler to create a smooth transition. When the filler is pretty close to smooth, switch to the 220-grit paper and continue until it's even. Take your time!

It's not unusual to miss a spot or realize there are some gaps or pits in your filler. If this is the case, mix a new batch of filler and repeat the process until it's smooth. You'll sand away most of the filler, leaving the dent filled and a smooth transition between metal and filler.

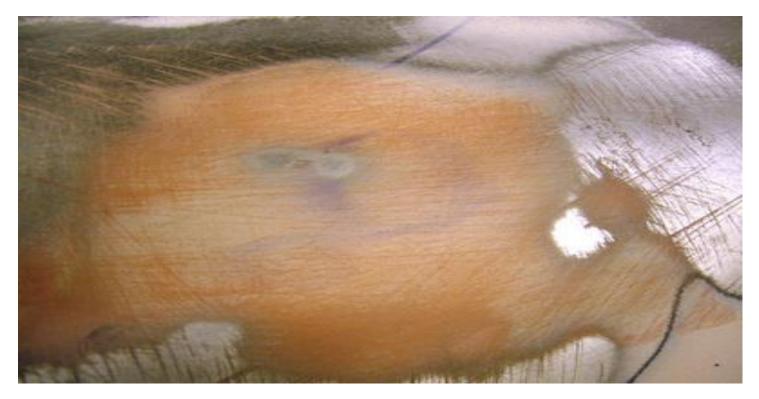
### **GLAZING THE REPAIR**



Spot putty is another version of filler, but much finer and easier to sand. It doesn't need to be mixed and can be applied directly from the tube to the repair. The spot putty fills in any tiny impressions in the filler.

Smooth (or glaze) spot putty across the repair surface with a flexible plastic spreader. It dries faster than the body filler, but be sure you give it enough time before you begin to sand it.

### **MORE SANDING**



Using 400-grit sandpaper, lightly and evenly sand the spot putty away. Sand it all away flat, and you'll be left with only tiny amounts of putty remaining in small scratches and gaps. These may seem minute, but even the smallest flaw will show up in the paint.

# PRIME THE SURFACE



To further prepare and protect your repair, you'll spray the surface with a primer/sealer. Mask off an area around the repair to avoid getting paint on any trim or other non-painted areas (don't forget, you don't want paint on your tires, either). Apply the spray primer in light, even coats. Three light coats are better than one heavy coat.

#### FINAL SANDING



Allow the primer coat to dry, then remove your masking tape and paper. To smooth the repaired area for painting, you'll use your 400 grit wet/dry sandpaper, but this time you're going to wet sand the repair. Fill a spray bottle with clean water and spray the repair area and the sandpaper. If you don't have a spray bottle you can use whatever method you can to keep the paper and repair area wet. Smoothly sand the primer using a straight back and forth motion. When you begin to see the old paint show through the primer, you've gone far enough. If you sand away too much primer and you can see metal again, you'll have to re-prime and re-sand.

#### YOUR NOW READY TO START PAINTING