



U.S. Department of Transportation  
**National Highway Traffic Safety Administration**

# ODI RESUME

OFFICE OF DEFECTS INVESTIGATION



**Investigation:** DP23004  
**Prompted By:** Defect Petition  
**Date Opened:** 08/30/2023      **Date Closed:** 02/16/2024  
**Investigator:** Tariq Bond      **Reviewer:** Gregory Magno  
**Approver:** Tanya Topka  
**Subject:** Electrical problems / No-start

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Toyota Motor Corporation  
**Products:** 2019 Toyota Yaris  
**Population:** 27,232

**Problem Description:** The petition alleges multiple electrical problems including but not limited to: instrument panel warning lights, inaccurate fuel gauge, inoperative key fob, no-start.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
<b>All Incidents:</b>	0	0	0	1	1	0
<b>Crashes/Fires:</b>	0	0	0	0	0	0
<b>Injury Incidents:</b>	0	0	0	0	0	0
<b>Number of Injuries:</b>	0	0	0	0	0	0
<b>Fatality Incidents:</b>	0	0	0	0	0	0
<b>Number of Fatalities:</b>	0	0	0	0	0	0

**Description of Other:** Defect Petition ODI 11501206

## ACTION/SUMMARY INFORMATION

**Action:** Petition is denied; close this Defect Petition.

**Summary:**

In a letter dated June 7, 2023, Mr. Kimberlyn Hearn (the petitioner) submitted a petition attributing electrical malfunctions of his 2019 Toyota Yaris (subject vehicle) to remote attacks by unknown parties targeting the subject vehicle's CAN Bus. The petitioner requested an Agency investigation of the susceptibility of the subject vehicle to the alleged attacks and for assistance securing a full refund of the vehicle price. The petitioner supported his request with a chronology of events detailing vehicle faults, service history, and a listing of cybersecurity articles over four total submissions from the June 7, 2023 petition to August 2, 2023.

Prior to filing the petition, the petitioner sent three pieces of related correspondence to the Agency from late December 2022 to February 2023. On August 30, 2023, NHTSA opened Defect Petition DP23-004 to evaluate the petitioner's request.

In mid-November of 2022, with 46,136 miles accumulated in the subject vehicle, the petitioner reported hearing three beeps while driving at low speed accompanied by engine shut down. After a delay, the petitioner was able to restart the vehicle, but a Check Engine Light (CEL) remained illuminated. The petitioner's dealer diagnosed the problem as a bad battery and installed a replacement battery.

Over the ensuing two weeks / 700 miles, the petitioner reported several instances of engine power loss, warning lights, and head unit malfunctions, leading to service at a different Toyota dealer in early December 2022. That dealer's invoice reported that no problem was identified after conducting several service checks, inspection of the ECU wiring, and 30 miles of test driving over a two-day period.

A vehicle history report indicates that the subject vehicle traveled only 44 miles over the following three months, returning to its regular servicing dealership in late March 2023, about a week after another report from the petitioner of flashing warning lights and repeated horn activation while the petitioner was inside his house. In late March, that dealership removed an aftermarket vehicle security system from the subject vehicle. Subsequent to this time, the petitioner has reported continued electrical malfunctions and that the vehicle is unusable to him.

In response to the Agency's request for information concerning the subject vehicle and petition allegations, Toyota stated:

- This vehicle is not equipped with a cellular communication module; therefore, it is not capable of communicating with a cellular network.
- This vehicle's multimedia system is capable of connecting to a cellular phone to support hands-free features, such as hands-free calling and streaming audio from the phone.
- This vehicle does not have advanced connectivity features, such as Apple CarPlay or Android Auto.
- The multimedia system, which includes Bluetooth connectivity, operates on a local bus network dedicated to the multimedia system.

After assessing the material submitted by the petitioner, information in NHTSA's possession, information submitted by Toyota in response to the Agency request regarding the petitioner's allegation; NHTSA concludes that:

- Notwithstanding the conditions cited by the petitioner, the subject vehicle lacks the external cellular connectivity needed to make it vulnerable to remote cyberattacks.
- Bluetooth connectivity is limited to multimedia and hands-free communication.
- The Agency has uncovered no other evidence of related cyberattacks or similar symptoms in 2019 Toyota Yaris vehicles.

Based on the foregoing, NHTSA does not believe that a formal investigation is warranted. Therefore, the petition is denied. A Federal Register Notice (FRN) further detailing NHTSA's reasons for denial of the petition will be published. The petition and its attachments can be reviewed at [NHTSA.gov](https://www.nhtsa.gov) under reference ODI number 11501206.