










TECHNICAL TIP ZEN #26

TYPES OF STARTER DRIVES

The starter drive is a fundamental item in the starting engine of a vehicle, through which it starts in cars, trucks, motorcycles, jet-skis. With so many different means of transport, we could not always use the same starter drive model. Today there are several models, their variations depend on the starting engine, some of them as follows:

Image	Model	Description	Movement	Torque Transmission
	Conventional	It is the most common type and usually Found in light and heavy duty applications.	Moves forward and backward through a lever Coupled to the shell and is mounted Directly on the armature shaft.	By roller.
	Conventional with integrated Planetary	It is an evolution of the conventional starter drive It has a coupled planetary gear where the freewheel system is located	Moves forward and backward through a lever coupled to the pinion	By roller.
	Inertial	Mostly used in watercraft.	Moves forward through the rotation of the starter and backward through a spring. It is mounted on the armature shaft.	By roller.
	Reduction	Designed for space optimization. It is used in smaller starters to decrease rotation without losing torque	Moves forward through a lever and backward through a spring. It is not mounted directly on the armature shaft.	By roller.
	Maxitork	It is only used in heavy-duty vehicles which require high torque.	Moves forward and backward through a lever coupled to the shell and is mounted directly on the armature shaft.	By ratchet
	Inertial with reduction	Designed for space optimization without torque loss. Usually found in watercraft and snowmobiles.	Moves forward through rotation and backward through a spring. It is not mounted directly on the armature shaft	By roller.
	Friction	It is a less common starter drive type and found only In heavy-duty vehicles.	Moves forward and backward through a lever. It is mounted directly on the armature shaft.	By friction (clutch).