

INFORMATION EVERY MOTORIST NEEDS TO KNOW

# MOTOR MART

## HABITS THAT DAMAGE THE GEARBOX

By Ahmad Muto

Resting a hand on the gear shifter is a bad idea, despite the arguments of convenience and comfort, considering the damage it causes to the gearbox in the long run. We can also agree that unintentionally shifting drive modes, say from drive to neutral, can damage the gearbox or cause an accident.

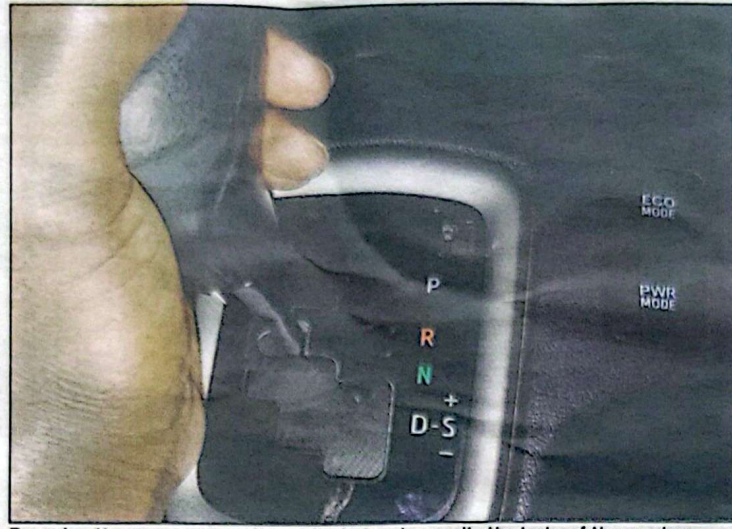
Now, have you imagined what can potentially happen in the event that drive mode shifts unintentionally from drive to reverse while on the road?

For starters, the reverse gear is purposely designed to enable a vehicle to be driven backward on the command of the right gear ratio and torque. This is done by the transmission changing the direction of rotation of the wheels.

It should be noted that, as a rule of thumb, the vehicle has to come to a complete stop before shifting to reverse (R), then gently pressing the accelerator pedal for the reverse motion to start.

Ibrahim Shomali, a car mechanic, explains that the gear will not enter because reverse only engages when the car has fully stopped. However, if done while the vehicle is in motion, the damage will be registered.

"What happens is that the mistake spoils the gearbox. The gearbox has locks and those are the parts that get spoiled. It does not matter whether it stays in reverse for a second or longer. The gearbox will respond with a grinding sound to signal that the command is not timely," he explains.



Engaging the reverse gear without first stopping spoils the locks of the gearbox

### CAUTION

Bonny Aclrdi, a car mechanic, says engaging the reverse gear while moving forward, without first stopping, damages the mechanism [shift fork in manual transmission] in the gearbox that opens when brake is applied before locking in the new gear that has been selected. "So, engaging the reverse gear without stopping first spoils those part of the car's gearbox."

### REVERSE WISELY

Now, in modern automatic vehicles, as explained by Shomali, reverse command while on the move will be ignored by the vehicle (but damage is still caused).

In modern manual cars, if you insist on reversing with repeated attempts, the transmission system will struggle with the command and respond with heat, tyre wear and a grinding sound from the gears clashing, to announce the potential damage of parts of the gear box.

## Why car mirrors are critical

By Vision Reporter

Often, you will see a car with a broken side mirror, an empty mirror shell, or no sign of a side mirror ever existing at all. The mere fact that such a car is on the road portrays non-urgency and a lesser purpose of mirrors on vehicles, as though to reduce them to mere luxury. This, however, is far from the truth; the absence of car mirrors is a traffic offence. Mirrors are actually critical; the reason they have largely become electronic parts on modern vehicles, discarding of manual adjustment mirrors. The goal is integration of safety and convenience.

Isaac Musitwa, a driver trainer, recalls a time a bodaboda rider broke his side mirror, leaving him with nothing to help navigate his blind spots. That, he says, was one of his worst experiences on the road.

"I had a short distance to drive to the spot where it was to be fixed. I wanted to check my blind spots, but I couldn't. It was hectic," he recounts.

The side mirrors, which are the most prominent given they are attached outside the vehicle on the front doors (A-pillar), are designed with convex lenses to give a great view of objects



Side mirrors give the driver a view of the surrounding background

and their surroundings using the convex lens that minimises the size of the objects while also extending their distance from the vehicle than they really are. For that reason, the manufacturers indicate on some of the mirrors, that objects are closer than they appear in the mirror.

### THE DIFFERENT MIRRORS

Medard Niwamanya, a driver trainer, explains that a car has three important mirrors - two side mirrors and a rear-view mirror - that are all important the

### BETWEEN THE LINES

Side mirrors help in reversing to show we are safe, to see the blind spots and to ensure a clear path during overtaking.

moment the vehicle hits the road.

The rear-view mirror is located inside every vehicle, placed above the centre of the windshield, to give a full view of the rear end of the vehicle using its concave lens.



Rear-view mirror

The front fender side-mirror is found on a few vehicles, commonly on the Toyota Prado and Harrier, to enable the driver to manoeuvre through tight spaces by reducing blind spots.

### USING MIRRORS CORRECTLY

Some people have fallen victim to suddenly opening car doors, regardless of traffic on the side. This single act has thrown riders and passengers off bicycles and bodabodas, hit pedestrians and damaged car doors.

The right practice is to use the side mirror to check the surroundings before opening the door. Side mirrors enable safety while driving by giving the driver a view of the surroundings to maintain a safe distance from other vehicles and road users.

Niwamanya explains that the side mirror is used to see the vehicle behind, but also, importantly, to see

the vehicle one intends to overtake. The left side mirror gives a view of how much space on the roadside is left for other users. Mirrors also have to be checked while overtaking, changing lanes and directions to ensure there is no vehicle or other road users. And because overtaking also comes with increasing speed, it is important to make sure there is no other vehicle trying to overtake you.

"Most of the time, bodaboda riders use the left side when trying to pass, so you try to leave enough space for them to pass. It also helps you know you are not in the middle of the road, meaning if you see the space you have on your left is too much, you are in the middle of the road," Niwamanya says.

While giving signals to indicate the direction the driver intends to take, the side mirror becomes useful to see the oncoming traffic, assess the blind spots and determine the right moment to join, exit traffic, or take a turn.

"Side mirrors act as the third eye of the driver, giving a view of the blind spots. Broken mirrors are not effective because they can't give a proper view. And not having a mirror at all is unacceptable and a traffic offence," Musitwa notes.

When driving off, say exiting a parking spot from a stationary state, check the side mirror and the rear-view mirror, then again just to make sure you are in the clear before stepping on the accelerator to exit the spot, and before joining traffic.