On February 20, 2023, DTNA conducted routine rough road testing of an e-Cascadia vehicle at its facility which involved driving the vehicle over cement risers and other unpaved and harsh road surfaces. During this testing, the truck experienced a loss of motive power while traveling at low speed. On March 2, 2023, DTNA conducted a tear down of the affected e-axle assembly where a fracture at the weld seam where the planetary gear attaches the baseplate was observed. The parts were sent for additional analysis. DTNA had opened an investigation to further analyze the issue, but on March 28, 2023, this investigation was closed on the basis that the failure had occurred during vehicle testing and under extreme road conditions that were not representative of real-world driving. Further, there were no reports of actual failures in the field (including after a review of vehicle telematics data) and it was believed that if a failure were to occur, the driver would have sufficient advanced warning to be able to respond. On May 4, 2023, DTNA opened a separate investigation after a report that the electric motor of an e-axle had decoupled, resulting in vehicle loss of forward movement. In this case, the instrument cluster did not display a telltale and did not generate a diagnostic trouble code for loss of forward movement which suggested the issue was electrical in nature. At the time there was no apparent connection between this topic and the fracture of the weld seam in the internal test vehicle. On June 7, 2023, DTNA was made aware of the first failure in the field potentially related to a fractured weld seam where the driver described the vehicle as struggling to move forward. Additional similar reports were received between June 7 – 28, 2023, where the drivers noted an inability to move forward and noting a gear pop. When the e-axle with the decoupled motor described above was later analyzed, it was discovered that the weld seam had separated in a manner similar to what was observed in the DTNA test truck. On June 30, 2023, DTNA decided to conduct a recall to address the issue. While the condition is primarily influenced by high torque, low speed maneuvers and severe road conditions, the possibility of a failure cannot be ruled out at higher speeds. DTNA has received 0 warranty claims and 3 field reports potentially related to this issue and is not aware of any accidents or injuries potentially related to this issue.

On October 17, 2023, DTNA amended its Defect Information Report to provide a description of the final remedy for this recall.