File in Section:

Bulletin No.: PIC6048

Date: November, 2014

## PRELIMINARY INFORMATION

Subject: Normal Operation Of Haptic Seat During Lane Keep Assist Event

Models: 2015 Cadillac ATS, CTS Sedan VIN A, XTS

With Lane Keep Assist (RPO UHX)

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

## **Condition/Concern**

A customer may comment on the operation of their haptic seat during a Lane Keep Assist (LKA) event.

## Recommendation/Instructions

Lane Keep Assist (LKA) works differently than Lane Departure Warning (LDW) in that it has two driver interventions: Stage 1 and Stage 2

Stage 1 – LKA icon is solid Amber, Forward Camera Module is actively commanding a torque to Electronic Power Steering. This means that the driver should also feel some feedback from the steering wheel. No Chimes or haptics.. Stage 1 occurs when approaching the lane marking.

Stage 2 – LKA icon is flashing amber, Forward Camera Module is actively commanding torque to Electronic Power Steering. This will also be accompanied with LDW chimes / haptics seat feedback (based on the setting chosen in the CUE vehicle settings). Stage 2 occurs when vehicle has crossed lane marking by (40 cm) or (15.75 in)

There are a few reasons for no chimes or haptics when crossing a well defined painted center line on the road. If LKA is overridden / suppressed, at any point, there will be no stage 2 alert.

**Important:** Lane Keep Assist can be overridden for any of the following reasons:

- 1. High steering / rapid change in steering position
- 2. High braking / aggressive brake apply
- 3. High / rapid acceleration
- 4. High driver applied torque to steering wheel
- 5. Turn signal activation

Most commonly, the driver applies more torque to the steering wheel to overcome the Lane Keep Assist. This would lead to the LKA fading out, and no stage 2.

**Note:** For Lane Keep Assist to enable, lane markings need to be of good quality AND the curvature of the road / lane markings need to be less than a certain threshold.

Please see the owner's manual for more information on Lane Keep Assist

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.