

Utility vehicles: *What's the difference?*

The terms “sport utility vehicle (SUV)” and “crossover” (also dubbed a compact sport utility vehicle, or CUV) are heard quite frequently and some-



times used interchangeably. It can be easy to blur the terms because of the subtle differences between these types of vehicles. But upon careful interpretation of these ultra-popular vehicles, the variations between them become more apparent. The frames of these vehicles can help people distinguish between them.

Many car experts refer to SUVs as those vehicles that are equipped with the chassis of a truck, while crossovers are based on a car's platform. SUVs rely on a “body on frame,” which means the body is built separately from the frame of the vehicle and then assembled later on.

Crossovers use “unibody” archi-

ture, which means the body and frame are one piece. SUVs are classified as a light truck and have the towing and performance capabilities of a pickup truck. As a result, the wheelbase, floorplan, suspension, powertrain, and other SUV arrangements are similar to those of a pickup. Conversely, crossovers use the platform of a sedan and

handle much more like traditional passenger cars, offering smooth rides and responsive handling. Crossovers are often smaller than SUVs and may not have the off-roading or towing capacities of SUVs.

Another difference is the driveline. Most SUVs employ four-wheel drive systems, while crossovers have two-wheel drive systems.

What's the difference between AWD and 4WD?

Winter weather is just around the corner, leaving some drivers wondering if their two-wheel-drive vehicles can handle roads covered in snow and ice. Now is the time people flock to car and truck dealerships to trade in their cars for something with a little more power and traction and also to take advantage of end-of-season pricing. When faced with an array of vehicles boasting four-wheel-drive and all-wheel-drive, consumers often wonder about the differences between the two options or if there is any difference at all. Though similar, four-wheel-drive and all-wheel-drive are not quite the same.

Four-wheel-drive systems, often referred to as 4WD, trace their origins to the late 1800s, while all-wheel-drive, or AWD, did not arrive until the late 1970s, when an AWD system was used on an Audi vehicle for rally racing. Now many cars and trucks come with 4WD or AWD, particularly crossovers and SUVs.

Both drive systems engage all four wheels at the same time to provide more traction. On AWD systems, the powering of the wheels is automatic and usually handled by the electronic system of the car. Some vehicles drive in two-wheel-drive, but then engage AWD when sensors detect a need for more traction and maneuverability. When operating 4WD

vehicles, drivers may have to manually engage the system. True 4WD uses a transfer case mounted by the rear of the transmission. A button or selector lever on older model SUVs would switch the vehicle from 2WD to 4WD. Unlike in AWD systems, the front and rear axles are locked together in 4WD systems.

Four-wheel-drive systems are better for off-roading, rock-climbing and driving through mud and water. Individuals who participate in many off-road recreational activities will find that 4WD, especially in vehicles with more gears, is more effective and provides better traction. All-wheel-drive provides stability, largely on roadways, and enables the vehicle to modify the level of power to either the front or rear wheels to improve traction as needed. All-wheel-drive is adequate for many drivers and situations.

It is important to note that, on icy or slippery roads, neither AWD or 4WD systems assist with braking or completely prevent cars from skidding on slick surfaces. Having the ability to engage all four wheels at the same time should not be used as a replacement for cautious driving in inclement weather.

Four-wheel-drive and all-wheel-drive both provide power to all four wheels on the vehicle but have subtle differences that make each better for certain driving conditions.



All-wheel-drive and four-wheel-drive systems are similar, but the latter is preferable when driving off-road.