

Technical Service Bulletin

Transaction No.: 2024284/3

28-10-05 - Hard or No Start at or below 0°C (32°F) and or Runs Rough after 28E6/R8 Campaign

Release date: Dec 14, 2010

Condition

28 10 05 December 14, 2010 **2024284** Supersedes T. B. V281004 dated November 23, 2010 to remove three model year 2006 vehicle identification numbers, to provide information regarding NGK Long glow plugs, and to add Saga warranty information.

Hard or No Start at or below 0°C (32°F) and or Runs Rough after 28E6/R8 Campaign**Tip:**

Glow plug circuit fault codes may or may not be present during this condition.

Hard / no start conditions above freezing temperatures are not related to this issue.

This technical bulletin **DOES NOT** apply to vehicles equipped with previous version NGK Long glow plugs (N10591604, N10591608).

This technical bulletin applies only to vehicles that have had the 28E6 previously performed.

This technical bulletin applies only to vehicles covered by extended warranty.

Vehicle Eligibility

- To determine if a vehicle is eligible for the Glow Plug Limited Warranty Extension, check the VIN in ElsaWeb > Vehicle Specific Notes > Vehicle Data. If the warranty extension is applicable to the vehicle, The “Enhanced Coverage” section of the “Vehicle Data” screen in ElsaWeb will be populated with the warranty extension parameters.

Technical Background

After 28E6/R8 campaign performed, vehicle exhibits a hard / no start condition when temperatures drop below freezing. This condition may be accompanied by rough running engine at idle with no fault codes correlated.

**Note:****Additional information regarding NGK glow plugs**

During the interim, between the discovery of the Hard/ No Start condition and the development of the solution, some Golf, Jetta and New Beetles were repaired with long version NGK glow plugs (Part No. N10591604; N10591608), new glow plug control module, new injectors, and new software, which served as the final solution for these vehicles. This “interim” solution **IS NOT** compatible with the new solution found in this technical bulletin and the replacement parts **MUST NOT** be mixed.

Production Solution

Not applicable.

Service

Section A - Golf, Jetta/Jetta Wagon, and New Beetle:

Installing New Glow Plugs, Glow Plug Control Module, and Engine Control Module Update - Programming (Flashing) using Software Version Management (SVM)

Note:

NGK short glow plug (N10591609) **IS NOT** reverse compatible with other glow plugs. **DO NOT** mix this glow plug with any other previous glow plugs or previous repair.

DO NOT perform Update Programming if glow plugs and glow plug control module as listed below have not been installed first! Damage to glow plugs will occur if software is updated prior to new parts installed in vehicle. Damage caused by not adhering to this Note is not covered under this action.

Tip:

Hard / no start conditions above freezing temperatures are not related to this issue.

Step 1:

- Remove glow plug(s) and inspect part number. If previous version NGK glow plug (N10591604; N10591608) is present, reinstall glow plug(s). This repair solution does not apply to vehicles equipped with previous version NGK glow plugs.
- Install glow plugs and glow plug control module from table below. Refer to direction in ElsaWeb>>Repair Manual>>Engine>>Engine Mechanical, Fuel Injection and Glow Plug>>28 Ignition/Glow Plug System>>Removal and Installation.

Part Number	Quantity	Description
N 105 916 09	4	NGK Short Glow Plug
038 907 281 D	1	Glow Plug Control Module

Step 2:

- After glow plugs and glow plug control module have been installed, continue to Section C - Engine Control Module Update – Programming (Flashing) using Software Version Management (SVM)

Section B – Passat/Passat Wagon:

Installing New Glow Plugs, and Engine Control Module Update - Programming (Flashing) using Software Version Management (SVM).

Note:

DO NOT perform Update Programming if glow plugs and glow plug control module as listed below have not been installed first! Damage to glow plugs will occur if software is updated prior to new parts installed in vehicle. Damage caused by not adhering to this Note is not covered under this action.

**Tip:**

Hard / no start conditions above freezing temperatures are not related to this issue.

Step 1:

- Install glow plugs from table below. Refer to direction in ElsaWeb>>Repair Manual>>Engine>>Engine Mechanical, Fuel Injection and Glow Plug>>28 Ignition/Glow Plug System>>Removal and Installation.

Part Number	Quantity	Description
N 105 916 09	4	NGK Short Glow Plug

Step 2:

- After glow plugs have been installed, continue to Section C - Engine Control Module Update – Programming (Flashing) using Software Version Management (SVM)

Section C - Engine Control Module Update – Programming (Flashing) using Software Version Management (SVM):**Engine Control Module Update - Programming (Flashing) using Software Version Management (SVM)****Tip:**

To Update-Programming using 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.

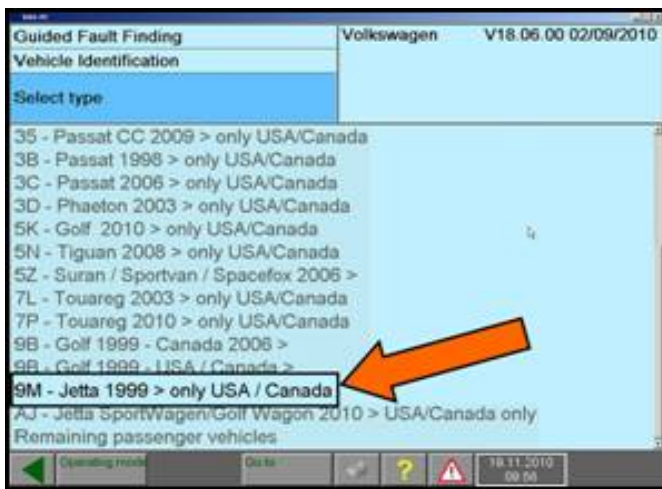
**Note:**

Prior to launching VAS-PC application and starting control module update process, confirm tester screen saver and power settings in accordance with Special Tools and Equipment - Service Information Circular # VSE-08-18. 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 6150/5051B or VAS 5052A tester in conjunction with a VAS 5054A wireless transmitter head for a flash procedure, please connect a USB cable between the transmitter head and the tester. Failure to do so may lead to errors during the flash procedure.

Golf vehicles only:**Tip:**

The Adapting Software test plan for Golf may not be successful even if the



vehicle is selected properly. To avoid this issue, select “9M – Jetta 1999> only USA/Canada” -arrow- when identifying the vehicle in GFF.

- Update the Engine 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
New Beetle ----- New Beetle Cabrio	1.9L	038906016P	5859	038997016S	0283	3456
		038906016P	6111			
		038906016P	7000			
		038906016J	5168			
		038906016J	5285			
		038906016J	5376			
		038906016J	5443			
		038906016J	6328			
		038997016P	4997			
		038997016M	2878			
		038997016M	4998			
Golf ----- Jetta ----- Jetta Wagon	1.9L	038906016Q	5843	038997016R	0282	3456
		038906016Q	6110			
		038906016H	4782			
		038906016H	4948			
		038906016H	5167			
		038906016H	5263			
		038906016H	5284			
		038906016H	5375			
		038906016H	5675			
		038906016H	6210			
		038906016H	6327			
		038997016H	8008			
		038997016H	9970			
		038997016L	1386			
		038997016L	3791			
Passat		038906016L	5377			
		038906016L	5656			

----- Passat Wagon	2.0L	038906016L	5978	038997016T	0314	3456
		038906016L	6036			
		038906016L	6417			
		038906016R	6222			
		038906016R	6416			
		038906016R	8900			
		038997016N	1388			

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



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 all objects away from Radiator Fan(s) during Update Process!



Tip:

Once the flash is complete and the key cycle has been performed, **Fault number 800.11 may appear**. Select cancel, and then re-enter the “Adapting Software” test plan which will indicate a “?” question mark. Re-enter the Unit code and follow the on screen prompts until the message “Data version in the vehicle is current” and the Adapting Software test plan states “OK.”



Tip:

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.

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



Tip:

Hard / no start conditions above freezing temperatures are not related to this issue.

Warranty



Tip:

This technical bulletin applies only to vehicles that have had the 28E6 previously performed.

This technical bulletin applies only to vehicles covered by extended warranty.

Vehicle Eligibility

- To determine if a vehicle is eligible for the Glow Plug Limited Warranty Extension, check the VIN in ElsaWeb > Vehicle Specific Notes > Vehicle Data. If the warranty extension is applicable to the vehicle, The “Enhanced Coverage” section of the “Vehicle Data” screen in ElsaWeb will be populated with the warranty extension parameters.

Review Warranty Service Circular:

U.S. = VWP-10-15

Canada = CVWP-10-17

To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual ¹⁾

Model(s)	Year(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
New Beetle	2004	1.9L Diesel (BEW)	All	1C_4M400103	1C_4M423879
New Beetle	2005	1.9L Diesel (BEW)	All	1C_5M400035	1C_5M411503
Jetta Wagon	2004	1.9L Diesel (BEW)	All	1J_4M000735	1J_4M 190784
Jetta Wagon	2005	1.9L Diesel (BEW)	All	1J_5M000129	1J_5M074870
Passat, Passat Wagon	2004	2.0L Diesel (BHW)	All	3B_4E128538 3C_4P205639	3B_4E350871 3C_4P335074
Passat, Passat Wagon	2005	2.0L Diesel (BHW)	All	3B_5E000067 3B_5P000191	3B_5E174398 3B_5P060366
Golf	2004	1.9L Diesel (BEW)	All	9B_44003688	9B_44050001
Golf	2005	1.9L Diesel (BEW)	All	9B_54000624	9B_54027613

Jetta	2004	1.9L Diesel (BEW)	All	9M_4M000082	9M_4M147508
Jetta	2005	1.9L Diesel (BEW)	All	9M_5M000014	9M_5M070910
Claim Type:		Use applicable Claim Type ¹⁾			
SAGA Coding					
Service Number:	Damage Code	HST	Damage Location (Depends on Service No.)	Parts Manufacturer (removed part)	
2884	0016	-	Use applicable when indicated in ElsaWeb (L/R)	W W O ²⁾	
New Beetle/ Golf/ Jetta/Jetta Wagon					
Labor Operation ³⁾ : Includes all operations necessary to complete repair: Install new glow plugs, glow plug control module, update ECM software via SVM			28842099 = 190 TU		
Passat/Passat Wagon					
Labor Operation ³⁾ : Includes all operations necessary to complete repair: Install new glow plugs, update ECM software via SVM			28842099 = 160 TU		
Diagnostic Time ⁴⁾					
GFF Time expenditure	01500000 = XX TU max.			NO	
Road Test	01210002 & 01210004			NO	
Technical Diagnosis	0132xxxx = XX TU max.			NO	
Claim Comment: Input “As per Technical Bulletin 2024284” 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 Policy & Procedures Manual.					

Required Parts and Tools

New Beetle/Golf/Jetta/Jetta Wagon		
Part Description	Part No:	Quantity
NGK short glow plugs	N 10591609	4

Glow plug control module	038907281D	1
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Passat/Passat Wagon		
Part Description	Part No:	Quantity
NGK short glow plugs	N 10591609	4

Tool Description	Tool No:
Midtronics Battery Tester/Charger or Battery Maintainer	InCharge 940 (INC-940) or PSC 550S
VAS Diagnostic Tool	VAS 5051B, 5052/A, 6150 (Base CD V18.00, Patch CD V18.01.01 and Brand CD V18.06.01 or higher)
Hinged socket	3220
Hose clamps up to 25mm in diameter	3094 or equivalent
Spring type clip pliers	VAS 6275 or equivalent
Torque wrench 5-50 Nm	V.A.G. 1331 or equivalent

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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