

Chronology of Defect Determination

April 2024

In late April 2024, Hino launched an investigation upon receiving a Technical Report from the field alleging that the brake air tube was contacting the passenger-side fender. The air tube is routed from the front brake relay valve to the ABS modulator valve mounted on the right-side frame. A contact mark was observed on the corrugated protector of the brake air tube.

May – September 2024

In late May 2024, Hino reviewed the assembly process at the West Virginia vehicle assembly plant and inspected the vehicles' post-assembly condition. It was identified that there was variation in the clearance between the air tube and the fender, but no wear was identified on any vehicles. Additionally, some vehicles did not meet Hino's internal specifications for tube/fender clearance.

On June 28, 2024, based on the inspection results, Hino determined to change the routing in which the location secured by a cable tie was relocated to improve clearance. Furthermore, Hino launched a study to evaluate the durability of the cable tie to confirm that the design was appropriate for long-term use.

Hino also performed a field vehicle inspection to confirm the wear progression of the brake air tube over time. Hino found that some vehicles had a contact mark on the brake air tube, however, any compromised air tube which allows air leakage was not found. Based on these inspection results, Hino considered that the contact issue may exist in other vehicles depending on the assembly variation, and such contact could permit the air tube to wear overtime.

On September 25, 2024, during its periodic meeting with NHTSA's Office of Defects Investigation, Hino shared its investigation and improvement status and noted its safety-related investigation of the brake air tube issue.

October 2024 – January 2025

In early-October, 2024, Hino determined that adding a bracket and P-clip provided a more durable solution to the clearance issue, in light of the assembly variation and the durability of the cable tie for long-term use. Specifically, the clip would be installed on the ABS modulator bracket, and once attached to the air tube, there would be sufficient clearance between the air tube and the fender. Hino determined that this would fully fix the issue.

Hino performed tests to evaluate the durability of the air tube and the impact on the vehicle when the air tube is worn over time using a manually worn air tube. Hino installed the manually worn air tube on an actual vehicle and applied service brake air pressure multiple times with different levels of wear progression, and it was verified that the air tube did not burst. From this, Hino concluded that wear progression is gradual, and a significant air leak will not suddenly occur. In addition, actual vehicle driving tests confirmed that, if there is a significant air leak, the vehicle will pull to the left during hard braking.

events. However, Hino has not received any field complaints alleging an air leak at this point, therefore, continued to closely monitor the field.

On January 30, 2025, based on the above investigation results, Hino concluded that it cannot rule out unreasonable safety risk related to brake performance for long-term use, therefore, decided to conduct a voluntary safety recall to apply the countermeasure and eliminate the risk.

To date on January 30, 2025, Hino is aware of 5 warranty claims for the worn air tube mentioned above and is not aware of any reports of an air leak, brake concern, injuries or accidents related to this issue.