

00 Start-stop system workshop information

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Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A7	2013 – 2016	All	With Start/Stop
A6, A8, Q5	2013 – 2017	All	With Start/Stop
A4, S6, Q7, TT, TT S	2016 - 2017	All	With Start/Stop
A3, A5, S3, S4, SQ5	2017	All	With Start/Stop

Condition

The customer may report:

- The start/stop system does not shutdown when the driver thinks it should.
- The engine is not automatically switched off or on.
- The engine restarts from start/stop for reasons unknown to the driver.

Technical Background

This informational TSB only applies to vehicles with the with start/stop system.

The start/stop system allows automatic engine stops and starts. Because of many different factors the engine may not automatically be switched off although the driver expects it.

It is also possible that the engine starts automatically although the driver does not expect it.

For the start/stop system to work there must be no malfunctions and no fault entry in any control unit that could affect its operation. If the vehicle has the start/stop system it cannot be legally disabled.

The engine is automatically switched off if the following conditions apply:

- The minimum engine temperature has been reached. Unless this is the case, the system does not switch off
 the engine to avoid interrupting the warm-up and to ensure that the heating is available as quickly as possible.
- After ignition on the vehicle has exceeded 10 km/h (3 km/h for manual transmission) and driven a few meters before coming to a complete standstill.
- The charge level of the battery must be sufficient so that the engine can be restarted. To ensure this the battery manager constantly monitors the charge level of the battery.
- · The defrost function is deactivated.



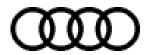
- The driver must wear a seat belt.
- The driver door and the hood must be closed.
- The engine speed must be below 1,200 rpm.
- The diesel particulate filter (DPF) of the engine must not be in the regeneration process.
- The difference between target and actual interior temperature must not be more than 12°C.
- The road incline must be under 10°.
- The steering wheel must not be more than 270° (3/4) turned, as the vehicle comes to a standstill.
- On automatic vehicles the brake pedal must be pressed and held as long as the start/stop function is to be active.
- A gear must not be selected (manual transmission only).
- The clutch must not be pressed (manual transmission only).

In the following situations the engine is not automatically switched off:

- The vehicle is electrically connected with a trailer (factory trailer installation only).
- The system was manually deactivated with the button on the center console.
- The clutch is depressed (manual transmission only).
- A gear is selected (manual transmission only).
- The brake pedal is not pressed hard enough.
- The parking aid is switched on.
- The interior temperature selected on the air conditioning system has not yet been reached.
- The charge level of the battery is too low.
- The windscreen is being defrosted.
- The steering wheel is turned more than 270°.
- · The vehicle is inclined too much.
- The system remains switched off, if after a replacement the battery has not been adapted with the Guided Functions or if after such an adaptation the system is in the process of calculating the charging curve. This process takes about 10 start cycles and varies depending on vehicle and equipment.

In the following situations the engine starts automatically without driver involvement (without pressing the clutch pedal):

- The vehicle moves with switched-off engine and reaches a speed of more than 3 km/h, for example because
 of a slope.
- On an automatic vehicle the selector lever position "R" is selected.



- The coolant temperature drops or rises too much.
- The vacuum in the brake servo has dropped leading to reduced braking assistance.
- The interior temperature differs from value selected in the air conditioning system.
- The charge level of the battery is below a certain level.
- · Too many electrical consumers are switched on.
- The windscreen is being defrosted.

Requirements for the engine to be started deliberately after being turned off by the start/stop system:

- The clutch pedal must be pressed.
- On vehicles with automatic gearbox the brakes have been released (without Auto Hold function).
- The start/stop button is pressed (lit up).

Further information about the start/stop system is included in the owner's manual.

Production Solution

Not applicable.

Service

If a customer concern is confirmed, proceed as follows:

Check for relevant faults and diagnose with Guided Fault Finding.

For checking and effectively diagnosing the start/stop system use Guided Fault Finding 1st.

If Guided Fault Finding does not help identify the concern a more detailed information about self-diagnosis and stop start system operation see the attachment "Audi start/stop systems, Workshop Manual and instructions for analysis".

The start/stop system is complex and the number of the conditions affecting it is high. In many cases concerns about the start/stop system may actually be normal operation or influenced by the actions of the driver or passenger.

Please do not replace parts without proper diagnosis.

Warranty

This TSB is informational only and not applicable to any Audi Warranty.



Additional Information

All parts and service references provided in this TSB (2045316) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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