# N150400

| Manufacturer of Defective Component | |
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| Company Name, Address: | Company Contact (Name, Position, Phone, email): |
| Delphi  5725 Delphi Drive  Troy, MI 48098-2815 | Gary Grieb  248-813-3362 |
| Lear  2001 Forbes St  Whitby, ON L1N74 | Greg Fraley  248-447-5811 |
| JCI  4616 West Fort St  Detroit, MI 48209 | Antonio Sanchez  248-885-2581 |

| Chronology of Defect / Noncompliance Determination |
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| On December 8, 2014, GM received an AOS electronic control unit (ECU) that was recovered from vehicle in which the front-passenger airbag status light was always “on” and the seatbelt chime came on without the front passenger seat being occupied. GM shipped the ECU to Delphi, the ECU’s supplier, for further analysis. On February 3, 2015, GM received a second warranty return ECU with the same condition, which it also shipped to Delphi for further analysis.  On March 9, 2015, Delphi completed its initial analysis of the warranty ECUs and its seat assembly build-data. Delphi informed GM that it suspected that moisture introduced during seat steaming in the seat-build process caused a calibration-learning error stored in the ECU, which could have caused the AOS system’s failure to suppress the front-passenger airbag. On March 31, 2015, GM and Delphi reviewed monthly AOS warranty data and, based on this analysis, a GM engineer reported the issue as a potential safety issue through GM’s Speak Up For Safety program.  With only two identified field cases of this calibration-learning error, GM and its suppliers conducted substantial additional testing and investigation to understand why the errors occurred and whether these calibration-learning errors were isolated conditions, including (a) attempting to identify whether humidity during the assembly process definitively affected AOS calibration, (b) surveying drivers of company-owned vehicles, (c) comparing humidity compensation calibration data for heated seats and vented-heated seats, and (d) collecting OnStar data relating to vehicles in which passenger airbag telltales were set to the “on” position. GM’s company-driver survey yielded three additional reports of calibration-learning errors; to date, GM has recovered and shipped one ECU to Delphi with the seat assembly for further analysis.  On July 14, 2015, GM’s Safety Field Action Decision Authority (SFADA) reviewed the status of the investigation. Although GM had only confirmed the presence of this calibration-learning error on three vehicles (which have already been repaired), SFADA decided to conduct a noncompliance recall based on the best available data. |