



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: DP 22-002
Prompted by: Petition
Date Opened: 09/12/2022
Investigator: Tariq Bond **Reviewer:** Gregory Magno
Approver: Stephen Ridella
Subject: Engine failure (wrist pin)

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Mercedes-Benz USA, LLC
Products: 2015 C300
Population: 92,539 (Estimated)
Problem Description: Improper wrist pin used in the M274 engine may cause engine failure

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	1	TBD	1
Crashes/Fires:	0	TBD	TBD
Injury Incidents:	0	TBD	TBD
Number of Injuries:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD
Number of Fatalities:	0	TBD	TBD

ACTION / SUMMARY INFORMATION

Action: Further evaluation of Defect Petition for a grant or deny decision

Summary:

The Office of Defects Investigation (ODI) received a petition dated April 29, 2022 requesting investigation of engine piston damage attributed to improperly sized wrist pins in the M274 engine found in the owner's 2015 C300.

The petitioner reported that their MY 2015 Mercedes C300 vehicle lost power while driving at highway speeds accompanied by shaking, white smoke from the exhaust, and a burnt oil smell. Subsequent diagnosis at the dealership identified a cracked piston.

The petition alleges that all Mercedes-Benz models equipped with a variation of the M274 engine should be included in the evaluation and cites Mercedes TSB LI03.10-P-060916. The petitioner's vehicle is equipped a 2.0L M274 DE20LA engine calibrated to run on 91 Octane or higher gasoline and contains diamondlike coating (DLC) wrist pins. None of the other Mercedes models referenced in the petition contain this engine configuration. Thus, the scope of the petition will primarily focus on those vehicles that contain DLC coated wrist pins like those in the petitioner's vehicle.

This defect petition has been opened to evaluate the allegations raised and conditions reported in the petition and to determine whether to grant or deny the petition.

The petition itself can be reviewed at [NHTSA.gov](https://www.nhtsa.gov) under ODI Number 11450360.