

# Suddenly both ignition modules are defective

.....basically, you should keep in mind that both modules did not give up the ghost at the same time - you just did not notice the failure of the first module.

The reason for this is as follows:

The capacitors in the modules are charged by the charging coils of the alternator and have stored enough current from a certain starting speed to emit an ignition spark.

This „switch-on speed“ is normally around 130-150 rpm and should not exceed 220 rpm.

If the capacitors gradually give up the ghost, they need more and more current from the alternator - i.e. a higher speed - to reach this cut-in speed.

If the cut-in speed is above the cranking speed that the electric starter turns the engine at when starting (approximately between 300-350 rpm), the weakened capacitor does not supply enough juice for an ignition spark and the ignition circuit can no longer start the engine.

The problem is that the engine starts because the 2nd module is still OK and the defective module then also supplies an ignition spark again at higher revs.

This creeping process is only noticed when the 2nd module also has a switch-on speed above the starter motor speed.

There is only one way to notice the defect of a module at an early stage:  
always start the engine on one ignition circuit and always alternately.

**\*\*But this is not in the manual**

In addition, more and more ignition switches are being installed with integrated ignition circuit selection. Unfortunately, the method fails here.

Another thing about heating the modules:

apparently, capacitors with a positive temperature coefficient are used in the modules, which increase their capacity as the temperature rises, so that they are helped along with a little heat.

If you need to heat up your modules so that the engine starts, you should act quickly and stop flying!

Something else comes to mind: Once the engine is running, it may start again the next day. But if you start it again after several days, it may not work again.

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