## **Common windscreen damage**

Most windscreen damage is caused by the impact of small stones continually being thrown up from the road. Such damage can be broadly classed into five categories:

**Sandblasting** - Small surface chips are continually being created by very small stones and debris, resulting in a 'sandblasted' effect (perhaps 10 or more 'pinpricks' per inch). This is something which accumulates on all screens, and will ultimately cause severe dazzling effects when night driving or driving into a low sun.

**Chips** - Surface chips of a larger size, typically ¼ to 2mm. There may be a dozen or more on the screen. They are unsightly, but are not generally a safety issue. They can be easily repaired.

**Star Cracks and Bullseyes** - Caused by larger stones which create a surface which penetrates through to the laminate. Generally they are between 5 an 20 mm in chip diameter, but can be significantly larger. Stars have small cracks emanating from the impact point, while bullseyes (shown here) result from a piece, or pieces, of glass broken below the outer surface and in its simplest form has a predominately black circular shape. In addition to impairing vision, both stars and bullseyes are liable to turn into long cracks if not repaired.

**Long Cracks** - These are cracks which are open to the surface, and can be anything from 1 inch to 18 inches or longer. They normally run from an existing star, bullseye, or chip, and are generally triggered by windscreen stress during traveling or by sudden temperature changes. These long cracks can now be repaired.

Less Common Damage - There are a number of other less common damage structures - combination bullseye/stars, horseshoe cracks (concentric ring cracks which may be anything from 1 inch to several inches in diameter), and various combinations of long cracks and stars/bullseyes. Stars, bullseyes, chips and long cracks can all now be repaired. Ideally they should be repaired as soon as possible after they occur. This is particularly important in the case of long cracks, which are more prone to allow moisture to penetrate the laminate, which will degrade over a period of time.