

EXAMPLE FAILURE RECORD

FORM DATA

Record creator: Erwin Bauernschmitt

Record owner: Erwin Bauernschmitt

Technical team: Electrical

Subsystem: PDM

Car year: 2022 (Flo)

Failure time: 14:30 08/09/2023

Failure title: LV PDM buck converter failure

Failure description: The LV PDM buck converter on '22 (Flo) failed whilst driving.

Failure impact: The pump for cooling the motor lost power, cannot test drive the car until fixed. Delaying vehicle testing and driver training. Lengthy troubleshooting/repair is diverting time from designing and manufacturing the 2023 car.

Failure cause: Overheating of the inductor due to high current.

Failure mechanism: Dielectric breakdown.

Corrective action plan: Replace broken inductor with a new lower-resistance inductor and validate reduced operating temperature with bench testing under expected load.

ADDITIONAL DATA

Record creator contact: 22964301@student.uwa.edu.au

Record owner contact: 22964301@student.uwa.edu.au

Technical team lead: Nathan Mayhew

Technical team lead contact: 23065159@student.uwa.edu.au

Report creation time: 21:31 08/09/2023

Due date: none

Time resolved: unresolved

Record validation status: validated

Analysis validation status: invalidated

Correction validation status: none

Review status: unreviewed

Comments: ?