



Mazda CX5 - Alternator control lamp comes on

Data sheet	
Manufacturer	Mazda
Vehicle model	CX 5 (KE)
Engine code	2.2 16V CDI Skyactiv-D
Year of manufacture	2011-2017
Symptoms	Charging system malfunction I-stop warning lamp flashes Alternator control lamp lights up Overrunning alternator pulley defective

Important safety note

Error message "Charging system malfunction - engine stop possible" is displayed on the Mazda CX5

If the error message "Charging system malfunction - engine stop possible" is displayed in the instrument cluster on the above-mentioned vehicle model, one cause for this may be a defective overrunning alternator pulley. In our case study, the defect occurred immediately after the engine had been started. The alternator control lamp also came on and the i-stop warning lamp started to flash.

After opening the bonnet and the carrying out of a visual inspection, a damaged V-ribbed belt was immediately diagnosed as the cause. After more troubleshooting, pronounced rubber abrasion on the alternator's belt pulley was detected, which could ultimately be traced back to a defective overrunning alternator pulley.

A stuck overrunning alternator pulley leads to load change reactions on the belt drive and can lead to damage or, as in our case, to a tear in the V-ribbed belt.



Defective overrunning alternator pulley with torn V-ribbed belt

ⓘ Repair notes

In the case of this engine variant, the water pump is also driven by the V-belt. Continuing to drive with a defective V-ribbed belt can lead to overheating and engine damage. After the repair, the relevant error memory entries in the control units must be deleted.

ⓘ Maintenance information

The overrunning alternator pulley, also called the alternator freewheel, must be checked regularly to ensure the functioning of the accessory drive and to avoid damage. A defective freewheel is noticeable as a result of an unsteady rotation of the accessory drive unit and the resulting noise. An alternator with an intact freewheel should come to a delayed stop when the engine is switched off.

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