

## **Chronology of Defect / Noncompliance Determination**

**Provide the chronology of events leading up to the defect decision or test data for the noncompliance:**

July 25, 2017 – Subaru received the first technical report from the U.S. market alleging that the owner experienced engine vibration and a visible change in the amount of tailpipe exhaust while driving. Parts were collected and it was observed that the PCV valve was separated. The PCV valve was replaced and the issue was resolved. Since this was the first case, and the symptoms did not appear to indicate a change in risk to relative safety, Subaru continued to monitor the field for additional data.

August 12, 2017 – January 24, 2018 - Subaru received a second technical report from the U.S market and the supplier conducted an investigation of the collected parts. From the results of that investigation, it was estimated that a loose washer moving inside the caulking could cause scraping in the aluminum valve case potentially resulting in PCV valve separation. The cause of the loose washer was estimated to be an improperly assigned press force value for the PCV valve. To expedite a preventative measure, Subaru decided to change the material used for the PCV valve case from aluminum to steel, which began on the engine production line on January 24, 2018.

February 22 – July 23, 2019 – Subaru received the first technical report related to this condition from a foreign market alleging that the vehicle experienced a loss of motive power. Subaru received two additional reports alleging loss of motive power; one on March 11, 2019 and the other on July 23, 2019.

October 10, 2019 –Subaru has received ten technical reports related to PCV valve separation from the U.S. market, none of which allege a loss of motive power. Out of an abundance of caution, Subaru decided to conduct a voluntary safety recall.