

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

In July 2012, Mitsubishi Motors Corporation (MMC) received a report from a foreign market of SRS warning lamp illumination. MMC launched an investigation into this issue.

In December 2012, MMC's investigation ruled out the ECU's software as the root cause as no problems were found in the programming.

From January to March 2013, MMC received similar complaints from the field of SRS warning lamp illumination. MMC conducted a scramble investigation but was unable to duplicate this phenomenon.

From April to December 2013, MMC investigated the SRS impact sensor's assembly process and the semiconductor's manufacturing process at the tier two and three suppliers. Although MMC confirmed that the electrical resistance of the electrically conductive adhesive increases when the phenomenon is duplicated, MMC was unable to determine the cause of failure. MMC continued its investigation.

From January to December 2014, MMC continued its testing of returned suspect parts, conducted a sampling investigation in the field, and analysed the manufacturing change history at the multiple suppliers. As a result of those investigations, MMC found that (1) the lead frame, which is the thin metal plate inside the sensor, may have experienced significant warpage during a certain time period at the tier three supplier, and (2) the metal mask, which is a masking jig that applies the electrically conductive adhesive, may have had a compromised structure at the tier two supplier. MMC estimated that those two factors may have decreased the amount of the electrically conductive adhesive between the lead frame and the coil, resulting in increased electrical resistance.

From January to September 2015, MMC continued its investigation and confirmed both that there were no field reports involving an accident or injury worldwide, and that in the event the electrical resistance inside an SRS impact sensor were to become abnormal, the SRS warning lamp would always illuminate to alert the vehicle operator. MMC further investigated applicable regulations in all affected countries throughout the world and ultimately determined that a recall was required only in the United States.

On September 15, 2015, MMC decided that field action was necessary in the US as a safety recall and advised Mitsubishi Motors North America, Inc. to conduct a safety recall in the US.