



INFORMATION BULLETIN

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Electronic Steering System Reset Required with Alignment Service

The number of vehicles equipped with on-board driver-assist systems, such as electric power steering (EPS) or electronic stability control (ESC), is rising as automotive manufacturers continue to improve performance and safety. In fact, the National Highway Traffic Safety Administration (NHTSA) established a rule that requires automakers to install some form of ESC in all vehicles with a gross vehicle weight rating (GVWR) of 10,000 lbs. or less by model year 2012.

ESC and other driver-assist systems rely on a network of sensors that track steering wheel position, turning rate, lateral forces, roll, wheel speed, and other performance variables to determine if the systems should be engaged to help stabilize the vehicle in unsafe situations. Thus, it is important that the sensors be calibrated in line with the front wheels and thrustline (direction of travel) of the vehicle to relay accurate information and maintain the integrity of the driver-assist systems.

For years, shops have calibrated or “reset” vehicle-performance sensors under manufacturer mandates for special cases like sensor replacement or collision repair. But now, a growing number of manufacturers require sensor reset in conjunction with alignment service. Alignment changes vehicle steering geometry and may alter what the driver-assist system sensors consider to be straight-ahead. Therefore, if required by the manufacturer, the sensors must be reset to correspond with the new steering geometry of the vehicle.

This new final step in the alignment process is called an electronic steering system reset – also more commonly known as a steering angle sensor (SAS) reset. Electronic steering system reset typically involves resetting the steering angle sensor, but, depending on the vehicle model and manufacturer requirements, other sensors such as torque angle and yaw rate may also require calibration.

Electronic steering system reset requires a diagnostic tool that connects to the vehicle’s on-board computer (OBD-II) to evaluate and electronically reset the sensors. With the right equipment, an experienced technician can complete electronic steering system reset in 3 to 10 minutes.

AMRA recommends that service providers follow manufacturers’ mandates when performing alignments on vehicles with ESC or some other driver-assist system that may require electronic steering system reset.