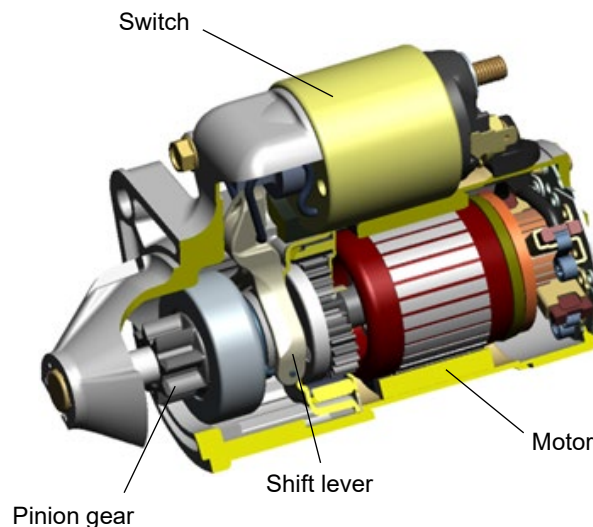


WHAT IS A STARTER?

A starter is a motor that uses the battery as its power supply, and starts the engine by operating it up to the required revolution speed. Despite its small size and light weight, the starter needs to generate an extremely high torque to crank the engine.

When the start switch is turned ON, a magnetic force draws the switch plunger, and the shift lever pushes the pinion gear toward the ring gear on the engine side. When the plunger is completely drawn, the main contact closes and a large current flows into the motor. The motor power is then transmitted to the ring gear on the engine side through the pinion gear, thereby cranking the engine. Once the engine is started, the overrunning clutch prevents the motor from running at a high speed interlocked with the engine revolution.

When the start switch is turned OFF, the plunger returns to its original position, and the pinion gear moves away from the ring gear. The motor also stops running.



TYPICAL SYMPTOMS IN CASE OF FAILURE

Symptoms in case of failure

- Starter motor does not run
- Starter motor runs idle
- Only a “clicking” sound is heard even when the start switch is turned ON