



WORDS AND PICS BY CHRIS SORGSEPP

# GARAGE HAZE



**S**o, you have the gear and need a crash course in vehicle repair 101? Well, you have come to the right place and we'll do our best to point you in the right direction.

Remember, Australia's top paint and panel beaters have had 20-30 years of experience in the field, so don't expect show-quality results at the first crack of the whip. However, it's not uncommon for the novice backyarder to get more than adequate results with just using the gear with the right technique.

Here we can see some before and after photos from an old VL I picked up for cheap. Not wanting to spend big on a fresh new look, all it took was one weekend and under \$500 worth of gear to get the results seen here. Instead of using a factory Holden white, I opted for the retina-searing straight white tinter.

Not only could I now drive the VL around in public with Police thinking it a junker, but it turned out to be a great weekend in the garage with many learning experiences on the way. Better to practice on the daily first!

Open that garage, turn on the radio and get a few cold ones ready as this is about to get messy.

## SO YOU WANT TO GIVE IT A SHOT? WELCOME TO THE WORLD OF THE DO-IT-YOURSELF PAINT AND PANEL BEATER

### GARAGE SET-UP

Let's face it, the garage is usually a place of all things mechanical: tools lying in pools of oil, half-eaten burgers put down onto bench tops and forgotten about... It's a place of business and is more often than not totally neglected.

It's time to bust out the broom and possibly an industrial-sized skip bin and go in all guns blazing (excuse the pun). It's important to remember that the finished result is very similar to that of the cleanliness found inside a panel shop's spray booth. Dust and dirt is your enemy and it's vital to remove as much of it as possible. Using a degreaser to remove any oil stains on the concrete is a good idea and one that doesn't hurt the hip pocket, or your home's resale value later.

A clean and clear bench makes all the difference when it comes time to mixing paint, and it's imperative that this step is not overlooked. Be sure that your workbench is not made out of plastic or contain any plastic coverings, as thinners and gun wash solvents will

happily eat it away in no time flat. Yes, that also means car keys, radios and mobile phones!

Many at-home painters prefer to cover their garage roof and walls in plastic drop sheets, depending on the actual garage itself. This step is a good move for older-style garages with wooden beams and fibro walls that tend to harbour truckloads of filth and dust.

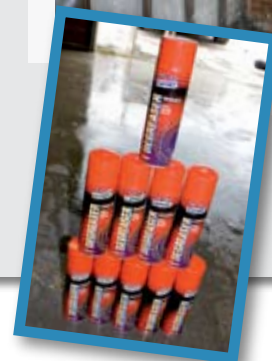
When applying the plastic to the walls, remember not to block any window ventilation into the garage, as a fresh air supply is most welcome for anybody wishing to survive the ordeal.

When painting in garages that are underneath a house, pay particular attention to the roof of the garage (the floor of the house) and check if it's made of out wooden floorboards. What can happen in this scenario is that the floor above is walked on, dislodging streaks of dust, which then make a lovely pattern on a freshly painted car roof. Be sure if this is the case to plastic up that garage roof!



### HOT TIP!

- The garage floor can often be a nightmare to clean and keep dust free. Help reduce dust by laying a plastic sheet over a wet floor. The water will make the plastic stick to the ground



## DENT REMOVAL

Dent removal can be done in a number of ways, which can depend on the dent, and of course on what tools you have available at the time.

A hammer and dolly set is the industry norm, and while it is the most basic form of dent repair, it's also the technique that requires the most practice to get right. A typical dolly set can contain around 30 different styles of dollies all for different depths and shapes of dents, so consult your local professional before even thinking about picking up a hammer and unleashing the fury.

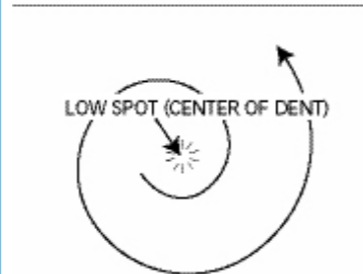
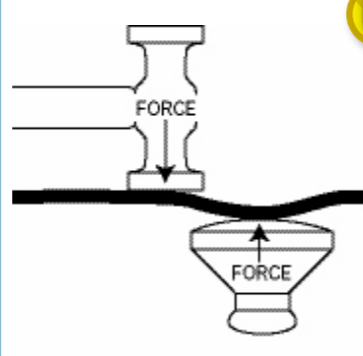
So, you now have a hammer and dolly and want to know the basics? Be warned to never attempt this on a panel you actually need, as 99-percent of beginners will end up stretching, warping or totally deforming the panel before even making any positive changes to the original offending dent. Most panel shops will happily donate a dinged-up reject for you to practice on, so start there before messing with the panels on your pride and joy.

The weight of the hammer, the shape of the hammer's head, and the shape of the dolly are carefully selected to fill the shape of the dent, which is why seeking

professional advice can mean all the difference in DIY dent repair. The whole idea of using a dolly is to apply pressure at the rear of the dent while using the special body hammer to tap the high outer edge surround the dent.

By tapping around the dent using a circular motion as seen in the picture, the dent should begin to flatten out and not deform the panel too much providing the tapping isn't too hard. This technique is called 'off-dolly hammering' and it's a good technique to minimise the risk of stretching the metal. Remember you aren't thumping a nail into solid concrete, it's all about a light tapping and the patience to ensure you don't over do it.

Also used in body repair shops is the heat-shrink technique, which involves heating up the troublesome dent with an acetylene torch until glowing red, then dampening the hot spot with a wet rag. As the metal rapidly cools, it can pull things back into shape, but due to the difficulty of this technique and the amount of DIY'ers potentially blowing holes through panels, we'll walk away now with the advice to leave such methods to the pros.



Off-dolly hammering

Different-sized screwdrivers and a panel hammer mean this VL has a while to go before it's ready for the gun



## HOT TIP!

- Not every dent needs extensive panel and paint repairs! There are many paint-less dent removal vans that come to your own place of residence or work and can fix a dent with amazing results. We recently watched a dent removal expert thump a dent in a brand-new black RX8. After no time at all, the panel was as good as new



## BODY FILLING

Using body filler in auto repair is almost unavoidable, and it has copped massive amounts of flack as being seen as the dodgy way out. This image came from backyarders using inch-thick layers to hide an un-repaired and rusty hulk underneath right before the sale of a vehicle. In a professional auto repair shop, panel beaters will often use a slight skim of body filler over a repaired portion just to ensure everything is perfectly straight before priming.

So, how do you use the stuff properly? It's quite simple really and involves you ensuring the panel is ready before the mixing can begin. After speaking to various industry professionals, most recommend starting with a clean bare-metal surface that has been scuffed with around 36-grit paper. Once that has been taken care of, it's time for the fun part.

Body filler is a two-part epoxy that needs a catalyst to start the chemical reaction to cause it to cure, so start with a clean surface to do your mixing on – whether it be a clean piece of steel, or even a clean ice-cream container lid.

Dab the required amount of filler onto the tray and take the accompanying tube of hardener and crack it open. How much hardener is added to the filler depends on a number of things and often isn't an exact science. Some professionals go for a 3–5 percent mix of hardener, while others go for as high as 20-percent. Practise on a junk panel with the brand of filler you have and see what results you can get before starting on the actual job. Using too much hardener will result in rapid drying before it's evenly applied and using too little will see the area never reach full hardness.

Applying the mixed filler over a panel involves using a flexible applicator, using



smooth motions. Ensure the filler isn't packed on too thick, with many professionals suggesting to keep it with in 1/4in inch to 3/8in of thickness. Once the area has been covered, it's the all about the waiting game and depending on how much hardener has been mixed, usually takes around 30 minutes to cure. If you find that once sanded there's still some low spots, filler can be applied on top of filler. So fear not, as a second application could be all that is needed to perfect the panel.

It must be said that if preparing a panel for a professional to paint at a shop, consult the painter first as to what products they recommend and any techniques or special methods they prefer. It could save a ton of heartache down the track. You may think you're saving thousands by doing the grunt work, but it could all be for naught.



## HOT TIP!

- When bogging a repaired dent, be sure to cover a large area to ensure a nice flat repaired surface. By having a larger surface to sand and by using a long block, time can be saved by minimising the need to refill the same area



This was only two 10c-piece-sized dents, but we filled a much larger area to start off with and the end result meant the bonnet was like new again

## SANDING

Sanding is a fairly straightforward affair, but as with most things, there is still a right way and a wrong way to sand. Sanding with a bare hand can be a tragic way to start off, as you are almost guaranteed to leave finger marks on the job. Instead of hand sanding an area of body filler, use a large blocking board and sand with a crosshatch pattern over the area to ensure a maximum even area that will quickly expose and low or high spots you have in the panel.

Avoid sanding in a straight line at all costs, as it can be very easy to dig a trench when using coarse-grit sandpaper.

Sanding a primer is usually done with 400 to 600-grit paper and is done so using water as lubrication. Most painters will often use a smaller handheld rubber block to avoid transferring finger marks and will again sand in a crosshatch pattern to avoid creating a low spot.



If you look close enough, there is a small rubber sanding block under Kyle's hand

## HOT TIP!

- Before sanding a panel, lightly blast on a coat of cheap GMH black to act as a guide coat. When rubbing this, any low spots will be obvious to the eye and saves spotting panel imperfections later when it's too late.
- When colour sanding a top coat, always consult your paint manufacturer to get their recommendations in order not to overdo it and destroy the job in the final stages of completion. Rubbing through a clear coat is disastrous, which is why we recommend leaving it to a professional



Ben wet-rubbing his very own SC project car. Note the use of the small rubber block

PREPPING AND MASKING

Once the job has been fully sanded, it's time to clean it up. Push the car outside and give it a thorough bath, paying close attention to all those hard to reach areas in which dirt loves to hide. The job must be totally free of any gunk that could find its way loose when hit with the air from the spray gun, so ensure you get into all those sills, nooks and crannies.

From here, we can now push the car back into the garage and dry it off in preparation for masking up. If you have a simple air hose attachment, now is a good time to test it out.

Decent masking tape and a roll of paper can be purchased at any body repair shop and only costs around \$20-\$40. Avoid using newspaper, as ink pigments can run and end up on places you would really rather not, so the more plain the paper is, the better. Newspaper can also be dusty and too porous to prevent the paint from getting in.

Masking is quite simple, with the main points to remember being: mask

a hard edge where you want the paint to stop, and be sure to tape paper folds down to avoid overspray blowing back onto the job. It's important to keep masking as neat as you can, as fewer folds and joins means a safer job with a less chance of overspray seeping through the paper, or getting reflected off odd paper angles often caused by amateur masking.

'Soft masking' is when the paper is folded onto itself to create a soft edge of paint transition, useful for those who wish to blend in to an existing finish.

Once the car has been fully masked up, many professionals will go over the car with PrepSol or a wax and grease remover to ensure no finger prints come though the paint and end up causing a 'fish-eye'.

After the deed is done and the car has been hit with paint, wait until it is completely dry before removing the masking tape and carefully use a razor for those tricky edges for a clean cut.



While this ute was only a quick throw together to compete in burn-out competitions, note the masking job on the back window and door openings. Yours should look something like this, but better!



Give the car a good wash to rid off all the dirt and sludge, even after priming



HOT TIP!

- Allow around two hours for a decent mask and tape job, and remember to never use electrical tape or regular sticky tape for masking as it will most certainly end in a mess of glue-like goop



PAINTING

Before even attempting to pick up a spray gun, check with local state laws on the legislation regarding the spraying of different types of paints in the garage, and always check with surrounding neighbours and make them aware of what your intentions are.

Now that the legal stuff is out of the way, we can concentrate on the painting technique, which is everything when it comes to the application of smooth, run-free paint.

Most DIY painters and even most industry professionals will use a HVLP gravity-fed spray gun to get the job done. These operate at a low 26-28psi at the gun - which equates to around 8-10psi at the tip - meaning the average backyarder can get away with using a moderate-sized compressor, as apposed to a 10hp 100L room-sized unit. This is only a starting point - we had consulted various top industry painters and found these values to vary. So, it's important to test your gear out to find exactly what you can and can't do with before it comes down to the crunch.

Pick up your spray gun and ensure you have correctly set it up (see previous article 'Anatomy of a spray gun') and ensure the gun is perfectly clean.

Once this has been done, hold the gun at 90° to the painting surface, keeping a 20cm distance from the job. Start applying the paint around a few inches from the start of the job, while keeping a steady sweep of movement right to the end, painting a total area of around a one-metre sweep.

Some painters like to release their trigger at the end of their sweep, others hold it down for an uninterrupted flow of paint. Overlap each coat by around 50-70 percent to ensure a smooth uniform finish.

This is a generalisation and is a recommendation only. Check with your paint supplier regarding special techniques and also check drying times in between coats. As each paint varies, it's not something we can go into great detail here.

When leaving the final coats of an acrylic job to dry, be sure not to touch it for at least a week, as cutting the job too early can result in disaster. A two-pack job on the other hand is a different story, which uses the spray booth to cure using just a few hours of heat. As previously mentioned, your paint retailer will be more than happy to inform you of proper drying times.



Paul painted his 308-powered wagon himself, which should act as good inspiration for anybody wanting to have a shot themselves



This gun was a loan gun for the top-coat finish, and as can be seen, was a total dud. Testing the gun on a test panel can save hours of re-sanding and prep work



HOT TIP!

- As a general rule, the distance between your pinkie finger and thumb finger when stretched out is the approximate distance the gun should be kept from the job

The results of a good DIY paint job can be very satisfying and save a ton of money in the process. An acrylic paint job will generally need a good cut and buff before taking out into the real world, which is something we could write another 10 pages on. Unfortunately, we don't have the space in this issue, but you can be sure we'll be back with round two real soon.

Just always remember: don't be a doofus and read all the labels, instructions and when in doubt, be sure to contact a professional detailer or panel beater before picking up the buff and destroying hundreds of hours of painstaking panel work. *SC*



Make sure the gun is always thoroughly cleaned before each use