



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 20-001
Date Opened: 03/13/2020
Investigator: Ryan Rahimpour
Approver: Stephen Ridella
Subject: Heater hose rupture
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Motor Coach Industries
Products: 2017-2019 J4500 Buses
Population: 1,232 (Estimated)
Problem Description: Supply and return heater hose rupture, causing loss of coolant resulting in an engine shutdown (loss of motive power).

FAILURE REPORT SUMMARY

| | ODI | Manufacturer | Total |
|------------------------------|-----|--------------|--------------|
| Complaints: | 0 | TBD | TBD |
| 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 |
| Other*: | 1 | Confidential | Confidential |

*Description of Other: EWR Field Reports.
1 TSB.

ACTION / SUMMARY INFORMATION

Action: Open a Preliminary Evaluation (PE).

Summary:

An Office of Defects Investigation (ODI) review of Early Warning Reporting (EWR) submissions by Motor Coach Industries (MCI) on model year (MY) 2017-2019 J4500 buses identified ruptured heater hoses on multiple motor coaches leading to the vehicles becoming disabled. ODI follow up with fleets found that a low coolant level light with an audible warning would provide notice to the bus driver to pull off the roadway before the bus shut down to prevent catastrophic engine damage. According to the fleets interviewed, there is not enough time between the warning and the engine shutting down to allow the driver to pull to a safe location. Multiple reports/interviews describe buses requiring passenger transfer to a second bus at roadside.

Discussions with MCI identified the heater hoses as being problematic with a high failure rate. During fleet interviews and additional field report searches, it was found that, in addition to the heater hoses failing, the radiator could also potentially crack resulting in most of the 25 gallons of coolant to be lost. In both failure scenarios, enough coolant can be lost to cause the engine to shut down quickly and prevent the driver from moving to a safe location before having to transfer the passengers to a second vehicle. This can compromise the safety of vehicle occupants and other moving vehicles.

A Preliminary Evaluation has been opened to determine if a defect in the subject vehicle presents an unreasonable risk to vehicle occupants and other moving vehicles on the road.

