

HOW CARS ARE HOLDING UP

Our latest survey of subscribers' experiences with their cars shows that vehicles from Detroit's Big Three automakers are now slightly more reliable, on average, than those from European makers. They also tend to hold up better than the European makes as time passes. It's the first time in decades that U.S. cars have done so well.

The survey, the largest of its kind to gauge automotive reliability, yielded information on the serious problems our subscribers have faced with some 675,000 privately owned or leased cars, trucks, minivans, and sport-utility vehicles. It shows that among cars less than a year old, the average problem rate for European cars and trucks was 20 per 100 cars. For domestic vehicles, it was 18 per 100. In our 2002 subscriber survey, U.S. and European automakers were tied at about 21 problems per 100. The graph at right shows the trend for vehicles up to eight years old.

Overall, the most reliable vehicles continue to be those from Asian automakers. The problem rate for the newest models among all Japanese and Korean vehicles is holding steady at 12 per 100.

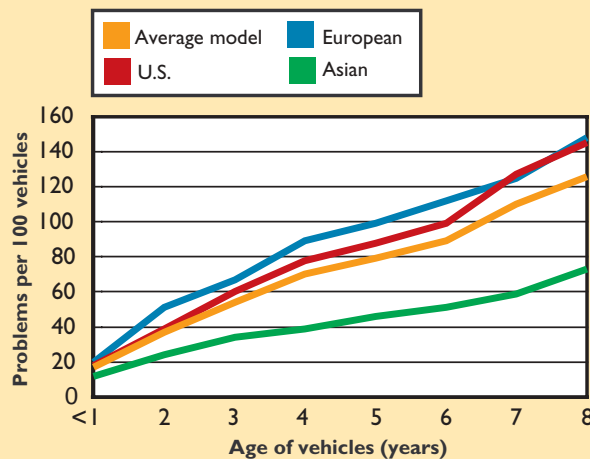
As the tables on page 17 show, Acura, Honda, Infiniti, Lexus, Mazda, and Toyota have been the most reliable makes over the past five model years, based on the average problem rates. (Those averages can mask a wide range of problem rates among individual models; reliability varies from model to model for most makes.)



As the problem rate for domestic vehicles improved slightly, the quality gap between U.S. and Asian makes narrowed slightly. Still, the average 2003 U.S. model still has 50 percent more problems than the average Japanese model.

Detroit makes gains

Our 2003 subscriber survey shows that U.S. automakers have a slightly lower problem rate than do European manufacturers. However, Asian vehicles remain significantly more trouble-free than either U.S. or European vehicles. The graph below plots the problem rates for vehicles up to eight years old.



THE NEW-CAR PICTURE

For CONSUMER REPORTS to recommend a vehicle, it has to perform well for us and in crash tests and achieve average or better reliability. To predict new-vehicle reliability, we weight the trouble rates to calculate overall reliability data for the three most recent years. We give added weight to problems with the engine, transmission, and cooling and drive systems.

In some instances, we use only one or two years' data because the current version of the vehicle is less than three years old or because we don't have data for more years.

Here are the most reliable makes and models, and some models notable for reliability problems, from the Big Three automakers and their Asian and European counterparts:

Chrysler: Improving.

Chrysler has made great strides over the past several years. Some new Chrysler models have been reliable since their introduction.

The Jeep Liberty SUV was the most reliable 2003 Chrysler vehicle. The Chrysler PT Cruiser also had above-average reliability. The Dodge Ram and Dodge Neon both improved to average, overall, but they scored too low in our tests for us to recommend them.

Ford: Some early troubles. This automaker suffers from teething pains: problems with new or redesigned models in

their first few years. (For example, the new-for-2003 Ford Expedition and Lincoln Navigator SUVs did poorly.) But this year, most of the Ford vehicles that had been troublesome in the past improved to average, so we can recommend them.

The most significant is the Ford Focus, which has scored high in our tests of small sedans, sporty cars, and hatchbacks but had a disastrous first few years where reliability is concerned. However, the 2003 Focus is the most reliable Ford model. (The 2000 and 2001 versions are still worse than average.) Other Ford models that we can now recommend are the high-rated Lincoln LS sports sedan and three SUVs: the Ford Escape/Mazda Tribute twins and the Ford Explorer.

General Motors: A mixed record. GM has some reliable cars and others that have been troublesome. In the three-year weighted average we use to predict reliability, the Buick Regal was the most reliable family sedan in the survey, out-performing perennial winners such as the Toyota Camry and Nissan Maxima. The best GM car for the 2003 model year is the Chevrolet Monte Carlo. We don't

Our broad look at reliability

Every spring we conduct a major survey of subscribers that asks about any serious problems they have had in the preceding 12 months with their own vehicles. Our 2003 survey went to CONSUMER REPORTS and ConsumerReports.org subscribers in the spring of that year. We use the results of the survey in several ways throughout this issue. See the following reports:


How the 2004 models will fare, page 77. These lists show our reliability ratings for new cars and let you compare vehicles by category. We also include the reliability predictions in the new-car profiles, which begin on page 33.

Best and worst used cars, page 80. These quick-reference lists show all models in our latest survey that had above-average or below-average reliability.

Detailed reliability ratings, page 82. These charts show you how 1996 through 2003 models have held up in terms of 14 specific trouble spots. They let you see the strengths and weaknesses for each of the past eight model years.

How the makes stack up over time

The tables below show how the makes rank according to the problem rate we calculate from our annual subscriber survey. The tables show not only how makes compare with the "average" car for that year, but also how the individual makes fare over time. For many makes, reliability varies. Problem rates have been rounded.

 The most consistently reliable makes.

New vehicles Problems with 2003s

MAKE	PROBLEMS PER 100 VEHICLES
Lexus	9
Infiniti	10
Honda	10
Toyota	11
Acura	13
Mazda	13
Buick	13
Saturn	14
Hyundai	14
Nissan	14
Pontiac	15
Dodge	16
Saab	16
Kia	16
Jeep	16
Average model	17
Chrysler	17
Ford	17
Subaru	17
Mercury	18
BMW	19
Volkswagen	19
Chevrolet	19
Audi	20
Volvo	20
Mercedes-Benz	22
GMC	24
Mini*	25
Cadillac	25
Hummer*	26
Jaguar	30
Lincoln	31

Three-year-old vehicles Problems with 2001s

MAKE	PROBLEMS PER 100 VEHICLES
Infiniti	21
Lexus	23
Toyota	24
Acura	28
Honda	35
Subaru	36
Mazda	39
Mitsubishi	41
Nissan	41
Buick	48
Saab	50
BMW	51
Lincoln	54
Average model	54
Hyundai	56
Mercury	57
Ford	58
Saturn	58
Jeep	58
Chevrolet	59
Dodge	60
Chrysler	60
Audi	60
Volvo	62
GMC	63
Oldsmobile	64
Pontiac	64
Volkswagen	78
Mercedes-Benz	79
Cadillac	91

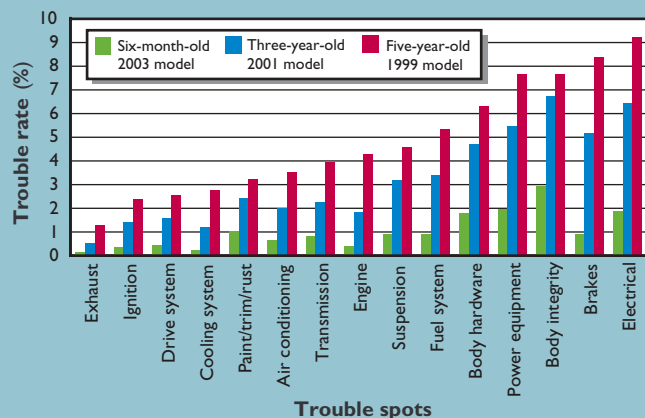
Five-year-old vehicles Problems with 1999s

MAKE	PROBLEMS PER 100 VEHICLES
Infiniti	24
Lexus	32
Acura	34
Toyota	35
Nissan	46
Subaru	51
Honda	53
Mazda	54
BMW	60
Saturn	62
Lincoln	72
Buick	72
Saab	74
Ford	75
Average model	79
Mercury	82
Cadillac	82
Mercedes-Benz	87
Chrysler	88
Dodge	90
Chevrolet	92
Plymouth	95
Volvo	95
GMC	95
Audi	98
Jeep	99
Pontiac	99
Oldsmobile	108
Volkswagen	138

* Problem rate based on one model only.

Average trouble rates over time

Graph shows the percentage of subscribers reporting problems in individual trouble spots over a five-year period. Brakes, the electrical system, power equipment, and body integrity are the leading trouble areas.



have recent road-test data on either the Regal or the Monte Carlo, however, and so cannot recommend them.

The GM cars we can now recommend are the Buick Park Avenue and Rendezvous and the Saturn L300, all of which improved to average.

Several of GM's full-sized trucks and SUVs, including the Chevrolet Avalanche, Silverado, Suburban, and Tahoe, and the GMC Sierra, Yukon, and Yukon XL, continue to maintain average predicted reliability, even though their 2003 models slipped slightly.

Japan: Best and worst. Honda, Nissan, Mazda, and Toyota were among the makes well represented in the top ranks of reliability. The Toyota Camry (re-designed for 2002) and Nissan Altima, which had sunk to average in our 2002 survey, have improved to above average.

Some Japanese nameplates had a mixed showing. Nissan and Subaru have generally good reliability, but the entry-level Nissan Sentra sedan dropped to below average, and the new-for-2003 Subaru Baja truck was much below average. The redesigned 2003 Toyota 4Runner was below average in its V6 version (it was subject to a recall for a fuel-system problem). The V8, however, was much better than average.

Europe: Few standouts. Relatively few European cars did well. The handful showing average or better reliability are the BMW 3 Series, the Saab 9-3 and 9-5, and all Volvos except the XC90 SUV.

But all Mercedes-Benz models were below average, as were all Audis, Jaguars, Land Rovers, and the BMW 7 Series, X5 SUV, and Mini Cooper.

Volkswagen continued losing ground, with the Golf, Jetta, New Beetle, and four-cylinder Passat all worse than average. Many of the problems can be attributed to the ignition coils in the 1.8T engine shared by those cars.

THE PROSPECT FOR OLDER CARS

When we calculate a make's overall problem rate, we look at all the trouble spots covered in our survey—engine, transmission, brakes, suspension, body hardware, and the like—and treat them equally.

On the road and in real time, however,

no vehicle ages uniformly. That's why we look at our survey data in a different way to calculate the Reliability Verdicts (see page 82). For the Reliability Verdict ratings, we compare each make and model with all vehicles of the same age.

Our surveys show these trends:

- As they age, Asian vehicles generally have fewer problems than U.S. or European vehicles. The 2001 Honda CR-V, for instance, with 12 problems per 100 vehicles, was more trouble-free than many 2003 models.
- Some models that have a troublesome start do not age gracefully. For example, the 2001 Mercedes-Benz M-Class SUV still has a higher trouble rate than its 1999 counterpart. The 1999 Honda minivan has had many more problems than did the 1996, 1997, and 1998 versions.
- Among late-model vehicles, the most common complaints involve squeaks and rattles, power accessories, loose trim and door latches, and electrical problems.
- As the graph on page 17 shows, the typical three-year-old vehicle has about three times the trouble rate of a new car, and the typical five-year-old has about 4½ times the trouble rate of a new model.

By the time a vehicle is three years old, brake problems join the roster of

prominent trouble spots. By age five, electrical problems outstrip all others.

For example, the worst car for electrical problems in our survey was the 1996 Volkswagen Passat V6, with an astonishing 40 percent of owners in our survey reporting a problem. The 1996 and 1997 Chevrolet Astro and GMC Safari vans were nearly as bad.

But even newer cars can have major troubles. At least 30 percent of owners reported serious electrical problems with the 1998 and 1999 New Beetle, the 1998 and 2000 Corvette, the 2001 Mercedes C-Class, and the 1998 Mercedes SLK.

Knowing how a particular model-year vehicle compares with the norm helps if you're in the market for a used car. The tables on the previous page look closely at three-year-old and five-year-old cars for two reasons: There are many three-year-olds available because they've come off lease, and there should be plenty of five-year-olds because their original owners have moved on to new cars.

A three- or five-year-old vehicle with a good reliability history can be an excellent value. It is new enough to still have most of its useful life, yet old enough to have endured the worst part of the depreciation curve.

closeup

HOW RELIABLE ARE GAS/ELECTRIC HYBRIDS?

You might expect hybrid cars to have serious reliability problems since they use a new and relatively unproven technology involving a gasoline engine, an electric motor, and a high-tech battery pack. But the hybrids seem to be holding up well so far. The first-generation Toyota Prius was among the most reliable in our survey, and the 2003 Civic Hybrid had outstanding reliability; we don't have enough data on the Honda Insight hybrid to predict reliability.

Those hybrids come from the most quality-conscious Japanese makers. It remains to be seen how well the forthcoming Ford Escape hybrid SUV will do. A point in its favor: Its hybrid powertrain will use components similar to those in the Prius. The 2005 Lexus RX 400h SUV hybrid stands a good chance of being reliable, based on Lexus' track record.

GREEN WITH ENVY The 2003 Civic Hybrid (shown), like the first-generation Toyota Prius, has had few reliability problems to date.

