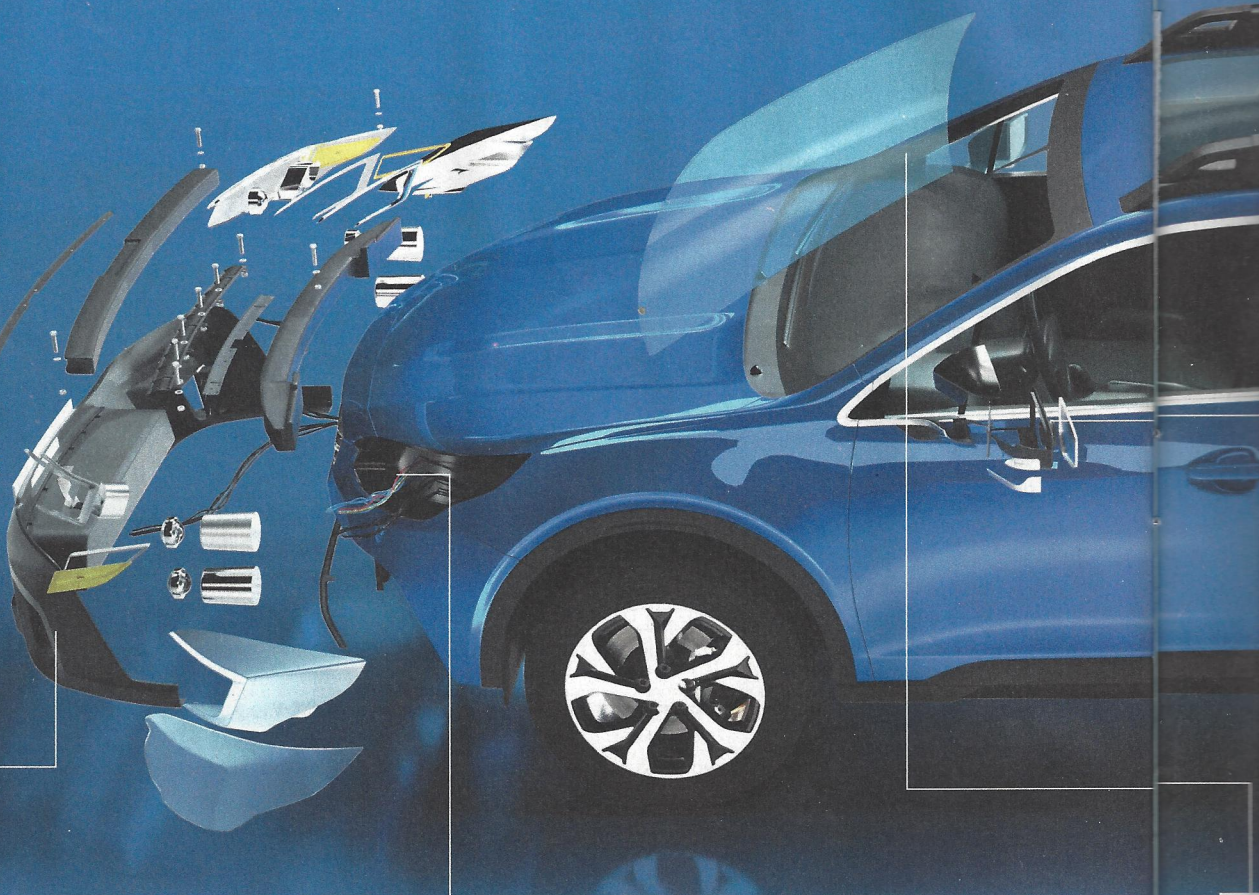


The Hidden Cost of Safety Features

HOW DOES ADVANCED SAFETY TECH AFFECT CAR REPAIRS?

Consumer Reports set out to find average prices for minor collision repairs that have become pricier as shops contend with repairing and recalibrating advanced driver assistance system (ADAS) parts. We asked RepairPal, an independent group that tracks repairs, to run the figures. Additional costs vary by model, but it's clear that ADAS equipment can make some of these repairs more expensive. But studies have also shown that some ADAS features can reduce crashes and collision-claim costs.



FRONT BUMPER

\$700-\$1,800

BASIC BUMPER REPAIR

+\$500-\$1,900

SENSOR AND CAMERA REPLACEMENT(S)

+\$250-\$600

RECALIBRATION

Front bumpers can hold sensors and cameras that help make automatic emergency braking (AEB) and other ADAS features work. Experts recommend recalibrating sensors and cameras after minor collisions, even if the ADAS equipment doesn't need to be replaced. Recalibration costs vary by model and the features involved. Vehicles with AEB and forward collision warning (FCW) had 50 percent fewer rear-end collisions, according to a study from the Insurance Institute for Highway Safety.

HEADLIGHTS AND TAILLIGHTS

\$200-\$500

HALOGEN ASSEMBLIES

\$750-\$1,500

LED ASSEMBLIES

+\$100-\$250

RECALIBRATION

LED headlights and taillights are available on more mass-market cars these days, adding expense when they're damaged and need to be replaced. LED headlights provide a brighter and wider beam pattern, but they don't necessarily help you see farther down the road, CR's tests have found. "LED headlamp assemblies vary wildly in cost," says Jill Trotta, vice president of RepairPal's automotive group. "Some European assemblies can cost as much as \$3,000 to \$5,000." Only headlight assemblies (not taillights) need to be recalibrated.

AFTER THE WINDSHIELD cracked on Ted Hine's 2017 Subaru Forester, he was shocked when a dealership quoted \$1,400 for a replacement. Safelite AutoGlass, a national auto glass repair and replacement chain, was cheaper but still surprisingly high at \$910. Hine recalled paying \$150 as recently as five years ago for a similar repair on his previous car, and a mobile

technician did the job right in his driveway. "I'm 74 years old and retired, on a limited fixed income," Hine said. "I can't afford \$900-plus for a windshield every time a truck randomly throws a rock at me."

Hine's Subaru has EyeSight, a suite of advanced driver assistance systems (ADAS) that includes forward collision warning

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SIDE MIRROR REPLACEMENT

\$300-\$500
STANDARD MIRRORS

\$1,000-\$2,500
MIRRORS WITH ADAS

+\$250 and up
RECALIBRATION

Side mirrors can house blind spot warning (BSW) indicator lights, but they can be more complex, with camera and video display capabilities. Vehicles with blind spot detection systems had 23 percent fewer lane-change crashes with injuries, according to the IIHS-Highway Loss Data Institute (HLDI) study.*

WINDSHIELD REPLACEMENT

\$300-\$500 REGULAR WINDSHIELD
\$700-\$1,500 ADAS-CAPABLE WINDSHIELD
+\$800-\$1,900 SENSOR AND CAMERA REPLACEMENT(S)
+\$250 RECALIBRATION

Cameras and radar sensors that help AEB and lane departure warning (LDW) work are often mounted inside the windshield. Depending on the type of damage, windshield repair or replacement can involve sensor and camera replacement and/or recalibration. Vehicles with LDW had 21 percent fewer single-vehicle, sideswipe, and head-on crashes with injuries, according to the IIHS-HLDI study.*

REAR BUMPER

\$700-\$1,800 BASIC BUMPER REPAIR
+\$1,000-\$2,500 SENSOR AND CAMERA REPLACEMENT(S)
+\$250 and up RECALIBRATION

Cameras and sensors for rear AEB, cross traffic assist, and parking assist live behind the rear bumper and can be damaged in a collision. Vehicles with rear AEB [when combined with rearview cameras and parking sensors] had 78 percent fewer backup crashes, according to the IIHS-HLDI study.* "Any basic body technician can do a bumper repair," Trotta says. "Now, there's so much tech built into the bumper it takes advanced technicians and calibration to fix it."

*Figures are based on average repair costs for typical cars that consumers might own, plus some higher-end outliers, according to RepairPal, an independent group that tracks repair costs. The figures don't reflect repair costs for some ultra high-end vehicles or for more serious crashes requiring more extensive body work. The pricing is for car, SUV, and light-duty truck repair costs, including parts and labor. RepairPal is a CR partner. Source: IIHS-HLDI's "Real-world benefits of crash avoidance technologies," June, 2019.