

96 Engine intermittently or consistently does not start using advance
key start button, starts w/ key & ignition switch

Release date: Nov 14,
2008

Condition

Customer states that engine does not start or intermittently does not start when Advance Key engine start button is depressed. Engine will start using ignition key and ignition switch.



Figure 1. The Advance Key engine start button.

Technical Background

REVISION HISTORY		
Revision	Date	Purpose
5	-	Revised Title to include Repair Group

May be caused by:

A – Mechanical issue with the engine start button.

B – Electrical issue with the engine stop button.

Production Solution

Production (B only)

Updated access start control unit software.

Service

Perform the following only if condition is accompanied by a customer concern.

A – Mechanical issue with the engine start button

Rationale

Engine start button has two detents. Similar to ignition switch, the first detent will activate 15 power. Second detent activates starter.

When depressing engine start button, flow from initial push through to second detent should be smooth; audible clicks should be heard as detents are reached.

In some cases, second detent, starter activation, cannot be achieved due to mechanical tolerances within the switch.

Procedure

1. Interrogate fault memory of access start control unit, address word (05), with VAS 5051/5052.
 - a. If no fault is found in access start control unit, check engine start button functionality by observing measuring value block 2, fields 1 and 2, of access start control unit.
 - If engine start button is found to be non-functional, replace Advance Key engine start / engine stop switch.Refer to Repair Manual >> Group 96 - Lights, Switches >> Interior, Anti-Theft for appropriate repair procedure.
 - b. If DTC 02764 008 (Button for start/access authorization - incorrect signal) is found in access start control unit, go to B – Electrical issue with the engine stop button below.

B – Electrical issue with the engine stop button

Rationale

Engine stop button has two internal micro switches, activated when the button is depressed.

Both micro switches send a signal independently of one another to access start control unit. When access start control unit receives both signals within three seconds, access start control unit disables the engine, as long as vehicle is stationary.

In some instances, the engine stop button may be held down lightly but not in the fully depressed position. For instance, there may be a cell phone resting on the button. In this case, the access start control unit receives only one micro switch signal.

The Access start control unit determines the situation to be implausible. DTC 02764 008 (Button for start/access authorization - incorrect signal), is set in access start control unit and engine start button is rendered inoperable.


Software level update 180 for access start control unit changes the three second threshold to thirty seconds. If thirty seconds have passed while engine stop button is lightly depressed, DTC 02764 008 (Button for start/access authorization - incorrect signal) sets in access start control unit.

However, when vehicle is parked and engine stop button is fully depressed to disable engine, DTC 02764 008 (Button for start/access authorization - incorrect signal) will change from an "implausible signal" to a "sporadic signal."


This allows engine start button to function next time engine start button is fully depressed to starter activation detent.

Procedure

1. Check access start control unit software level.
2. If access start control unit software level is below 180, perform Update Programming (Flashing) procedure of access start control unit using update CD Part No: 4F0 906 961N.

 Tip: Do not replace access start control unit.

Update - Programming (Flashing) Procedure


 Tip: When performing the reflash procedure, all DTCs for all systems are erased. DTCs linked to Guided Fault Finding function tests will be lost. Therefore, always address stored DTCs for customer concerns unrelated to the reflash procedure first.

Tool Requirements:

- VAS5051 or 5052 (with Basis CD V.07.00 and Brand CD V.07.36.00 or higher) with old diagnosis logs erased prior to start.

- Update – Programming (Flashing) CD Part No: 4F0 906 961N.
Additional copies of the "Update – Programming" (Flashing) CD (Item No: 4F0 906 961N) may be ordered from the Audi Technical Literature Ordering Center at www.Audi-ussltd.com, or by calling 1-800-544-8021 from 8:00 a.m. to 8:00 p.m. EST Monday through Friday. This number can be dialed in both the United States and Canada.

Approved battery charger.

 Tip: The battery must have a minimum no-load charge of 12.5 volts (failure to maintain voltage during update process can lead to control unit failure). Use approved battery charger to maintain battery voltage.

Procedure

1. Insert update CD 4F0 906 961N into VAS 5051 / 5052 tester.
2. From start up screen, select Vehicle Self Diagnosis >> 05 - Access and start permission >> Update - Programming. Follow instructions on VAS 5051 / 5052 tester.
 - Old software version will be erased and version 180 will be installed.
 - Fault memory of the other control units will be erased.
3. An ignition OFF / ON cycle will be required when prompted. However, do not cycle the ignition while the software is loading.

If you experience any problems, please reference the file under //Manual/GB.pdf on the update CD (insert CD into CD-ROM drive of any computer) or contact the Audi Technical Assistance Center at (800) 388-2834.

Warranty

When procedure applies to vehicles within the New Vehicle Limited Warranty, use the following:		
Claim Type:	W2	
Part Identifier:	9677	
Damage Code:	9677 40	Flash Access Start Control unit

	001 1		
Damage Code:	9677 40 001 2	Replace switch	
Labor Operations:	9677 19 50	Stop-start switch remove + reinstall. Does not include: remove + reinstall front ashtray	10 TU
	6820 19 00	Front ashtray remove + reinstall. Includes: 87 04 19 remove + reinstall A/C control head	30 TU
	9677 25 40	Flash Access Start Control unit	70 TU
Diagnostic Time:	Diagnostic time reimbursement follows guidelines printed in Section 2.2 of the Audi Warranty Policies and Procedures Manual		
Claim Comment:	As per TSB #2010941/5		
All warranty claims submitted for payment must be in accordance with the Audi Warranty Policies and Procedures Manual. Claims are subject to review or audit by Audi Warranty.			

All part and service references provided in this TSB are subject to change and/or removal. Always check with your Parts Dept. and service manuals for the latest information.

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