

Claims management

How to deal with increasing complexity in vehicle body repair

White paper

Claims management

How to deal with increasing complexity in vehicle body repair

New vehicles entering the market are manufactured with lightweight, innovative materials and equipped with modern, safety enhancing technology. This development, and the rapid growth in market share of electric drive-line vehicles, affects how these vehicles need to be repaired after a collision. Not only does this create challenges for body shops, but also for insurers, lease companies and other fleet owners involved in this process.

How can your company arrange quality, safe repair, while keeping repair and associated process costs under control?

This white paper provides an overview of how increased vehicle complexity affects body repair and offers concrete guidelines for dealing with these developments.



In this white paper

- ✓ Insight in the effects of new technology on vehicle repair complexity
- ✓ Clear guideline for dealing with these developments as an insurer or fleet owner

Increasing vehicle complexity: multiple, simultaneous developments

Multiple technological developments are changing the nature of vehicles entering the market today.

1 Adoption of ADAS technology

To some degree, almost all vehicles manufactured today are equipped with a range of “ADAS”: Advanced Driver Assistance Systems. These systems, which combine technology such as sensors, cameras, GPS and smart software to interpret the data gathered, help drivers to have a safe and comfortable journey.

ADAS were created in response to the demand of consumers for safer and more comfortable vehicles and to the wishes of fleet owners to reduce total cost of ownership. Also, legislation is pushing the introduction of ADAS. As of 2022, multiple ADAS technologies will be mandatory for new vehicles in the European Union.¹

Although ADAS help prevent “smart” vehicles from colliding with other vehicles, the converse is not, or is hardly, the case. Since the vehicles on the roads today are a mix of those with and without ADAS on board, accidents involving ADAS equipped vehicles happen every day.

Although the number of collisions is dropping, the repair costs associated with ADAS equipped vehicles are substantially higher than for vehicles without these systems. A recent study² showed that for ADAS equipped vehicles, the repair cost for simple front or rear collisions may be almost two and a half times that of a vehicle without ADAS.

The repair process for ADAS equipped vehicles is substantially more complex than for vehicles without these technologies. It involves significant investment in higher skilled personnel, training and the availability of specific equipment to reinstall and calibrate the damaged vehicle. Since ADAS equipped vehicles are highly dependent on this technology, quality repair is absolutely vital to ensure safe travel for all passengers.

2

Growing market share for electric vehicles

The market share for electric vehicles in European markets is growing at a rapid pace. Comparing the registrations of Q4 2019 and Q4 2020, the number of new Battery Electric Vehicles (BEV) and Plugin Hybrid Electric Vehicles (PHEV) grew by 263%. This accounted for 31,6 percent of all new vehicles registered in Q4 of 2020, compared to a market share of 22,4% one year earlier. In total, over one million new electric vehicles entered the European market in 2020.³

The rising market share of electric vehicles has a direct effect on body repair. Body shops that want to stay eligible to repair these vehicles must invest heavily in training and equipment to perform quality and safe repair. Special, designated areas must be created to handle the high-voltage battery packs. Handling these batteries means extra labor hours spent on repairs, resulting in additional costs.

“Over one million new electric vehicles entered the European market in 2020”

In addition to the direct effects on repair costs and quality, other aspects also have implications. There is an increasing demand from OEMs for vehicles to be repaired in specific, certified body shops. The costs involved in these certifications and also in the use of OEM certified parts directly impacts the cost of repair.

3

Use of innovative, lightweight materials

A third development with a direct effect on vehicle complexity is the use of innovative, lightweight materials. The use of materials like carbon, aluminum and new steel alloys, means vehicles are lighter and stronger, which contributes to emission reduction and safety.

As with the other trends described, the use of these innovative materials also puts high demands on how they are repaired after collision. Again, if done incorrectly, the poorly repaired vehicle becomes a serious threat to the safety of the driver and other passengers.

Now that lightweight materials have found their way to mainstream vehicles, proper training and investment in equipment that is suitable for the safe repair of these materials is required.

Implications of repair complexity for insurers and fleet owners

The growing complexity of modern vehicles has a direct effect on the complexity of repair of these vehicles and on the associated costs.

All three developments make it more difficult for body shops to arrange safe, quality repair, while keeping costs under control. Significant, ongoing investment in training is needed to keep up with developments. Also, investment in equipment and certification is needed to remain eligible to perform specific repairs.

However, the developments described not only effect body shops, but also raise questions for insurers and fleet owners about how to organize their processes around body repair. Key questions are:

- ✓ How can we safeguard optimal, quality repair in the fast changing environment, given a company's responsibility for the safety of its customers?
- ✓ How can we limit the potential risk of damage resulting from incorrect repair?
- ✓ How do we keep repair costs fully under control in the rapidly changing environment?
- ✓ How can we optimize customer satisfaction around repair and prevent poorly executed repairs from having a negative impact on customer satisfaction.

“How can optimal, quality repair be safeguarded in the fast changing environment, given a company's responsibility for customer safety?”

Answering these questions is not easy. It requires an integrated approach that starts with repair quality and optimizes costs and customer experience at the same time.

The next section of this white paper describes a practical approach for dealing with the challenges described. This approach is based on the following important points:

- ✓ Steering damages to a contracted body shop network in order to maintain control of costs and processes, increasingly raises the obligation to take active control of repair quality (customer safety) as well. Insurance companies and fleet owners should actively arrange quality repair, empowering their network to deliver an optimal performance. Leaving this obligation to your network partners only, i.e. individual body shops or chains, will not lead to optimal results in terms of costs and quality.
- ✓ Generic steering (primarily based on location or cost performance) prevents body shops from truly specializing in specific repair types and vehicle brands. This will inevitably lead to cost, quality and process issues. It requires a more sophisticated way of steering to make the ideal match between the damage and the specific capabilities of the body shop.
- ✓ In order to keep costs under control, it is just as important to define optimal routing for complex damages as for simple, one-day-repair, damages. Optimizing the total portfolio will allow companies to beat the competition in average repair costs and customer satisfaction.

To sum up, an integrated approach is needed to safeguard the safety of customers after repairs the vehicle body and to beat the competition on cost-efficiency. The 6 concrete steps an insurer or fleet owner can take to achieve these goals are described in the next chapter.

An integrated approach: safeguarding safety, maintaining control of costs

Vehicle complexity is on the rise, and so too are the associated challenges relating to safe and efficient repair. Therefore, rather than taking a one-dimensional approach, it is time to implement an integrated solution, one that starts by considering safety aspects, and optimizes for costs and customer experience at the same time.

1 Understand your fleet characteristics

To start with, it is important to understand your fleet and more importantly the changes that will take place in your fleet the coming years. Having a good insight into the current and future composition of your fleet allows you to plan the next steps in your approach. Ask yourself the following questions. To what extent have and will complex vehicles become part of your fleet? What are the dominant brands in your portfolio?

2 Map your network capabilities

Once you have insight into the composition your fleet, it is well worth mapping out your current network in terms of capabilities and (OEM) certifications. This identifies the white spots, for instance in relation to capabilities in specific geographic areas. It tells you whether your network is able to meet the repair demands of your fleet, now and in the future.

3 Collect, interpret and forecast your repair data

If you want to take active control of quality and costs of repair, it is vital to have objective, uniform and real-time insights into every aspect of your network performance. So it is essential to collect data on (the development of) network capabilities, repair costs (calculation data), process and customer satisfaction. Combining these insights in one clear dashboard gives you a strong basis for decision making and forecasting future costs and for tracking the result of your strategy.

4 **Implement a flexible infrastructure for sophisticated steering**

As we concluded earlier, one-dimensional steering of your network, based solely on geography, will not help you to solve the quality-cost dilemma. Therefore, it is vital to have an infrastructure in place that allows you to steer damages exactly how you want.

The following aspects are important:

- ✓ Channel clients to a digital environment where you can take control of the steering process. This means connecting every customer contact channel to your steering process.
- ✓ Implement a solution that allows for sophisticated steering based on the specific aspects of a particular damage. The optimal steering route is determined by elements such as brand and type of vehicle, extent of the damage, geography, customer needs and liability on the one hand and your body shop network on the other.

“Implement a flexible infrastructure for sophisticated steering”

5 **Organize the triage between simple and complex damages**

Particularly relevant for solving the quality-cost dilemma is the ability to separate simple from complex damages. You can make this initial assessment based on customer input, computer vision (automated recognition of damage severity) and vehicle data. This allows you to organize optimal processes for both types of damage.

6 **Optimize steering, processes and agreements**

Once you have created your initial business rules for damage steering, you can continuously optimize these on the basis of your repair data. You create a “fit-forpurpose” steering method, one step at a time, which takes quality, cost and customer experience factors into account. It is certainly relevant to involve your network in where you are going and how they can be part of this process.



About Openclaims

Openclaims offers a Software-as-a-Service repair management solution to insurers, fleet owners and automotive companies. With our software, we enable our customers to digitize and optimize their vehicle body repair processes, optimizing repair quality, lowering process costs and claim costs while improving customer satisfaction.

Get in touch

Would you like to know more about this white paper or our solutions?
Do not hesitate to get in touch!



[Openclaims.com](https://openclaims.com)



Amsteldijk 10
1074 HP Amsterdam



(+31) 20 2613719



info@openclaims.com



[Openclaims](https://www.linkedin.com/company/openclaims)

Sources

¹ Euro NCAP

² American Automobile Association (2018)

³ ACEA, European Car Manufacturers Association, New Passenger Car Registrations by fuel type in the European Union, Spring 2021