

## Sludge: Jumping through hoops to make a case

A killer named sludge may live in your engine and can choke the life from your car, regardless of maintenance or mileage. And the automakers whose engines are susceptible to sludge still aren't always eager to help.

Sludge often forms when oil oxidizes and breaks down after prolonged exposure to high temperatures. The baked oil turns gelatinous and can block vital oil passages, which could lead to repairs exceeding \$8,000 or even an engine replacement.

While sludge often results from poor upkeep, notably not changing oil at prescribed intervals, some engines from Audi, Chrysler, Saab, Toyota, and Volkswagen appear prone to it (see the chart [below](#)).

The Center for Auto Safety says it has received about 1,300 sludge complaints since 2004. Toyota, the company with the most engines in question, cited 3,400 complaints through 2002 but hasn't provided an updated number since. And while about 4.7 million engines sold in the U.S. may have sludge-prone designs, the problem rate as reflected in our reliability data is very low. But that's little solace to those affected by it.

The automakers initially blamed these concerns on poor care and resisted covering repair costs. However, all but Chrysler have begun replacement or repair programs, even for those who bought their vehicles used. Chrysler says it will handle sludge complaints individually.



**Some 4.7 million engines sold in the U.S. may be prone to developing sludge.**

Photograph by Rocky Carr

### AUTOMAKERS PLAY TOUGH

These programs put the burden of proof on the owner, however. While Toyota, Lexus, Audi, Saab, and Volkswagen have extended engine coverage to eight years from the original purchase, the deals come with fine print.

Volkswagen's policy requires that customers produce all oil-change records. Saab will repair or replace its engines only after its own maintenance review, and Toyota asks for proof of at least one oil change a year.

Those conditions would require attentive record-keeping for original owners, but it could cause headaches for used-vehicle owners. Even with the extended engine warranties, some consumers are denied repair compensation when they first approach the manufacturer.

When Sarah Bolek's 2001 Volkswagen Passat hit 59,000 miles in 2004, the engine succumbed to sludge. The repair estimate was \$9,000, says Bolek, who lives in Boyds, Md.

Despite the warranty, Volkswagen originally turned down her reimbursement request. The automaker objected to two oil changes because a shop had not recorded the vehicle's mileage. Still, all the oil changes were within recommended intervals.

"They kept telling me it was my fault," Bolek says. Meanwhile the car was out of service for four months.

When contacted by *CR*, the company said that it was investigating Bolek's claim and that it had paid for part of the repair. A week later, it picked up the balance of Bolek's bill.

Clarence Ditlow, executive director of the Center for Auto Safety, says consumers must be persistent with dealers and manufacturers concerning sludge. "Too few consumers complain beyond the dealer," he says. "Manufacturers know that every hurdle they create will make more consumers drop out."

### HOW TO FIGHT SLUDGE

*Consumer Reports* urges vehicle owners to keep thorough records of their automobile maintenance and repairs and make sure all receipts contain the date, mileage, and vehicle identification number.

CR also recommends that owners of vehicles with sludge-prone engines use an American Petroleum Institute-approved synthetic motor oil or change oil according to the “extreme use” schedule in the vehicle’s manual.

Synthetics have a higher tolerance for extreme heat and flow better in cold temperatures. When using any oil, be sure it meets manufacturer viscosity guidelines.

Changing oil on the extreme use schedule (and saving the records) provides evidence that you tried to protect the engine from sludge.

Used-car buyers considering those vehicles should locate one with complete maintenance records.

<b>ENGINES IN QUESTION</b>				
Makes	Engine	Models and years	U.S. engine population*	New-engine warranty
<b>Audi/Volkswagen</b>	1.8L 4 turbo	1997-2004 Audi A4, Volkswagen Passat	447,000	8 years/unlimited mileage
<b>Chrysler/Dodge</b>	2.7L V-6	1998-2002 Chrysler Concorde, Chrysler Sebring, Dodge Intrepid, Dodge Stratus	797,000	None. Chrysler will handle on a case-by-case basis
<b>Lexus/Toyota</b>	3.0L V-6	1997-2001 Lexus ES300, Toyota Camry, Toyota Avalon, Toyota Sienna; 1999-2001 Lexus RX300, Toyota Camry Solara; 2001 Toyota Highlander	1,577,000	8 years/unlimited mileage
	2.2L 4	1997-2001 Toyota Camry, 1996-99 Toyota Celica, 1999-2001 Toyota Camry Solara	1,757,000	8 years/unlimited mileage
<b>Saab</b>	2.0L 4 turbo	2000-02 9-3 hatchback, 2000-03 9-3 convertible	82,000	8 years/unlimited mileage
	2.3L 4 turbo	1999-2003 Saab 9-5, 1999 9-3 Viggen	68,000	8 years/unlimited mileage

\* Source: Analysis from Ward's Auto Info Bank (approximate).