

2007 CHEVROLET AVALANCHE

Remake your own truck, every day. Chevrolet Style.



CHEVROLET AVALANCHE

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It's based on the entirely new GMT900 truck platform found beneath full-size Chevrolet, GMC and Cadillac siblings wearing both pickup and sport-utility-vehicle bodies.

The front end is cleaner, more modern and has closer tolerances and fewer pieces and panels. This significantly aids aerodynamics and thus helps to increase fuel mileage and reduce wind noise. The body sides are free of the plastic cladding of the old version while the windshield is at raked at a steeper angle. Its position actually allows the top of the instrument panel to be lower for greater visibility and a more open-feeling interior.

The dash panel is a huge step



The second-generation Chevrolet Avalanche retains the versatility that made it so popular while boasting big improvements in fuel economy, refinement, ride quality and steering quality.

forward. It's covered with a grained soft-touch material and gaps between panels have been considerably reduced and made more uniform resulting in a much more upscale and refined impression. The front seats are wide yet supportive and the rear has plenty of room for three big adults with loads of head

and legroom for all.

Lower the rear seat backs and you get a flat, hard-covered storage area of considerable size inside the cab. The next step is to lower the patented Midgate wall, giving access to the 5'3" cargo bed and enough room to carry the traditional 4x8 sheet of building material flat

with the tailgate closed under a weather- and theft-proof cover. Next, remove any or all of the three solid panels atop the cargo bed. For even more cargo space, you can remove the rear glass, exposing a vast area stretching from the rear of the front seats to the tailgate. Each of the removable cargo-cover panels has a weatherproof seal and is capable of holding a 250-pound load.

The floor of the bed is covered in a unique rubberized material that is so effective at preventing cargo from sliding around that you can't actually slide items into it . . . they just won't move. There are lockable storage cabinets on either side of the bed with drain holes in the bottom so you can fill them with ice and beverages. The tailgate and side boxes are all programmed to lock and unlock with the remote keyless entry system.

Beneath this unique skin lies a new Chevy pickup with the ruggedness of a boxed steel frame and separate body. The standard engine is a 5.3-liter V8 putting out a robust 320 horsepower, 310 with four-wheel-drive due to a more convoluted exhaust system. Unfortunately, in this age of five-, six- and even seven- or eight-speed transmissions, this one has only four forward ratios. Thanks to lots of torque, it works well but both performance and fuel economy would benefit

from an additional gear or two.

General Motors has made big gains in fuel economy with new GMT900-based vehicles. The 5.3 is equipped with displacement on demand or active fuel management as GM calls it. This system seamlessly shuts off half of the cylinders under no- and low-load conditions.

A 366-horsepower 6.0-liter V8 will become available later in the model year.

Big disc brakes at each corner with four-wheel anti-lock are also standard. The Avalanche is rated to tow up to 7,000 lbs. (3,225 kilos).

The Avalanche is designed for the individual who wants versatility. It can be a people hauler, a tow vehicle or be configured to carry a wide variety of cargo sizes and shapes. This unique go-anywhere, do-anything multi-purpose vehicle fits plenty of lifestyles. ■

WHAT YOU SHOULD KNOW

► **Type**
Full-size, four-door, five-passenger pickup with unique cargo storage and configuration capabilities, available in two or four-wheel-drive.

► **Engines**
5.3-liter OHV V8 (320 h.p., 310 h.p. with four-wheel-drive)

► **Transmissions**
Four-speed automatic

► **Market position**
The original Avalanche was slow to catch on but has steadily found its market. This second-generation model is significantly improved in all major areas, most significantly in terms of fuel economy.

► **Points**
- All this handiness plus several trim levels
- Rear-wheel-drive is standard but a full-time four-wheel-drive system is available.

- The Avalanche remains unique in size, capability and weather-proof carrying capacity.
- With styling less of an issue, it will be interesting to compare sales numbers of the new-generation model to sales of the older model.

► **Safety**
Front airbags, anti-lock brakes and stability control are standard.

► **The numbers**
MPG (city/hwy): n/a
Base Price: \$31,800

AUTOGRAPH

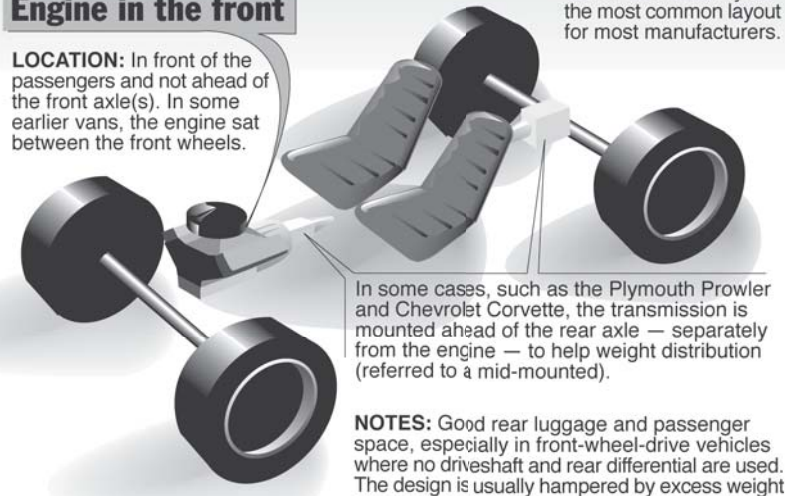
Know the back from the front

Over the years, manufacturers have placed the automobile engine in three distinct and different locations, each having its own benefits. Travelling into today's new-car lots, you'll find the same three variables.

Engine in the front

LOCATION: In front of the passengers and not ahead of the front axle(s). In some earlier vans, the engine sat between the front wheels.

THE PLAYERS: By far the most common layout for most manufacturers.



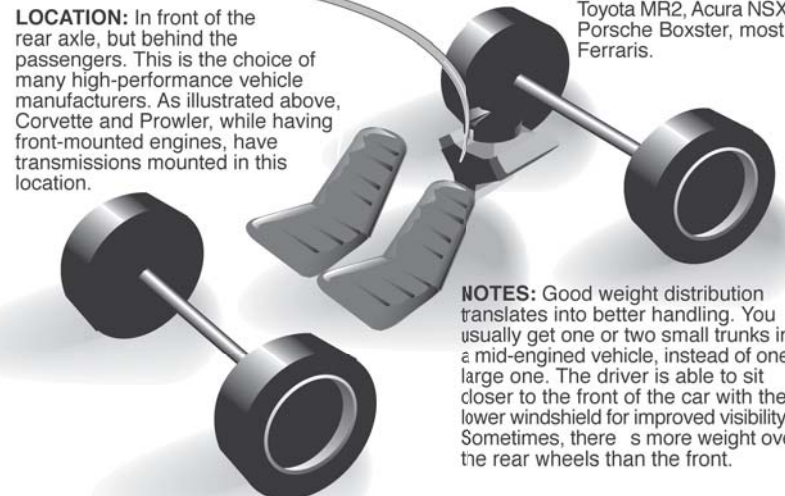
In some cases, such as the Plymouth Prowler and Chevrolet Corvette, the transmission is mounted ahead of the rear axle — separately from the engine — to help weight distribution (referred to as a mid-mounted).

NOTES: Good rear luggage and passenger space, especially in front-wheel-drive vehicles where no driveshaft and rear differential are used. The design is usually hampered by excess weight over the front wheels, which limits braking and handling potential. Some front-engine designs move the passenger compartment and engine further back to better distribute the weight.

Mid-engine

LOCATION: In front of the rear axle, but behind the passengers. This is the choice of many high-performance vehicle manufacturers. As illustrated above, Corvette and Prowler, while having front-mounted engines, have transmissions mounted in this location.

THE PLAYERS: Toyota MR2, Acura NSX, Porsche Boxster, most Ferraris.

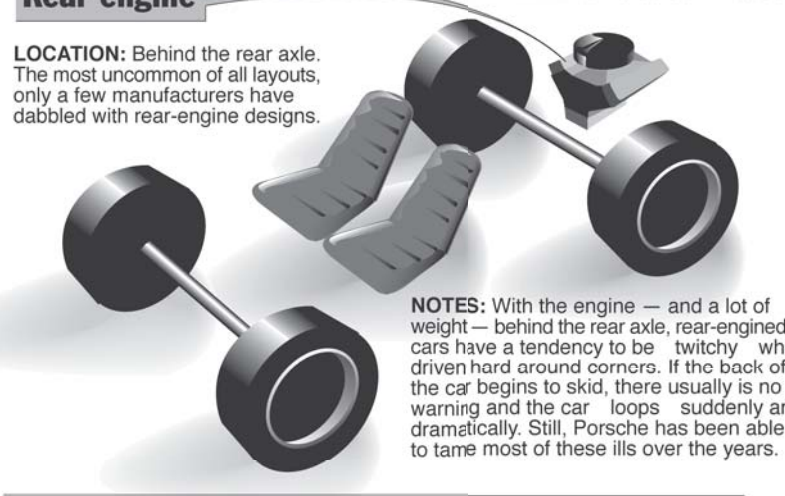


NOTES: Good weight distribution translates into better handling. You usually get one or two small trunks in a mid-engined vehicle, instead of one large one. The driver is able to sit closer to the front of the car with the lower windshield for improved visibility. Sometimes, there's more weight over the rear wheels than the front.

Rear engine

LOCATION: Behind the rear axle. The most uncommon of all layouts, only a few manufacturers have dabbled with rear-engine designs.

THE PLAYERS: Porsche 911 models.



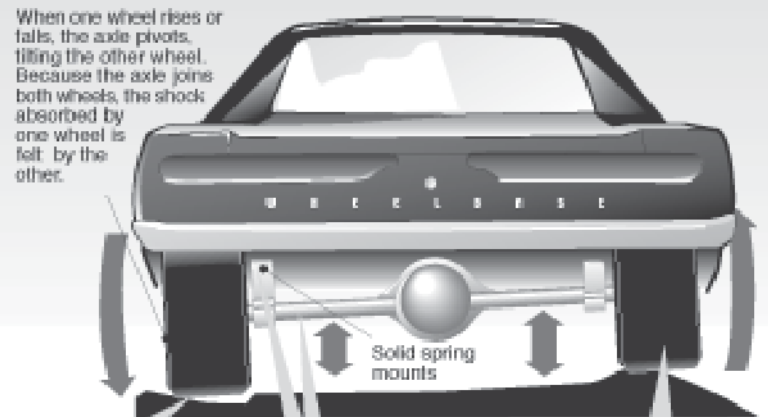
NOTES: With the engine — and a lot of weight — behind the rear axle, rear-engined cars have a tendency to be "twitchy" when driven hard around corners. If the back of the car begins to skid, there usually is no warning and the car loops suddenly and dramatically. Still, Porsche has been able to tame most of these ills over the years.

AUTOGRAPH

How independent suspensions work

For many years, the rear axle was a straight, solid piece that joined the two driving wheels. Now that independent front suspensions incorporating front-wheel drive have proven durable, the design has found its way into the rear suspension — and more rear-wheel-drive cars. Benefits include improved suspension geometry that make for a better ride over bumpy roads, as well as better vehicle control.

Live axle Used since the dawn of the automobile, the straight axle is tough and relatively inexpensive to build and maintain. Despite its merits, the straight axle does not provide optimum ride comfort and control, simply because when one wheel hits a bump, the other wheel feels it.



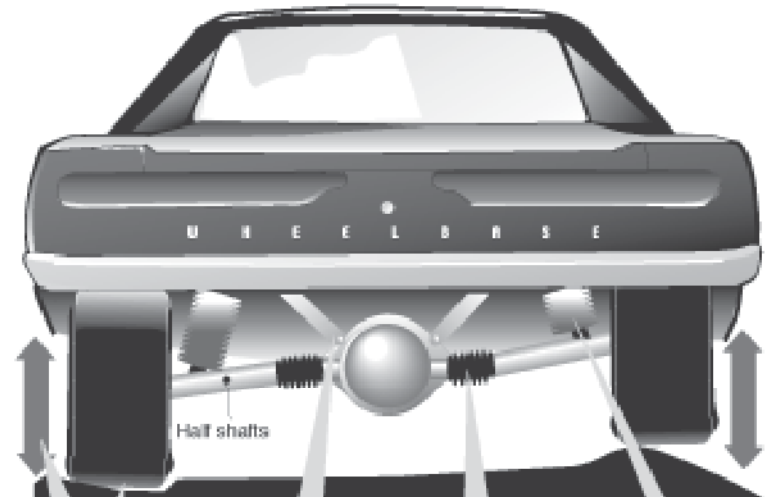
When one wheel rises or falls, the axle pivots, tilting the other wheel. Because the axle joins both wheels, the shock absorbed by one wheel is felt by the other.

Tilted wheels mean that the tread of the tire is not square with the road, which can lead to less than optimum road holding.

The axle is live in that it actually floats, but is fastened to the car at fixed points. Bumps cause the leaf springs and mounts to twist.

Ride and handling are most hampered when each wheel is engaged in heavy up/down movement. Each wheel feels the other wheel's activity, with the body being flung about as the axle moves.

Independent rear suspension



Ideally, an IRS setup keeps the tire face square to the road for better traction while cornering, although economy versions (the rear suspensions on many front-wheel drive cars, for example) sometimes do not.

The middle section of the suspension is fixed to the body or frame. Because of this, no universal joints exist between the transmission and rear differential.

Universal joints (constant velocity joints) connect the half shafts to the differential allowing up/down movement of the wheels.

Coil springs and struts allow manufacturers to fine-tune ride and handling more so than with leaf springs.