

A diamond cut wheel is part paint and part bare metal. However, both parts are covered with transparent clearcoat/lacquer. When these alloys are made in the factory they are “cut” on a lathe. An industrial diamond tip cuts the face of the wheel creating the bare metal machined face finish. They can be repaired in two different ways:

1/ By re-cutting the wheel on a lathe. The wheel is machined and a few millimetres skimmed off the face, taking the kerb damage with it. The alloy is then re-lacquered

2/ By cosmetic replication. This is a “copy” repair. The kerb damage is ground away and sanded back locally using smaller hand-held tools. The painted part of the wheel is masked off and primer, silver paint and lacquer applied to the area that was sanded, i.e. where the damage was. The idea being that silver paint and bare metal are similar in colour.



Diamond cut lathe machine

There are pros and cons of each method as outlined below.

Re-Cut	
<u>Advantages</u>	<u>Disadvantages</u>
<p>Authentic/factory repair 99% invisible (because some of the face is skimmed off a trained technician could spot this) Can deal with large amounts of damage</p>	<p>Can only be performed twice (because each time a fraction of the wheel’s entire face is skimmed off, no matter how much damage there is; eventually there is not enough left to cut anymore metal away and a new wheel will be required) More expensive (largely because of the cost of the lathe equipment to the repairer) Difficult to perform mobile due to the size of the machine Takes longer (2-5 days)</p>
Cosmetic Replication	
<u>Advantages</u>	<u>Disadvantages</u>
<p>Cheaper Convenient – can be performed mobile from a van at your home or work in a few hours Can be performed multiple times (whilst it is not possible to have an infinite number of repairs, it can be performed significantly more times than a re-cut 95% invisible on matt/satin lacquer wheels</p>	<p>85/90% invisible on gloss lacquered wheels – because silver paint is not identical to bare metal you may see a slight colour transition up close (most people would not notice) Not officially accepted on lease/PCP car returns Not suitable for heavily damaged or corroded wheels</p>