

Driver Zone

What they don't tell you ABOUT YOUR CAR

Typically, the UK consumer will see two different views on cars and the car industry.

On one side, you'll be getting the glossy magazine views and car adverts showing how sexy and how exciting your prospective new car is, how it will easily double up as a storage container for your golf clubs, kids clutter, sports gear, luggage and practically anything else you should wish to take with you.



The other view is of a dodgy "under the arches" geezer who will badly repair your car so that it's a death-trap worthy of an episode of Watchdog.

The truth is that on the one hand, your car is more advanced than you probably realise, and on the other hand, your insurer wouldn't allow your car to be badly repaired like that.

LET'S START BY LOOKING AT THE CAR ITSELF. YOU'VE PROBABLY SEEN VIDEO CLIPS OF CAR CRASH TESTS. THEY ALL LOOK SPECTACULAR, AND EVEN A LITTLE FRIGHTENING, BUT CERTAINLY WITHIN THE UK AND EUROPE, A LOT OF PEOPLE ARE WORKING HARD ON THE DETAIL BEHIND THOSE CRASH TESTS. YES, BITS OF PLASTIC AND METAL AT THE FRONT OF THE CAR WILL SHATTER AND FLY OFF, BUT ENGINEERS HAVE DESIGNED THE VEHICLES SO THIS HAPPENS IN A CONTROLLED WAY TO PROTECT THE CAR'S PASSENGERS AS MUCH AS POSSIBLE.

Driver Zone

The metal structure of your car is not what it was 10 years ago; in many cases it's not even what it was just 5 years ago. The steel itself has been produced in ways that harden it, making it stiffer and stronger, and each part is shaped and joined to the surrounding panels in such a way that engineers can make it behave in predictable ways in a crash. The front of a car will crumple to absorb the impact force gradually, taking the force out of the crash, with the structure getting stiffer and more resistant the closer the impact gets to the passengers. However, for an impact into the side of a car, the structure does not have room to crumple that much as the occupants are close to the doors and windows. In these cases the side pillars, particularly those panels surrounding the front doors, are much stronger and stiffer as they need to prevent the other vehicle intruding into the car and injuring the occupants. In fact, under the skin of the B-pillar, (the pillar your seat safety belts are attached to) you will often find the strongest steels available. They're expensive, but they're there to protect you!



It is not just a matter of knowing steel technology either. It could be aluminium, it could be plastics, it could even be carbon fibre, or it could well be a mix of any of these. The vehicle is mostly made by welding these panels, but it's just as likely now that it is riveted or glued in many places. If the thought of driving a car that's glued together is frightening, you'd better cancel your flight to the Algarve as it's the same aircraft industry adhesives that are used. In many cases, the panels are joined by laser welding. These joins can be, and often are, every bit as important as the steels or other materials. For example, attempting to replace a laser spot weld with a traditional spot weld could affect the strength of the steel.

THE FRONT OF A CAR ISN'T HARD. YOU CAN OFTEN FEEL THE BONNET AND FRONT BUMPER FLEX IF YOU LEAN ON IT. THIS IS THE PEDESTRIAN PROTECTION ZONE. THIS AREA IS CAREFULLY DESIGNED TO ABSORB A PEDESTRIAN OR CYCLIST SHOULD ONE BE UNFORTUNATE TO BE STRUCK BY THE CAR. THIS IS AS COMPLICATED AND CHALLENGING AS BUILDING THE CAR ITSELF AS PEDESTRIANS COME IN ALL AGES, SHAPES, AND SIZES.

IT OFTEN SURPRISES PEOPLE THAT THE AIRBAGS DON'T GO OFF IN AN ACCIDENT. THE FACT IS, GENERALLY THEY DON'T NEED TO. THE CAR ABSORBS THE IMPACT WELL ENOUGH, AND THE SEATBELTS GRADUALLY RESTRAIN THE PASSENGERS WELL ENOUGH, THAT ALTHOUGH IT'S A FRIGHT, THERE IS NO NEED FOR AN AIRBAG DEPLOYMENT. IT IS FAR MORE LIKELY THAT AN AIRBAG WILL DEPLOY IN A HARD SIDE IMPACT, WHERE THERE IS LESS SPACE FOR THE CAR BODY ALONE TO PROTECT THE PASSENGERS.

BUT FAR BETTER THAN PROTECTING THE PASSENGERS IN A CRASH, IS AVOIDING THE CRASH IN THE FIRST PLACE.

Driver Zone

Again, you'll frequently see cars being driven in an exciting style by motoring journalists, at exciting, exotic locations like Silverstone or the Dunsfold airfield. But a race track or a runway are both much wider than an urban road, and on your daily commute or school run, you couldn't afford to lose control or stray from your lane to anywhere near that degree.

So any modern car will have a stability control system. You'll probably never notice it's there; it won't suddenly take over the car and leave you as a passenger. Instead it continually monitors the levels of grip and stability and will make instant corrections to keep you in control. The simple fact is, whatever we may think and however skilled we are, electronics can do many things a lot better than we can. Of course, you can often switch off your stability control system, but take a look at the videos of a car with ESC switched off on our website and ask yourself what would happen if that happened on your daily journey.

As much as we are dependent on electronics in so many aspects of our daily life, the dependence on in-car electronics is increasing. The technologies that assist us with stability control are increasingly supporting us with driving on uneven surfaces, ice and snow, and if we're towing something. Now, too, they are even doing fantastic things such as reading the road ahead and automatically applying the brakes when we're distracted by the kids in the back seat. Let's face it, we all get tired or distracted or simply make mistakes. That's when pedestrians get killed, people get injured or, if we're lucky, it costs us time and inconvenience getting our cars repaired. Maybe the "expert" at the pub will tell us that "I don't want the car driving itself, I'm much better", but the simple fact is that these systems intervene when we've left it too late.

If you are unfortunate enough to have an accident and to need a repair, this is when you'll be glad you have a UK insurance company to turn to, as there is no doubt that we in the UK have the most regulated, highest skilled and most sophisticated insurance accident repair industry in the world.

It is from years of training, utilising correct and specific information and keeping up with the latest technology that insurance engineers can ensure that the car is returned to the correct condition. They know that you can't heat up certain steels to make them easier to repair without affecting the strength that we've seen is critical to protecting passengers. They know, expensive though it may be, that it's often correct to replace a structural panel, rather than to repair it. It's not as quick to do this, and maybe not as convenient for you, the customer, but they want to ensure that should you have another accident, that you're just as safe as you were the first time.



Conversely, they know that in many instances repairing the 'soft' pedestrian zone at the front of a car can make it too strong, and that could increase the injury risk for a pedestrian or child, so they will ensure a certain type of repair, or replacement. Your car, and your car insurance, cost money because both are a result of sophisticated demands, but both have your safety as their priority.