

Check and check again

Our fourth instalment on classic car ownership is one that every enthusiast must cross — damage assessment.

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NOW that your classic is totally stripped out and is currently in the body shop, let's go over a few details to help assess the damage.

As I have mentioned earlier, when you are restoring body work in a classic — even on a limited budget — it's better to get everything done at one go.

If you don't treat a metal problem right away before painting, it will most certainly come back to haunt you one day.

So my advice is it's worth it to spend that extra money on body work repair and paint as well.

You can still compromise, or better off delay the progress of other parts if you are on a tight budget.

Let's get down to business. Remember, the key here is to be able to "see" the damage in the first place.

So be sure that front fenders are removed as well as all doors and both windcreens.

Together with your welder, get some screw drivers and hammers and try to locate sick areas on the outside of the car, and I mean every

inch of it, even in the engine bay and the trunk.

Look for rusted areas, and also areas which look weak.

Take the abovementioned tools and knock on such areas to help you find out how big a problem it actually is. Check around the door sills as well.

Now go over the inside of the car. This is where you need to check the floor boards, and a place where many people forget to go over, the inner part of the firewall (which is located behind your dashboard).

With proper lighting, check for holes and rusted areas.

You can also counter-check the

outside of the firewall in the engine bay. If this area is not addressed, rain water can make its way into the cabin.

Next, put the car on hydraulic jacks and go underneath it. Check for rust on chassis rails, floor boards again, and wheel wells.

Don't forget the doors, hood and trunk lid as well.

If your classic seems to have a very thick amount of putty or cement on it, it would be better for you that your welder remove them so you can see what is underneath it. Most welders here may use a blow torch to remove the layer.

If your car just looks very bad, I

advise you to sand blast it.

Yes, it's extra money but it will pay off one day, trust me.

This is where it's always best to buy a classic that is in good condition in the first place.

If the car's body condition is moderate, you can get away with just removing all components and finding the damage yourself.

Well, there you have it! Basically check everything and everywhere, and try not to compromise on body work and paint.

Next month, we'll talk about welding and painting your beloved classic.

Happy New Year!



Like a cancer: A rusted area at the base of a car's rear windscreen and wheel well (inset). It will spread if left unchecked.

WOE is you. You are driving on your way to work when a stone, lodged in one of the tyres of the car in front comes off, does a ditty on the asphalt and flies straight into your windscreen. Wham!

Like an ice block that has been pick-axed, a bull's eye shows up. Chances are you think you are staring at a RM300 to a RM1,000 tab to have the windscreen replaced.

Not necessarily. It can actually be repaired for far less if the damage is not too serious.

Contrary to popular belief, lorries carrying stones are not the chief cause of such mishaps, says Yeoh Eng Hui of Glass Mechanic, one of a handful of established windscreen repairers in the country.

It's the stones and pebbles stuck in the recesses of tyres that are the main culprits as they are spit out and cause random damage.

Only laminated glasses — with a plastic membrane in the middle layer to prevent shattering — can be repaired. Tempered glass, as used on windows, must be replaced if damaged.

Windscreen damage can be classified by the shape made: bull's eye, stars, half-moon, combination, cracks and stone chips.

After the repair, the windscreen is restored to its original strength but cosmetically the damage will leave a faint mark that is only visible if you look really hard.

"When glass breaks, a lot of the damage is internal. The glass becomes fine powder at the impact point. It's this point that will usually leave a mark behind," Yeoh explains.

Restoration can only promise a surface appearance that is 90-98% as good as before.

The advantage of repairing a windscreen is that you save money, the repaired section

Fix your damaged windscreen



Yeoh (left) and a worker showing the tools of the trade used to repair a customer's windscreen.

does not reflect light any more and the wipers won't be damaged after the surface is patched up and polished.

Replacing a windscreen — when it can be repaired — may offer a false sense of security. It takes 1,500psi to remove a factory-fitted windscreen from the car body. The frame-glass attachment is strong enough to hold up the roof if the car turns turtle or stops a person from being ejected in a collision.

It takes far less force to knock down a windscreen that had been replaced by after-

market installers working in an open and uncontrolled environment. Worst still is when the windscreen is seated in surrounds that have rusted and weakened over the years, offering reduced protection in an impact.

Next to seatbelts and airbags, the windscreen offers a third line of safety in a collision. It stops a person from flying out into certain death, says Yeoh.

Glass Mechanic, which started offering its repair service over four years ago from its Petaling Jaya outlet, has seen a growing number of insurers, fleet operators and motorists subscribing to its services.

It follows the US practice of assessing what is a minor or major break. A break less than 2.54cm in diameter can be repaired; so can a crack not more than 15.2cm long.

Glass Mechanic will advise a change of glass if it finds that a repair is not possible. It uses a repair kit sourced from a Las Vegas company that specialises in the business.

Resins of varying viscosity are used for different types of breaks. The thinnest has viscosity of 15-20cps versus the thickest at 1,600-2,200cps.

For spot breaks, the damaged section is vacuumed to extract the air before a clear resin is pumped into the glass. Vacuuming is vital or else air bubbles will form.

No vacuuming is required in patching a crack, which is like an open drain but the application of the resin is more time-consuming because of the larger surface area involved and the need to allow the resin to flow in and fill the crack.

The resins are then left to cure for a few minutes under UV light. The treatment is fast, taking 30 minutes to a little over an hour to wrap up and a lifetime warranty is offered on each job.

A bull's eye typically means shelling out RM110-120 to fix. Cracks cost more as they require more time.

While most windscreen damage is at the front and from outside, the damage can also be inflicted from inside, such as when a child is playing the fool in the front seat and slams his head into the glass, causing weird-looking breaks without an impact point. Such damage, akin to a volcanic eruption, cannot be repaired, according to Yeoh.

Yeoh, himself a qualified repairer, has two full-time technicians to assist him.

The service is also mobile. So if you can't go to Glass Mechanic, it will come to you.

— GEORGE WONG

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