2.11 Scan tool modes (test modes)

An OBD-compatible scan tool according to ISO 15 031-5 has a minimum of 9 functions (modes).

Important note:
According to the new OBD directive the term “mode” is replaced by “service”.

mode 1	reads out the current operating data (actual data) such as engine speed, lambda probe signal, readiness code
mode 2	reads out the operating data in which an error occurred (“freeze frame”) such as engine speed, coolant temperature, engine load
mode 3	reads out the exhaust gas relevant errors that caused the malfunction indicator lamp (MIL) to go on such as P0101 combustion misfire Only “debounced”, i.e., confirmed errors are displayed (see Sections 2.7 and 2.8)
mode 4	erases the fault code memory of all systems Erases the fault codes, the “freeze frame” values and the readiness codes Attention: admissible only if followed by a repair and a new driving cycle
mode 5	displays the lambda probe signals (current voltage) Attention: the engine must be running and at an operating temperature
mode 6	displays the measured values of the systems that are not monitored permanently such as blowing in of secondary air, which varies according to vehicle manufacturer
mode 7	reads out “sporadic errors” reads out errors that have not yet caused the malfunction indicator lamp (MIL) to go on Only “non-debounced”, i.e., non-confirmed errors are displayed (see Sections 2.7 and 2.8)
mode 8	system and component test status indicating whether the test is finished (component test, readiness code)
mode 9	displays information on the vehicle such as the engine code, chassis number