

01-25-05 - Update Programming, MIL ON, DTC P00B7 Stored in the -J623- Engine /Motor Control Module

Condition

Applicable Vehicles					
Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
Golf R	2022 - 2024	2.0T (DSF*)	All	All	All
GTI	2023	2.0T (DRN*)	All	All	All
Arteon	2023	2.0T (DSF*)	All	All	All

Revision Table			
Instance Number	Published Date	Version Number	Reason For Update
2079099/2	10/16/2025	01-25-05	To include new models and model years.
2079099/1	9/10/2025	01-25-05	Original publication.

One or more of the following fault code(s) must be stored in the ECM:

DTC	Description
P00B7	Engine Coolant Flow Low/Performance
P0116	Engine Coolant Temperature Sensor 1 Circuit Range/Performance
P2681	Engine Coolant Bypass Valve "A" Control Circuit/Open

NOTICE

DO NOT diagnose or replace any components for the above fault(s) before performing the update function as explained in this bulletin.

Technical Background

Updated ECM software to improve thermostat performance.

Production Solution

Improved ECM software implemented in production.

Service

Update-Programming Procedure:

WARNING

Critical Warning: The Midtronics battery charger with at least 70A charging current must be connected to the vehicle battery for the duration of the programming, to ensure the battery state of charge remains above 12.5 volts during the update process. If the battery drops below 12.5 volts, the programming could fail which may result in damage to the control module. Control modules damaged by inadequate voltage will not be covered under the warranty policy. The technician should verify the vehicle voltage prior to starting the update process, and should monitor the voltage for the duration of the update.

WARNING

Radiator Fan(s) may cycle ON high speed during the Update Process! There is a risk that personal injury may result if contact is made with spinning fan blades.

- Keep hands and objects away from Radiator Fan(s) during update process.

NOTICE

Prior to launching the ODIS service diagnostic applications and starting control module update process, confirm tester screen saver and power settings in accordance with Special Tools and Equipment - Service Information Circular # VHW-22-13. Failure to do so may result in the tester entering power save mode during data transfer, and subsequent control module failure.

- When using a VAS 6150/X or 6160/X tester in conjunction with a VAS 6154/X wireless transmitter head for a flash procedure, connect a USB cable between the transmitter head and the tester. Failure to do so may lead to errors during the flash procedure. VAS tools must only be used with their power adapters plugged in. Under no circumstances should they be used on battery power alone during the programming procedure.



To Update-Programming using Software Version Management (SVM), review and follow instructions in Technical Bulletin Instance 2014603 "Software Version Management".

The SVM Process must be completed in its entirety, so the database receives the update confirmation response. A warranty claim may not be reimbursed if there is no confirmation response to support the claim or action is carried out that is not explicitly stated in the Technical Bulletin.

- Update the **-J623-** Engine/Motor Control Module using the SVM Unit code as listed in the table below:

Model	Engine	Old Software Part No.	Old Software Version	New Software Part No.	New Software Version (or higher)	SVM Unit Code
MY22 Golf R	2.0T (DSF*)	5H0 906 259 A	0001 0003	5H0 906 259 A	0004	51C6
MY23 Golf R	2.0T (DSF*)	5H0 906 259 E	0001	5H0 906 259 E	0002	51C6
MY24 Golf R	2.0T (DSF*)	5H0 906 259 J	0001	5H0 906 259 J	0002	51C6
MY23 Arteon	2.0T (DSF*)	3G0 906 259 AH	0001	3G0 906 259 AH	0002	51C6
MY23 GTI	2.0T (DRN*)	8Y0 906 264 D	0001 0002	8Y0 906 264 D	0003	51C6



The procedure can be found in GFF under Functions/ Component Selection, Software Version Management, Adapting Software.

Ensure attached ECM/TCM Tuning Form has been completed and signed by customer as required in SVM Technical Bulletin Instance 2014603.

Warranty

To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual ⁽¹⁾					
Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To

Golf R	2022 - 2024	2.0T (DSF*)	All	All	All
GTI	2023	2.0T (DRN*)	All	All	All
Arteon	2023	2.0T (DSF*)	All	All	All
SAGA Coding					
Claim Type:	Use applicable Claim Type ⁽¹⁾				
Service Number:	Damage Code	HST	--		
2470	0039	--	--		
Parts Manufacturer	Golf R, Golf GTI, Arteon		WWO ⁽²⁾		
Labor Operation ₃: GFF functions (including Battery Charge)			01500010 = See Elsa for the latest time units.		
Labor Operation ₃: Update Programming			See GFF Time expenditure		
Causal Part: Select Labor Operation			01500060		
Diagnostic Time ⁽⁴⁾					
GFF Time expenditure	01500060 = 50 TU max.		YES		
Road Test	01210004 = 00 TU		NO		
Technical Diagnosis	01320000 = 00 TU max.		NO		
Claim Comment: Input "As per Technical Bulletin "2079099" in comment section of Warranty Claim.					
¹⁾ Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only ²⁾ Code per warranty vendor code policy. ³⁾ Labor Time Units (TUs) are subject to change with ELSA updates. ⁴⁾ Documentation required per Warranty Policies and Procedures Manual.					

Required Parts and Tools

No special parts required.

Tool Description	Tool No.
Midtronics Battery Tester/Charger	GRX3000VAS or MTRMSP0702 battery maintainer/charger
VAS Diagnostic Tool	VAS 6150/X & VAS 6160/X with: ODIS Service with current online updates.

Additional Information

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

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**OWNER INFORMATION ABOUT CONTROL MODULE TUNING*
ACKNOWLEDGEMENT AND AUTHORIZATION FOR
REPROGRAMMING (REFLASHING) OF CONTROL MODULE(S)**

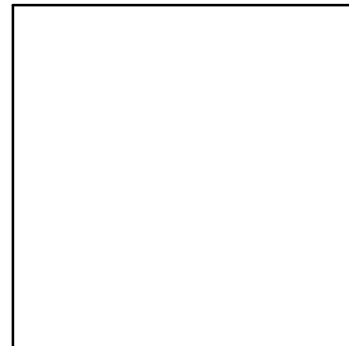
*) "TUNING" is described as the addition of or modification of any component which causes a Volkswagen vehicle to perform outside the normal parameters and specifications approved by Volkswagen Group of America / Volkswagen Group Canada.

Date: _____

Dealer Number: _____

Vehicle Identification Number: _____

Repair Order Number: _____



Dealer stamp

I _____, owner or driver of the above identified Volkswagen, confirm:

"Tuning" as described above (especially power increasing modifications) has NOT been performed on my vehicle.

"Tuning" as described above has been performed on my vehicle and the following components were modified or installed:

 TUNING was performed by (Please provide Company name and telephone number, if you wish us to contact them):

I understand that if my Control Module is determined to have been tuned, any damage caused by the tuning of the Control Module (including adverse emissions consequences) will not be covered by VWGoA / VGC warranties.

I am permitting an authorized Volkswagen Dealer to reflash (update) my Control Module, and by doing so, I understand that this process will automatically overwrite (destroy) and permanently delete any tuning program that was previously installed on the Control Module of my Volkswagen vehicle.

By signing below, I fully acknowledge and understand that the tuning program will not be restored and VWGoA / VGC, will not be liable in any way for the loss of tuning data.

Signature of Customer