



Maserati Tech Tips 73

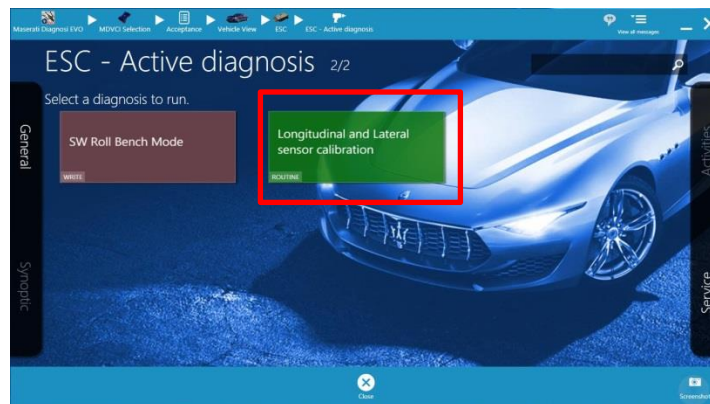
Date: September 26, 2016
Bulletin No.: Tech Tips 73

MASERATI

Subject: M156/M157/M161 ESC ECU Longitudinal/Lateral Sensor Calibration Procedure

Description: The longitudinal and lateral forces are measured by an integrated YAW, longitudinal and lateral acceleration sensor within the ESC ECU. On the MY17 vehicles, the location of the sensor sensor's location has been relocated to the ORC ECU. The values on the integrated sensor correspond with the amount of directional force being applied to the vehicle at a given time interval. These values are used by the ESC and other ECU's throughout the vehicle for various dynamic strategies regarding the functionality of stability control, skyhook suspension dampening, gearbox shift points and EPB applied force during applications. Please see below for the necessary steps to perform the recalibration procedure.

- 1) This procedure is required whenever you have completed a major repair to one of the following components: removal and installation of the entire power train assembly, structural component repairs, procedures requiring the dismounting of the ECS Hydro-electric assembly or replacement of the ORC ECU.
- 2) A symptom the vehicle could exhibit to indicate that the longitudinal/lateral sensor is referencing an incorrect reading/value, would be the gearbox remaining in a lower gear and not upshifting. However the gearbox will upshift in manual shifting mode if a request is made by the operator.
- 3) To execute this procedure use Maserati Diagnosi or EVO. Connect to diagnostic tool, then access the ESC ECU. Next select Active diagnosis, from that menu, select Longitudinal and Lateral sensor calibration.



- 4) Prior to stating the application, ensure the vehicle is positioned on level ground, the steering wheel is straight and the front wheels are pointing forward. Please also follow the standard "A" conditions for preparing the vehicle for a full vehicle alignment, per Knowledge-On-Line Procedures. This procedure is located in section 06.90.000 40 COMPLETE CAR ALIGNMENT section of the workshop manual.
- 5) Select the calibration routine and follow all prompts on the Diagnostic Tool, until you receive a "Successful" acknowledgement. Clear any stored diagnostic trouble codes which the routine may have generated. Finally road test the vehicle to confirm proper dynamic operation.