

#### 00 Start/Stop system workshop information

00 20 42 2045316/5 October 7, 2020. Supersedes Technical Service Bulletin Group 00 number 19-27 dated October 4, 2019 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8	2013 – 2017, 2019 - 2022	All	With Start/Stop
S8	2017, 2019 - 2022	All	With Start/Stop
Q3, Q8	2019 - 2022	All	With Start/Stop
A6 allroad, A6 Avant, RS6 Avant, SQ8, RSQ8	2020 - 2022	All	With Start/Stop
TT, TTS, and TTRS	2016 – 2017, 2019 - 2022	All	With Start/Stop
A6, A7, and Q5	2013 – 2022	All	With Start/Stop
A4, S6	2016 - 2022	All	With Start/Stop
Q7, SQ7	2016 - 2022	All	With Start/Stop
A3, A5, S3, S4, S5, and SQ5	2017 - 2022	All	With Start/Stop

### Condition

REVISION HISTORY					
Revision	Date	Purpose			
5	-	Revised header (MY 2021 and MY 2022 added) Revised attachment (MY 2021 changes added)			
		Revised <i>Technical Background</i> (Updated information about attachment location and added photo)			
4	10/04/2019	Revised header (MY 2020 added) Revised attachment (MY 2020 changes added) Revised <i>Technical Background</i> (Updated temperature statement)			
3	11/21/2018	Revised header (MY 2019 added)			

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Revised attachment (MY 2019 changes added)

#### **Customer states:**

- 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 Start/Stop system.

For greater detail on Start/Stop operation and diagnosis please check the attachment to this Technical Service Bulletin in the repair manual "Audi Start/Stop systems, Workshop Manual and instructions for analysis" (Figure 1).

Text information	Attachments	Vehicle description /

#### Figure 1. Attachments Tab in the repair manual.

The Start/Stop system allows the engine to be automatically stopped and restarted. 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 entries in any control module 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 or 6mph (3 km/h or 2mph for manual transmission) and driven a few meters or feet 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.

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- The target HVAC temperature has been reached
- 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 or 2mph, 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.

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- 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:

- 1. Check for relevant faults and diagnose with Guided Fault Finding.
- 2. For checking and effectively diagnosing the Start/Stop system use Guided Fault Finding 1st.
- 3. If Guided Fault Finding does not help identify the concern further information about self-diagnosis and Start/Stop system operation is available -- see the attachment "Audi Start/Stop systems, Workshop Manual and instructions for analysis".
- 4. 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/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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