

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
Tiguan, Eos, CC, GTI, Beetle, Beetle Convertible, Jetta	2009-2013	2.0L (CCTA, CBFA)	All	All	All

## Condition

**20 13 02** January 16, 2013 **2031426** Supersedes T.B. V201301 dated January 15, 2013 to correct rail pressure psi specification.

#### **High Pressure Fuel Pump Diagnosis**

Engine Crank, No Start after Long Periods without Driving. Engine may run rough, and or MIL-ON with DTC P0087-low fuel pressure stored in ECM Fault Memory.

### **Technical Background**

Completing the GFF high pressure pump function test is essential to diagnose proper pump operation and to avoid unnecessary replacements.

### **Production Solution**

N/A

### **Service**

The high pressure pump requires a sufficient supply of fuel pressure in order to operate properly.

 Check for sufficient pressure at the low pressure pump as described in the repair manual, located under the headings: Engine -> Engine Mechanical, Fuel Injection and Ignition -> Fuel Supply System -> Diagnosis and Testing -> Fuel Pump, Checking -> Fuel Pressure, Checking.

Is low pressure fuel pump within specifications?

YES: Continue to high pressure fuel pump test.

NO: Replace low pressure fuel pump and continue.

Guided fault finding provides a function test for the high pressure fuel pump. This test must be performed in order to properly diagnose the high pressure fuel pump.

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## **U**Note:

### A completed high pressure fuel pump function test is required for reimbursement.

#### Following completion of the function test:

If the fuel rail pressure is within  $\pm 1$  of 40 bar (580 psi.), **DO NOT** replace the high pressure fuel pump. Continue to further diagnose the fuel system, this bulletin does not apply.

• With the engine running, check measure value blocks 106, 140 and 141 to confirm fuel rail pressure reads a minimum of 40 bar (480 psi).

#### The engine should be switched OFF and the key switched ON to perform the following procedure:

- Enter vehicle self-diagnosis.
- Select OBD.
- Select 01 engine electronics.
- Select 005 output diagnostic test mode (DTM).
- VAS will run diagnostics.
- When the test starts to check operation of the "fuel pressure regulator 2 control circuit high" (figure 1), listen for an audible "click" sound coming from the N276 pressure regulator.

## iTip:

The audible "click" sound may be better heard with hood open and the engine cover removed.

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Vehicle On Board Diagnostic 005 - Output Diagnostic Test Mode (DTM) Output Diagnostic Test Mode waiting, advance required	01 - Engine electronics 1K0907115AS 1K0907115AA 2.0I R4/4V TFSI H18 0020 Coding long Dealership number 01357
Supply relay for engine components Fuel pump electronics signal wire Evaporative Emission System Purge Contro Evaporative Emission System Leak Detectio Fuel Pressure Regulator 2 Control Circuit H	n Pump Sense
Measured values for Fuel Pressure Regulate	

#### Figure 1

- If "click" noise is heard, **DO NOT** replace the high pressure fuel pump, <u>this bulletin will not apply</u>. Continue to further diagnose the fuel system.
- If "click" noise is **not** heard, and fuel rail pressure is below 10 bar, replace the high pressure fuel pump.
- Following completion of the test procedure, the vehicle should be driven with higher RPM's (3000 5500) to confirm the fault does not return.

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## Warranty

#### Low Pressure Fuel Pump Only

To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual <sup>1)</sup>					
Model(s)	Year(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Tiguan, Eos, CC, GTI, Beetle, Beetle Convertible, Jetta	2009-2013	2.0L (CCTA, CBFA)	All	All	All
		SA	AGA Coding		
Claim Type:			Use applicable Claim Type <sup>1)</sup>		
Service Numbe	Damage Code		HST	Damage Location (Depends on Service No.)	
2066		0010		Use applicable when indicated in ElsaWeb (L/R)	
Parts Manufacturer Eos, GTI, Beetle, Beetle Cor		nvertible, Jetta,CC	VDO		
	Tiguan			TJ5	
Tiguan					
Labor Operation <sup>3)</sup> : Remove and Install Low Pressure Fuel Pump			20661900 = 90 TU		
Eos/CC/GTI/Beetle/Beetle Convertible/Jetta					
Labor Operation <sup>3)</sup> : Remove and Install Low Pressure Fuel Pump		20661900 = 70 TU			
Causal Part:			Low pressure fuel pump		
		Diag	nostic Time <sup>4)</sup>		
GFF Time expen	diture 0150	00000 = 30 TU max			YES

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Road Test	01210002 = 10TU	NO		
	01210004 = 10 TU			
Technical Diagnosis- low pressure fuel pump test	01320000 = 60 TU max	YES		
Claim Comment: Input "As per Technical Bulletin 2031426" in comment section of Warranty Claim.				
<sup>1)</sup> Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only <sup>2)</sup> Code per warranty vendor code policy.				
<sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates.				

<sup>4)</sup> Documentation required per Warranty Policies and Procedures Manual.

OR

#### High Pressure Fuel Pump Only

To determine if this procedure is covered under Warranty, always refer to the Warranty Policies and Procedures Manual <sup>1)</sup>					
Model(s)	Year(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Tiguan, Eos, CC, GTI, Beetle, Beetle Convertible, Jetta	2009-2013	2.0L (CCTA, CBFA)	All	All	All
SAGA Coding					
Claim Type:			Use applicable Cla	im Type <sup>1)</sup>	
Service Number	·: C	)amage Code	HST	Damage Location (Depends on Service No.)	
2463	0010			Use applicable when indicated in ElsaWeb (L/R)	
Parts Tiguan, Eos, CC, GTI, Beetle, Beetle Manufacturer Jetta		Beetle Convertible,	BI	PF	

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		iguan				
Labor Operation <sup>3)</sup> : Remove Pressure Fuel Pump	ve and Install High	24631940 = 50 TU				
	Eos/GTI					
Labor Operation <sup>3)</sup> : Remove Pressure Fuel Pump	ve and Install High	24631920 = 70 TU				
	CC/Jetta/Beetle	e/Beetle Convertible				
Labor Operation <sup>3)</sup> : Remove and Install High Pressure Fuel Pump		24631918 = 50 TU				
Causal Part: High pressur	Causal Part: High pressure fuel pump		06H 127 025N			
	Diagno	ostic Time <sup>4)</sup>				
GFF Time expenditure	01500000 = 30 TU max. YES		YES			
Road Test	01210002 = 10TU NO 01210004 = 10 TU		NO			
Technical Diagnosis- low and high pressure pump test						
Claim Comment: Input "As per Technical Bulletin 2031426" in comment section of Warranty Claim.						
<ul> <li><sup>1)</sup> Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only</li> <li><sup>2)</sup> Code per warranty vendor code policy.</li> <li><sup>3)</sup> to be a Time the information of the transmission of transmission of the transm</li></ul>						
<ol> <li><sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates.</li> <li><sup>4)</sup> Documentation required per Warranty Policies and Procedures Manual.</li> </ol>						

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## **Required Parts and Tools**

Part Description	Part No:	Quantity		
High Pressure Fuel Pump	06H127025N	1		
OR				
Low Pressure Fuel Pump	See ETKA	1		

Tool Description	Tool No:	
Midtronics Battery Tester/Charger	InCharge 940 (INC-940)	
VAS Diagnostic Tool	VAS-PC, 5051B, 5052A, 6150X	
	(Base CD V19.01.00 and Brand DVD V19.19.00 or higher)	

## **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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