

Dirk Zedler

# Pedelec sales are rising in Germany, but pedelec lawsuits are booming

**Pedal-assist bicycles, or pedelecs, have lifted the bicycle industry. Electric bikes have boosted sales, created new categories of customers, and inspired a host of innovative technology. They make retailers smile, and motivate engineers to be creative and squeeze top performance out of their products.**



*Lawsuits involving pedelecs now account for 38 percent of all expert's reports prepared by the Zedler loss adjusting agency.*

There is a lot of light — but a lot of shadow, too, as many retailers and bicycle brands have also discovered.

As bikes become electrified, consumers demand higher quality and better service. Pedelecs appeal to different consumers, many of them new to cycling, who come into a bicycle retail store with high expectations and little patience.

When a retailer or manufacturer is unable to meet these expectations, pedelec owners are increasingly going to court, even for minor problems.

That costs a lot of time and money for retailers as well as for bike brands.

**A market boom in lawsuits.** E-bike sales in Germany increased to 535,000 in 2015 from 380,000 in 2012, according to the German bicycle association ZIV.

Their share of all bikes sold rose from 11 percent in 2013 to 12.5 percent in 2015, according to ZIV.

While their market share is growing slowly, the number of lawsuits involving pedelecs is exploding.

Lawsuits involving defective pedelecs account for a significant percentage of all expert's reports prepared for the courts by the Zedler loss adjusting agency.

Those reports are for bicycle-related lawsuits that involve motor vehicle accidents, personal liability claims, household claims, and accident reconstructions as well as claims for damages caused by product failures.

In 2013, cases involving pedelecs accounted for 19 percent of all expert's reports. That jumped to 43 percent in 2014 and 32 percent in 2015. So far this year, 38 percent of these expert's reports involve pedelecs — in other words, the number of court cases involving pedelecs is disproportionately higher than those involving conventional bicycles.

Recent cases involved serious injuries stemming from pedelec accidents caused by material failures such as broken forks, handlebars, stems and seatposts.

**Small problems, big trouble.** The most common pedelec lawsuits are over insufficient range or problems with a motor that is noisy, rough or jerky. Other top complaints involve battery capacity (usually involving a lack of understanding about the effect of age on battery life), or the fact that two seemingly identical pedelecs behave differently when ridden. Cases also involve software, shifting, brakes and instability.

The common denominator is that these complaints often have simple remedies. Yet it seems that retailers are unable to resolve them, and manufacturers are clearly failing to provide sufficient customer support.

Yet many of these unnecessary lawsuits could have been prevented with a little basic maintenance. Zedler loss adjusters, for example, were involved in a case that could have been avoided if a retailer had simply oiled the bicycle chain.

**Cheap bikes vs. pricy pedelecs.** Conventional bicycle parts also break, and retailers sometimes neglect to perform essential services. So why are lawsuits more common with pedelecs but not regular bikes?

The answer has to do with the bikes themselves as well as who buys them. The reality is that cheap bikes account for the biggest share of the market. If a substandard part breaks on a cheap bicycle, it is not a big financial loss.

With so little money at stake,

there is hardly a lawyer who would take the case. The customer will fix the problem, live with it, or get rid of the bike.

With high-end conventional road and mountain bikes, buyers tend to be enthusiasts who understand what they are getting into. If the bike is not running properly, these customers are often willing to put up with the repairs and delays needed to fix the problem.

With e-bikes, everything is different. Customers expect their new pedelec to function properly — no excuses. They've just spent a lot of money for a "bicycle," and expect it to run without problems.

That's often because a pedelec is more important to these customers.

In Switzerland, for example, about 18 percent of all cyclists consider a bicycle to be their second most important means of transportation. But for pedelec owners, it's nearly 80 percent. Pedelec owners expect their investment to give them "anytime mobility."

**Lessons from car dealers.** Bicycle retailers may not like the comparison, but their new pedelec customers may expect them to act more like car dealers. A dealership offers a friendly greeting at the reception counter and provides a waiting area with comfortable seats, free coffee and magazines. These conveniences are sorely lacking at most bike retailers.

Differences in the service departments are even more pronounced. The dealership uses computer software to read the car's diagnostic system and pinpoint the problem. Many dealerships wash the car before returning it to the customer. These things make an impression.

But with most independent bicycle retailers hardly able to offer the same level of service, it is little wonder that these new customers become more demanding and confrontational.

Our industry needs to change if it wants to satisfy its customers — especially pedelec buyers — and avoid expensive and time-consuming lawsuits.

We do not need to break new ground; we simply need to look at what other industries have done for years and adapt some of their best practices.

For examples, retailers should be honest about the real range of a pedelec. Manufacturer's claims that a pedelec can achieve, for example, a range of "up to 180 km (110 miles)" on a single charge are nonsense — maybe it can happen only under exceptional conditions.

Retailers also need to be upfront about the fact that components, such as the battery, degrade from time and use.

**Room to improve.** From the many court cases that Zedler loss adjusters have been involved in, it is clear that retailers have much room to improve. Manufacturers also need to do better job with technical documentation and the way they handle modifications.

Retailer training should not be a one-time event, or something that involves only the boss. All staff employees should know more about pedelecs. That's the only way to ensure that a simple complaint from a customer doesn't end up in court.

This dramatic rise in lawsuits involving pedelecs can have only one explanation: Manufacturers and bicycle retailers are not prepared to meet the increased demands of pedelec consumers.

They must realize that a pedelec is more than a frame, fork, a set of handlebars and a motor on wheels. It's a product that requires a lot of education through user manuals, riding classes, etc., and a much higher standard of service. That service doesn't stop when the pedelec is sold. Customers require after-sale service as well. ■ **DIRK ZEDLER**

## Zedler-Institut

Since early 1993, graduate engineer Dirk Zedler has worked as an expert analyst who investigates bicycle accidents and material failures on behalf of courts, companies, insurance companies and private individuals. Since 1994, he has been recognized as an officially appointed and sworn expert for bicycles, and, since 2014, for electric bicycles. His team currently prepares about 800 expert's reports per year.

Zedler – Institut für Fahrradtechnik und -Sicherheit GmbH benefits from this wealth of knowledge to manufacture testing systems that enhance research and development efforts, leading to safer and better bicycles. It also supplies equipment for leading European special-interest magazines. These test systems are available for purchase by manufacturers, and are available to customers at the Zedler-Institut's test lab.

The Zedler-Institut also draws upon its background to write user manuals that



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help bicycle buyers understand how to use their bicycles and pedelecs appropriately, while releasing manufacturers from liability. Manuals are published in more than 30 languages.

In short, Zedler GmbH has set the standards for the bicycle industry. For more information, visit [www.zedler.de](http://www.zedler.de). ■