

Ask the Mechanic

Paul Kaganzi



SEND YOUR
QUESTIONS TO
mycar@ug.reactionmedia.com



A Q&A page where a
expert advice, trouble

Does a car's lifespan decrease if it is driven by multiple people?

Hello Paul, several members of my household use the same car, and everyone drives differently; some accelerate hard, others brake suddenly, while some are very gentle. Can inconsistent driving styles affect fuel consumption, gearbox health, or engine lifespan, and is there a way to minimise this kind of wear? **Grace Atim**

Hello Grace, you raise a pertinent issue. When multiple drivers use the same car, each with different driving styles and habits, ranging from aggressive acceleration and stop-and-go driving to gentle, laid-back driving, it creates a challenging situation for the vehicle's electronic and mechanical systems. Most vehicles built after the year 2000 are designed to endure and adapt to the use by different drivers. However, extreme variations in driving styles can significantly impact the longevity of critical components such as the engine, gearboxes, and brakes, primarily due to the heat generated by these different driving behaviours. This situation also affects fuel economy and the carbon footprint through increased tailpipe emissions.

Fuel economy and engine lifespan are influenced primarily by varying driving habits, which contribute to movement and heat generation through friction and wear and tear. The more aggressively you drive, the more frictional wear and heat damage you cause. Aggressive acceleration can increase fuel consumption by up to 30 percent on the highway and 40 percent in stop-and-go city traffic.

Hard acceleration or prolonged revving during cold starts can lead to premature wear of upper engine components (such as the valve train), piston rings, and cylinder walls. This occurs because the engine starts turning immediately, while the cold oil, which is thicker

and has a higher viscosity, takes time to warm up and provide adequate lubrication. During this initial period, moving components can run dry, leading to damage.

Conversely, laid-back or lazy driving, especially in conjunction with short trips, can result in the buildup of harmful carbon deposits on the intake valves and fuel injectors. This is due to insufficient heat generated to burn off these deposits, particularly in diesel engines. In newer diesel vehicles equipped with Diesel Particulate Filters (DPF), extremely short commutes and gentle driving can lead to the costly accumulation of exhaust soot, as the engine does not generate enough heat or run for a sufficient distance to effectively burn off the trapped soot.

NOTE
AVOID
AGGRESSIVE
DRIVING

Different driving styles can also damage both manual and automatic gearboxes. Impatient drivers may harm the gear clutch friction plates or the torque converter due to rapid downshifts that create sudden and harmful transmission overloads. Many automatic and dual-clutch transmission systems use adaptive technology to learn the driver's driving style, adjusting shift points and transmission output accordingly. When multiple drivers use the same vehicle, the transmission computer has to reconcile varying driving patterns, which can lead to harsh gear shifts, jerking, or hesitation.

Frequent hard braking can damage sensitive brake components such as brake pads and discs, as the extreme heat generated can glaze the pads and warp the discs. This also puts stress on the Anti-lock Braking System (ABS), which frequently engages the modulator pump and strains the ABS controller.

To minimise wear and tear, it is important to encourage all drivers in your household to practice considerate driving, especially when they are not responding to emergencies. Allow the car to idle and warm up for about five minutes during cold starts to ensure oil and coolant circulate through the engine before revving it. Avoid aggressive stop-and-go manoeuvres and hard shifts.

Regular maintenance checks are vital to inspect the fluids and oils in the engine, transmission, and brake systems. The brakes and suspension should be inspected for mechanical wear to prevent further damage.

During servicing, use premium engine oils blended with synthetic or semi-synthetic molecules, which leverage modern technology to withstand extreme engine conditions such as heat, combusive acids, and metal shear. These high-quality lubricants quickly circulate to the upper parts of the engine at startup, providing timely protection and performance improvements, as well as enhancing fuel economy as the engine runs.

What way Suzu

Hello P: Suzuki's low groat buying it slightly! Beside: what ot ple, susi make fe experie

F places as vehicle. V Swift exc with the clearanc underca terrain, I may dar as the en exhaust Due to it versatili to drive suburbs If you the Suz through upgrad assess limita perform impro chang centri confi adjus cleara raisin again: for m vehic maint

Tyre:

Your 2 ant Su: of appi crease: tion is t is fitted 185/551 provide crease of 155mm) Intere 2012 Ma equippe giving it 4 70mm. d

