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## Document Information

**Location:** Chassis - Steering

**Topic:** Steering Column does not move and/or does not calibrate

**Condition:** Permanent

**Diagnostic Trouble Codes:**

SCUG:

B103521 ASCC Reach Position Signal Low  
B103522 ASCC Reach Position Signal High  
B103527 ASCC Reach Position Signal Rate High  
B103537 ASCC Reach Position Signal Pulse Frequency Too High  
B103554 ASCC Reach Position Invalid Calibration  
B103564 ASCC Reach Position Signal Invalid  
B103621 ASCC Rake Position Signal Low  
B103622 ASCC Rake Position Signal High  
B103627 ASCC Rake Position Signal Rate High  
B103637 ASCC Rake Position Signal Pulse Frequency Too High  
B103654 ASCC Rake Position Invalid Calibration  
B103664 ASCC Rake Position Signal Invalid

## Measure

When calibrating the electric steering column via the MDS, it will move to its furthest positions to learn the end stops.

The steering column can sometimes overdrive and get stuck on the end stop position. The image below demonstrates this.

(For demonstration purposes, the steering column is removed from the vehicle)



If the above has occurred, it can be identified by the steering column being in either full reach or rake position, not moving during the calibration and potentially be able to hear the motor attempting to drive the column but after 2 to 3 attempts it will stop.

To overcome this, manually assist the movement of the steering column in the opposite direction.

- If the steering column is stuck down, you will need to pull the steering column upwards – this will require reasonable force until the column begins moving again.
  - If the steering column fails to move after attempting to assist it manually and the calibration has failed, it is likely to be stuck at the end stop. In this instance, you will need to power the correct motor to drive the column off the end stop. Depending on what position the motor has failed will determine which way the motor needs to drive. The motor can be driven in two directions depending on what polarity you supply the voltage.
- 1. To move the Steering Column Rake (Up and Down), disconnect IMBFC2-M and apply 12V and a Ground to PIN 5 and 13

2. To move the Steering Column Reach (Forward and Back), disconnect IFSC1-M and apply 12V and a Ground to PIN 14 and 15

- Once the column has moved off the end stop, run the calibration sequence again.

## Parts Information

N/A

## Attachments

N/A

## KA Update Information

11/05/2021 KA Review

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