

**24V-104**  
**Model Year 2023-2024**  
**BMW Group Vehicles**  
**Integrated Brake (IB)**  
**Chronology**  
**12 Feb 2024**  
**Rev.1 – 12 Aug 2024**

In October 2023, an engineering review was initiated after field monitoring indicated an increasing trend of a potential issue with vehicles equipped with a certain configuration of Integrated Brake (IB) system. The IB supplier was also contacted.

In November, the supplier indicated that, production process anomalies could have occurred to certain internal components of the IB. Preliminary information indicated that this could cause an interference of the electrical signal to the IB's motor position sensor. This would illuminate a warning symbol and message in the vehicle's instrument cluster. Further reviews, and dynamic driving tests, were planned to understand and assess potential effects on vehicle performance. A review of information based upon customer perception and field experience was also planned.

In December, reviews of the supplier production process, supply chain logistics, and vehicle production / build configurations were performed. As a precaution, a vehicle stop ship at certain vehicle assembly plants, a corresponding dealer hold, and a supply chain block, was issued.

In January 2024, the engineering review continued with further in-depth analyses of IB functionality, and a comparison to prior IB, and other power assist brake, systems, including a failure mode assessment across various system designs, and their effects on vehicle performance. The field information review continued.

Vehicle assembly information and supplier production records were reviewed to determine the number and production dates of potentially affected vehicles.

On February 5, 2024, in an abundance of caution, BMW Group decided to conduct a voluntary safety recall.

Between June 2022 and February 2024, BMW became aware of approximately 48 customer complaints, concerns, and/or instances, 100 dealer field reports, and 459 warranty claims that relate, or may relate, to the issue identified in this report.

BMW Group has not received any reports, nor is BMW Group otherwise aware, of any accidents or injuries related to this issue.

In June, subsequent to the implementation of 24V-104, it was noticed that some warranty claims that were processed for the IB system were for vehicles that were outside of the scope of 22V-104. An in-depth review was initiated.

Preliminary analysis included a review of the supplier production process specifically for IB systems that were produced after the 24V-104 clean point and equipped on out-of-scope vehicles.

In June, an intensive team was established to apply additional resources in order to focus upon and analyze the issue. Discussions with the supplier occurred. Further failure mode analyses were performed.

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**In late July, the analysis indicated that vehicles produced subsequent to the previously identified clean point may have been equipped with IB systems that were also subject to a supplier production process anomaly and a configuration update.**

**Vehicle assembly information and supplier production records were reviewed to determine the number and production dates of potentially affected vehicles.**

**On August 5, 2024, in an abundance of caution, BMW Group decided to expand the scope of the recall.**

**BMW Group has not received any reports, nor is BMW Group otherwise aware, of any accidents or injuries related to this issue.**