

## Chronology for recall 17248:

On September 28, 2016, a GM employee submitted a report to GM's Speak Up for Safety (SUFS) program noting an increase in steering gear-related warranty data for GM-Holden's Chevrolet SS vehicle. The issue was assigned to GM's Holden operation where these vehicles are produced. GM had previously recalled a similar GM-Holden vehicle for a similar issue (the MY 14-16 Chevrolet Caprice Police Pursuit Vehicles (Recall No. 16V-160)), but the steering gear replacements in that case were for loss of EPS assist and the issue was thought to be isolated to the unusually high idling times unique to the police vehicles in that case. In this case, however, at the time the SUFS was submitted, initial field data indicated that the issue was likely a quality concern related more generally to steering gear replacements and not necessarily to loss of EPS assist. On March 6, 2017, the issue was reviewed at Holden's Safety Condition Categorization Team (SCCT), which recommended advancing the issue to GM-International's (GMI) Preliminary Investigation Review (PIR) as a potential safety issue. To prepare for that review, an initial warranty analysis was conducted that indicated elevated warranty rates for loss of EPS assist. On March 20, 2017, GMI's PIR reviewed the issue and opened a formal investigation on March 23, 2017.

During the investigation, further analysis of warranty data showed higher incident rates of steering gear replacements in these vehicles. The investigator learned that there had been two design changes intended to reduce fretting corrosion in these vehicles—adding Nyogel, which was introduced in March 2015, and using gold-plated terminals, which was introduced on July 26, 2016 (the start of MY17 production). There was also a period between March 2016 and July 2016, before gold-plated terminals were added, when epoxy was applied to the connector (to reduce relative motion). Based on warranty rates, the epoxy application actually increased the incidents of fretting corrosion and loss of EPS. Therefore, the investigation tended to show two categories of Chevy SS vehicles with high rates of loss of EPS assist—(1) those built before the Nyogel was introduced and (2) those built with the epoxy application. Among these two categories, the warranty rates for loss of EPS assist on left-hand drive vehicles was significantly higher than on right-hand drive vehicles. This information was reviewed at GMI's Global Open Investigation Review (GOIR) on June 7, 2017.

On June 9, 2017, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall.