



Two mechanics inspect a stripped-down gearbox by the roadside in Kampala

THE COMPLEXITY BEHIND VEHICLE **GEARBOX** FAILURE

By Samuel Balagadde

When a car gearbox starts developing problems, replacement is often the best option, though repairs can work depending on the fault. Overhauling or carrying out major repairs can be complex, and many attempts end in failure, leaving owners at a loss.

REPLACEMENT

Simon Jjagwe, a Kampala dealer in used car parts, advises considering replacement when serious issues arise beyond minor leaks. He says he has

SPECIALISED TOOLS

James Mugenyi, a Toyota Hiace mechanic, says some car brands' gearboxes are remanufactured at a lower cost than importing used ones.

"Toyota Hiace gearboxes are remanufactured at a relatively low cost," he says. Components that are particularly difficult to repair include planetary gear sets, valve bodies and synchronisers, all of which require specialised tools and knowledge.

seen many vehicles fail completely despite costly repairs carried out on mechanics' advice.

"Many repaired gearboxes either fail outright or return with the same problem," he says.

Some mechanics mistake gearbox repairs for engine overhauls, underestimating the complexity of the tiny parts, hydraulics and electronics involved.

James Kabali, a car engine expert, says repairs can work for minor issues such as damaged bearings or seals, but modern gearboxes are complex and require professional handling.

"It is a myth for an ordinary mechanic to claim they can fix a cracked gearbox or severe internal issues," he says.

Specialised tools and expertise are crucial to avoid errors.

Kabali adds that internal component deterioration — such as worn planetary gear sets and valve bodies — require a highly specialised mechanic. Many motorists are misled into undertaking the wrong repairs, leading to repeated failures.



A gearbox is a mechanical component in a vehicle that transmits power from the engine to the wheels