## Chronology of Defect / Noncompliance Determination - SR-22-004 Submitted 8/2/2022

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

In May 2019, Mitsubishi Motors Corporation (MMC) received 3 field reports from the US indicating the engine did not start or stalled while driving. MMC began an investigation.

From July 2019 through April 2020, MMC received 1 additional field report from the US. MMC continued its investigation and began analysis of engines that were returned to MMC after being replaced due to alleged occurrences of this condition. The analysis indicated there was piston to exhaust valve contact, but no root cause was identified, and the investigation continued.

From May 2020 through Apr 2021, MMC received 5 additional field reports and continued its analysis of additional returned engines. These engines appeared to have the same piston to exhaust valve contact.

From May 2021 through Dec 2021, MMC continued investigating returned engines based on a Fault Tree Analysis and performed a bench test to duplicate the phenomenon of the exhaust valve hitting the piston.

Additionally, Mitsubishi Motors R&D of America, Inc. (MRDA) performed on-site investigations on vehicles exhibiting a similar condition and determined the control logic of the CVT-ECU may have affected the condition. MMC started focusing its attention on the CVT.

From Jan 2022 through June 2022, MMC conducted further in-depth analysis, investigation and simulations and determined that when the CVT-ECU resets, it will respond by setting the CVT target gear ratio to the lowest gear ratio. During this time, MMC also worked to identify the range of vehicles potentially affected by this condition.

On July 26, 2022, MMC concluded that 2019 - 2022 model year vehicles equipped with a CVT and mechanical key may have an unreasonable safety risk, determined that a field action was necessary in the US, and together with Mitsubishi Motors North America, Inc. (MMNA), decided to conduct a safety recall. Although the 2011-2018 models equipped with a CVT and mechanical key are substantially similar to the 2019-2022 models, MMC is not aware of similar incidents in the 2011-2018 models. While a CVT-ECU software change was made beginning with the 2019 model year, MMC is unable to determine at this time those software changes have contributed to this issue. MMC will continue to monitor the earlier model years and take appropriate action as necessary.

MMC has received 21 field reports and 29 potential warranty claims (19 of which were also field reports) from the US between May 2019 and May 2022. However, MMC and MMNA are not aware of any reports of fire, accident or injury related to this condition.