



Generic Auto Parts Don't Make the Grade

Not every cost-reduction idea is a good idea, as the Allianz Center for Technology (AZT) recently proved. Its study of collision repairs with inexpensive generic parts produced less than satisfactory results.

This summer, AZT published the results of a study on repairs with generic parts it carried out during 1999-2000. In two stages, AZT's objective with this study was to examine the extent to which generic parts can be used technically in the repair of accident damage and then to assess whether such use could result in actual cost savings.

The study represented the second part of AZT's research into car repairs in line with

their current market value. In 1998, the group's first paper on automobile repairs with used parts sparked off a lively debate among recycling firms, the automobile industry, repair associations, consumer associations and the insurance industry.

Though many were initially opposed to this repair method, AZT showed it to be flawless and economical, and it is now being more widely applied.

"We were very excited about all the attention the used parts study got and felt encouraged to extend our research of cost-effective alternatives for car repairs to include generic parts," explained Hans Grossmann, one of the authors of the latest study.

People can generally look to three alternatives for replacement car parts:

- Original equipment manufacturer (OEM) parts that bear the logo of the vehicle manu-

facturer and are sold through the manufacturer's dealer and workshop network.

- Identical parts, actually OEM parts without the manufacturer's logo, from the same production run and commonly outsourced parts like headlights, radiators or windshields.
- Generic parts, which are generally less expensive spare parts made by independent manufacturers based on the original part but not bound by the vehicle manufacturer's test criteria.

AZT's study focused on using generic parts for damage to car models representative of the German market, but the results are valuable for car markets elsewhere. German insurance laws regarding the suitability of generic parts and an insurer's ability to insist on their use also differ from those in other countries, but there are widespread concerns regarding the cost savings in relation to the quality of generic parts.

In Spain, for example, where the use of generic auto parts is common, consumers and insurers look to the Centro Zaragoza, an automotive research group, to certify and guarantee the quality of generic parts. Centro Zaragoza, like AZT, is a member of the Research Committee for Automotive Repair, an international group dedicated to exchanging information on car repair and safety that also addresses such concerns.

Scope of study

AZT technicians focused on three cars popular in Germany. Of those, two were mass-market models, a domestic 1997 VW Golf III and an imported 1995 Nissan Primera 2.0 SLX. The third model was a high-end 1992 BMW 520i.

Attention was given to replacing standard parts for those models like front and rear bumpers, lights, radiator grills, hoods, doors and front end panels. The AZT technicians gathered information on the parts, specifically their product ranges, prices, availability, quality, fit and quality of material.

On first examination, AZT ascertained that generic parts tended to be 38 percent cheaper, on average, than OEM parts. But only the most commonly replaced parts are available as generics. One part, the doors, was not available at all. This problem reduced the actual difference in price to 26 percent, since the areas to repair also required OEM parts and thus raised costs.

"We also discovered very quickly how much the designations of the same parts differ from manufacturer to manufacturer, both among OEM producers and the generic manufacturers, which made it very difficult to order, evaluate and compare," said Grossmann.

Other information emerged after several orders. Interesting, for example, was that dif-

ferent suppliers' parts were often made by the same manufacturer. The Nissan parts were in fact all made by the same manufacturer, and those parts were produced for an earlier model.

Installation key

Installation and installation time, however, became the key issues. Whereas the OEM parts fit as expected, the generic parts deviated considerably in their accuracy of fit due to dimensional variance, mismatching edges and lower quality pressing for metal parts. In some cases it was impossible to smooth out the uneven joints and wavy edges that resulted.

Inaccuracy increased installation time considerably. On average it took 47 percent longer to replace damaged parts with generic equivalents. This brought total replacement costs up almost to parity with OEM parts (see Fig. 1).

The further disadvantage of generic parts lay in their quality. Material tests of the metal parts showed them to be roughly the same in quality as their OEM equivalents, but in most cases they lacked the outer zinc plating that slows rusting. Tests of the plastic bumpers revealed that they become brittle and unsafe at low temperatures.

Additional costs such as repainting ultimately reduced cost savings even further. AZT concluded that generics were unsuitable for the German market for a combination of the following reasons:

- minimal cost differences to OEM parts
- safety concerns
- availability of only the most widely used parts
- the unattractiveness of mismatched parts

"In the end, despite the lower prices for generic parts, installation problems meant that they really cost almost the same as original parts. But the quality was far inferior to OEM parts," Grossmann added.

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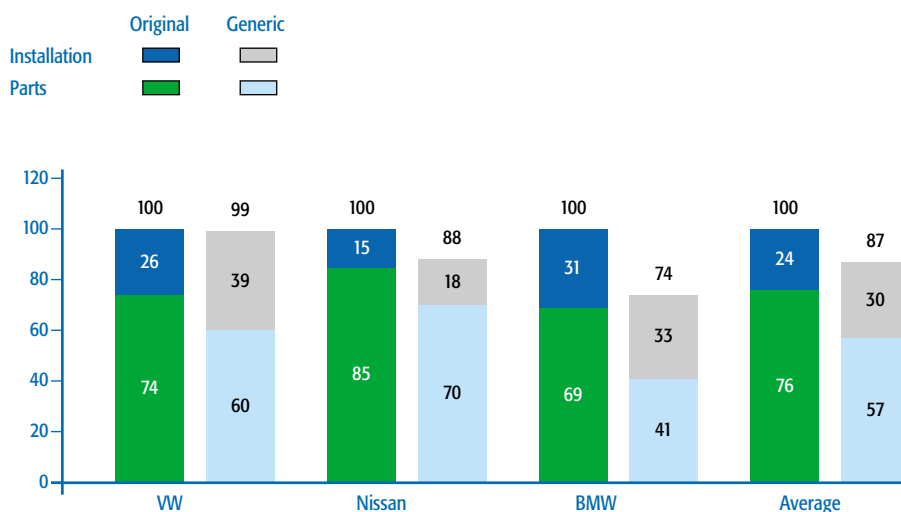
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Fig. 1

Cost comparison for replacing frontal car parts

(OEM = 100%)



Source: AZT Automotive Division study on car part replacement in Germany, 2001