

Repair of windscreen damage

Repairs should be done quickly

Bullseyes, stars, chips and long cracks can all be repaired. However, it's important that a repair is carried out as soon as possible, particularly in the case of long cracks. Long cracks let in moisture and dirt which can ultimately damage the laminate and destroy the ability of the windscreen to withstand damage in the event of a crash. Experience has shown that if a long crack is properly repaired within two to three months, the repair will restore the full integrity and strength of the windscreen. This time factor is equally critical for small star cracks and bullseyes.

The conditions under which the vehicle is used also plays a significant part. Where the vehicle is driven on unmade roads, for example, particularly in rainy conditions, repairs need to be done earlier.

How repairs are done

In the case of stars and bullseyes, repairs are normally done by the use of an injector, which allows the air to be extracted from the damaged area by suction, after which a resin is injected into the damaged area to replace the air. The resin bonds to the glass and because it has the same refractive index as glass, the repaired bullseye or star, while not invisible, generally shows an improvement visually of 80 to 90%.

Long cracks are treated quite differently: Once a crack has grown to one or two inches in length, it is open to the surface of the glass along its entire length. (Unlike the small cracks from a star or bullseye which do not come to the surface).

This is why long cracks are more prone to the ingress of water and dirt which will ultimately damage the laminate. A sliding injector is used which forces the resin into the crack, and is slid along the crack until it has all been injected. First a thin primer resin is injected which bonds to the glass, and this is followed by heavier resins which give the required strength. Once repaired correctly long cracks are guaranteed against any further cracking for life.

Windscreen wiper scratches

Windscreen wiper scratches are generally caused by either a small object or objects being caught in the wiper rubber, which then scratches the glass during the normal operation of the wipers. Alternatively, the windscreen rubber can sometimes separate from the clips and the clips themselves will scratch the glass. In either case it is very important to stop the wiper operation after any sign of scratching occurs, extended operation of the wipers will result in a scratch which could be too deep to polish out.

In the next article, I'll talk about windscreen wiper scratches, and other deeper scratches on side and rear windows.

