## Chronology Harley-Davidson Recall 0173 10/18/18 Amended 11/9/2018

1/15/18: Harley-Davidson's Recall Investigation Committee (RIC) became aware of an incident in Korea in which a crash allegedly occurred due to a loss of clutch disengagement caused by a leaking secondary clutch actuator. No injuries were reported.

1/24/18: A field data query identified 92 warranty claims and 10 dealer/customer contacts (without corresponding warranty claims) that appeared to be related to secondary clutch actuator leaks. No additional crashes were identified. The secondary clutch actuator from the Korea incident was received and parts were sent to the supplier, Brembo, for further analysis.

2/13/18: Brembo and Harley-Davidson initiated a joint investigation of warranty return parts, with parts sent to Brembo's facility in Italy.

4/9/2018: The RIC initiated a formal investigation.

4/2018: Multiple meetings were held with Brembo regarding warranty return analysis and root cause investigation. Updated field data (4/23) showed 154 warranty incidents and 13 dealer/customer contacts that appeared to be related to secondary clutch actuator leaks. No additional alleged crashes related to this issue were identified. The RIC decided to continue to monitor field data monthly.

5/21/2018: Updated field data showed 170 warranty claims and 26 dealer/customer contacts that appeared to be related to secondary clutch actuator leaks. No additional alleged crashes related to this issue were identified.

6/25/18: Updated field data showed 204 warranty claims and 30 dealer/customer contacts that appeared to be related to secondary clutch actuator leaks. One additional alleged crash was identified, with no reported injuries, that may be related to this issue.

7/2/18 and 8/1/18: Actions related to this investigation were reviewed by the Technical Subcommittee (TSC) and the decision was made to share all available information with the full RIC for their review and input.

8/2/18: Meeting held with the full RIC. Updated field data showed 265 warranty claims and 29 dealer/customer contacts that appeared to be related to the secondary clutch actuator leaking. Three additional alleged crashes, with no reported injuries, were identified that may be related to this issue (bringing the total to five). Because many of the warranty claims included indications that the customer was aware of a clutch issue but still able to safely operate their motorcycles, the RIC directed that customers who had recent warranty claims be contacted to help evaluate notice or warnings experienced by the rider prior to loss of lift.

8/2018 - 9/2018: Customers were contacted to evaluate notice/warning. This included reviewing warranty and customer contacts to identify customers who had experienced lift issues in the last

90 days, and gathering and reviewing all available information regarding the customers and their motorcycles, including prior service and/or accessory installation. Eleven customers were contacted and nine substantive conversations occurred (following multiple voicemail and return call situations).

During this time, the team performed integration work on returned systems. Three systems were recovered from the most recent incidents identified from Brazil, Sardinia, and Texas. One of the systems was installed on an exemplar motorcycle, and attempts were made to recreate the failure and to understand the feedback as the mechanism of the failure progresses.

Moreover, during this period, the team addressed two additional questions related to the fact that police vehicles and owners from southern states appeared to be over-represented in the incident rate. Customer correlation data was utilized to mine and segregate data as necessary to sort the population of vehicles in those respective segments. Various customer usage parameters were evaluated to determine if any correlated to a difference in incident rates.

9/27/18: The foregoing actions and conclusions were reviewed with the TSC.

10/4/18: Meeting held with full RIC. Actions from the previous meeting were reviewed. Updated field data showed 338 warranty claims and 38 dealer/customer contacts that appeared to be related to the secondary clutch actuator leaking. No additional alleged crashes were identified. The RIC decided to escalate this issue to executive management.

10/11/18: Upon review of the results of the RIC's investigation and analysis, Harley-Davidson's executive management made its determination that a safety defect exists in the subject population and declared a recall to remedy the issue.