

Model(s)	Year	Eng. Code	Trans. Code	VIN Range From	VIN Range To
All	2008-2015	2.0L CCTA, CBFA	All	All	All

Condition

20 17 01 March 6, 2017 2031426 Supersedes T.B. V201503 dated July 28, 2015 to update parts table.

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. (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.)

NO: Replace low pressure fuel pump and continue.



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

© 2017 Volkswagen Group of America, Inc.

Page 1 of 11



Following completion of the function test:

If the actual fuel rail pressure is within ± 1 bar of specified fuel rail pressure [40 bar at idle (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 (580 psi).

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

ODIS:

- Enter Diagnosis.
- Select "Test Plan".
- Click "Select self test" button.
- Locate the test plan for the "N276 Fuel Pressure Regulator Valve," and attach the test to the test plan list (Figure 1a and Figure 1b).

Officiard Dusprocts	Information System Service - 221			- 1995	= 0 ×
Importer:	444	VIN:	WVGBV7AX2FW009265	100	(TA)
Dealer:	03999	Engine:	CCTA 2.0 L Motronic/147kW	🥪 🛃 🗞	
RO:				1.5	
Control modules	Feasible Orders DISS TSB	Test overview	And a Constant		080
Tests in current t	est plan		Accelerator pedal module		@ Flash
Status T	ests (sorted according to chance	e			A Measurement
	Digital Satellite Radio Tuner	R	Camshaft adjustment valve 1 -N205-		
	J412 - Cell phone oper. elect	or El	Recirculating valve for turbocharger -N249-		😭 Info
-		1 8	N276 - Fuel Pressure Regulator Valve	3	🚱 Admin
			N316 - Intake Manifold Runner Control (IMRC) Valve		
			Fuel injectors -N30- to -N33-		Log ¥ e
					Data ¥
		<u>ः</u>	Ignition colls -N70/N127/N291/N292-		
			Charge pressure control valve -N75-		Extras *
					Help R
		36	Documents Attach to the test plan 🔍 Clo	ise	Online Help
R19091	1_0310_11_RNS315@00011				🍪 Support
Perform test	Documents Remove Select	elf test			» 🖾 📀
The diagnostic entrance	was ended.				
💿 🧟	🔽 🕕 🖸 🗎	8 6		• 1	119 PM

Figure 1a

© 2017 Volkswagen Group of America, Inc.

Page 2 of 11



Importer: Dealer: RO:	444 03999 	VIN: Engine:	WVGBV7AX2FW009265 CCTA 2.0 L Motronic/147kW	an 🛃 🏷	
Control modules (leves orders DI	SS TSB Ted plan Operation Specia	Fundans.		000
Fuel Pressure Re	gulator Valve -N27	6-		-1-	 Film
Test options				-2-	Co Measurement
Supply		The On Board Diagnostic did not de	etect any malfunction.	-3-	😭 Info
General notes DTC memory eva	aluation	-1- Function (output DTM)		-4	3 rain
Test options		-2- Fuel pressure			Log ¥
		-3- Wiring test -4- Cancel			Data ¥
					Extras ¥
					Help R
					Online Help
					Support
		K < > >	Help Cancel test		>
				Test version	

Figure 1b

• Close test overview window.



 Highlight "N276 – Fuel Pressure Regulator Valve" test plan and select "Perform Test", and select Complete/Continue (Figure 2).

	Information System Servi	A MICHAEL			
Importer: Dealer:	444 03999	VIN: Engine:	WVGBV7AX2FW009265 CCTA 2.0 L Motronic/147k	w 🧔 🖡 s	
RO:	-				
	Results Criters D	ISS TSB Text pair Operation Species			a ceo
Fuel Pressure R	Regulator Valve -N2	76-		Complete/Continue	C Flam
Output DTM					A Measurement
Supply		- Remove the engine cover.			😭 Info
General notes		Repair Manual, Repair Group 24 Charles In International Control	A CONTRACT OF A CONTRACT		Anne
DTC memory ex	valuation	Regulator Valve been activated.	o determine whether it has Fuel Pressure		
Test options		or component location as needed	d		Log ¥
Output DTM		- Press the <- DONE-> button.			Data ¥
				Component location	Extras *
					Help &
					Online Help
					Support
		K < > >	Help	test	> 2
				Teal version	on 🛁 🖬
👔 🧟	0	न् 🚞 💪 🌖 💿			- 1 N R -4 4 121 PM

Figure 2

© 2017 Volkswagen Group of America, Inc.

Page 4 of 11



• ODIS will run GFF test plan for the Fuel Pressure Regulator Valve (Figure 3).

1000 CO. 100	Information System Service -	TANDAC IN			Carlo and a
Importer: Dealer:	444 03999	VIN: Engine:	WVGBV7AX2FW009265 CCTA 2.0 L Motronic/147kW		
RO:		Engine:	GGTA201 MOBONO 147KW	🧀 🛃 🗞	
Control modules	Results Orders DISS	TSB Test plan Operation Special			() Ono
Fuel Pressure R	legulator Valve -N276-			Complete/Continue	Citati
Output DTM					A Measurement
Supply		The Fuel Pressure Regulator Valve i	s being activated.		😭 Info
General notes		- Check by listening or touching whet	ther it works.		Q American
DTC memory ev	valuation	Press DONE-button to continue prog	yram.		
Test options	1				Log ¥
Output DTM					Data *
Output DTM					Extras #
					Help R
					🚱 Online Help
					Support.
		K < > >	Help Cancel test		» 🖾 📀
				Test version	

Figure 3

© 2017 Volkswagen Group of America, Inc.

Page 5 of 11



• When the test starts to check the operation of the N276 pressure regulator, listen for an audible "click" sound coming from the High Pressure Fuel Pump. Once test in complete, answer the question provided (Figure 4).

Officiand Diagnostic Information System Ser	700211			
Importer: 444	VIN:	WVGBV7AX2FW009265		ATA
Dealer: 03999	Engine:	CCTA 2.0 L Motronic/147kW	an 📑 🐼	
R0:				•
Control modules Results Orders I	DISS TSB Test plan Operation Specia	il Franctions		🐞 dep
Fuel Pressure Regulator Valve -N	276-		Yes	📽 Filen
Function query			No	Ca Measurement
Supply	- Switch the ignition off.	•		😭 Info
General notes	Was the Fuel Pressure Regulato	r Valve activated in intervals?		Q ranh
DTC memory evaluation				
Test options				Log ¥ s
Output DTM				Data *
Output DTM				Extras ¥
Function query				
				Help *
				Support
	K < > >	Help Cancel test		» 🛛 🗿
		///	Test version	
🗿 🙆 💌 🕕	🗟 📋 🖧 🌖 🔘		N	• * 12 PM

Figure 4

Tip:

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

- 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.

© 2017 Volkswagen Group of America, Inc.

Page 6 of 11



Warranty

Low Pressure Fuel Pump Only

To determine if t Procedures Man		dure is c	overed under War	ranty, always refe	r to the Warranty P	olicies and
Model(s)	Yea	ar(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
All	2008-2015		2.0L CCTA, CBFA	All	All	All
			SAGA	Coding		
Claim Type: Use applicable Claim Type ¹⁾						
Service Number:			Damage Code	HST	Damage Location (Depends of Service No.)	
2066	2066		0010		Use applicable when indicated Elsa (L/R)	
		Eos, GTI, Beetle, Convertible, Jetta		VDO		
			Tiguan		TJ5	
			Tig	juan		
Labor Operation Pressure Fuel Pu		ve and In	stall Low	20661900 = 90 TU	J	
		Eos/CC	C/GTI/Beetle/Beetle	e Convertible/Jetta	a/Passat	
Labor Operation ³⁾ : Remove and Install Low Pressure Fuel Pump			stall Low	20661900 = 70 TU		
Causal Part: Low	/ pressur	e fuel pur	np	See ETKA		
			Diagnos	tic Time ⁴⁾		
GFF Time expen	diture		01500000 = 30 TU	J max.	YE	S

© 2017 Volkswagen Group of America, Inc.

Page 7 of 11



Road Test	01210004 = 10 TU	YES			
Technical Diagnosis- low pressure fuel pump test01320000 = 60 TU maxYES					
Claim Comment: Input "As per Technical Bulletin 2031426" in comment section of Warranty Claim.					
¹⁾ Vehicle may be outside any W	/arranty in which case this Technical B	ulletin 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.					

OR

High Pressure Fuel Pump Only

Model(s)	Yea	ar(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Tiguan, Eos, CC, GTI, Beetle, Beetle Convertible, Jetta	2008-2015		2.0L CCTA, CBFA	All	All	All
			SAGA	Coding		
Claim Type:		Use applicable Claim Type		1)	1	
Service Number:		Damage Code	HST	Damage Locatic Servic	• •	
2463		0010		Use applicable when indicated Elsa (L/R)		
Parts Manufacturer		Tiguan, Eos, CC, Passat, GTI, BPF Beetle, Beetle Convertible, Jetta		PF		
			Tia	uan	1	

© 2017 Volkswagen Group of America, Inc.

Page 8 of 11



Labor Operation ³⁾ : Remove and Pressure Fuel Pump	Install High	24631940 = 90 TU		
Eos/0	GTI/CC/Passat/Jetta	/Beetle/Beetle Con	vertible	
Labor Operation ³⁾ : Remove and Install High Pressure Fuel Pump		24631918 = 50 TU		
Causal Part: High pressure fuel p	oump	06H 127 025Q		
	Diagnos	tic Time ⁴⁾		
GFF Time expenditure	01500000 = 30 TU	J max.	YES	
Road Test	01210004 = 10 TU	J	YES	
Technical Diagnosis- low and high pressure pump test	01320000 = 85 TU	J max	YES	
Claim Comment: Input "As per To	echnical Bulletin 20	31426" in commen	t section of Warranty Claim.	
¹⁾ Vehicle may be outside any Wa	rranty in which case	e this Technical Bu	Illetin is informational only	
²⁾ Code per warranty vendor code policy.				
³⁾ Labor Time Units (TUs) are sub	ject to change with	ELSA updates.		

⁴⁾ Documentation required per Warranty Policies and Procedures Manual.

© 2017 Volkswagen Group of America, Inc.

Page 9 of 11



Required Parts and Tools

Part Description	Part No:	Quantity			
Adapter	<mark>06E127065G</mark>	2			
Round Hd. Screw	N10700201	2			
O-ring	WHT005184	1			
High Pressure Fuel Pump	06H127025Q	1			
OR					
Low Pressure Fuel Pump	See ETKA	1			

Tool Description	Tool No:
Midtronics Battery Tester/Charger	InCharge 940 (INC-940)
	or
	GRX3000VAS
VAS Diagnostic Tool	VAS 6150/X & VAS 6160/X with
	ODIS Service with: current online updates

© 2017 Volkswagen Group of America, Inc.

Page 10 of 11



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.

Document Control Revision Table			
Instance Number	Published Date	Version Number	Reason For Update
2031426/11	3/6/17	V201701	Update parts table.
2031426/10	7/28/15	V201503	Revised to update Eos/GTI High Pressure Fuel Pump Labor Operation Number and Time Units according to labor time guide.
2031426/1	11/21/12	V201202	Original publication.

© 2017 Volkswagen Group of America, Inc.

Page 11 of 11