

Model(s)	Year(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Jetta, Jetta Wagon	2009	2.0L TDI (CBEA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2010	2.0L TDI (CJAA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011-2014	2.0L TDI (CJAA)	All	All	All

#### **Condition**

**21 15 04** April 29, 2015 **2026771** Supersedes T. B. V211501 dated January 15, 2015 to remove engine cover labor operation contained in diesel particulate filter labor operation.

Engine Lacks Performance, Engine Warning Light ON, DTCs P2563, P2564, P0299 or P20D8 Stored in ECM Fault Memory

Engine does not have any power and the engine warning light may be ON. One of the following DTC entries is stored in the engine control module.

DTC	Description
09570, P2562	Turbocharger Boost Control Position Sensor "A" Circuit
09571, P2563	Position Sensor for Boost Pressure Controller has an Implausible Signal
09572, P2564	Signal is too Low of the Position Sensor for Boost Pressure Controller
09573, P2565	Turbocharger Boost Control Position Sensor "A" Circuit High
09574, P2566	Turbocharger Boost Control Position Sensor Circuit Intermittent
00665, P0299	Boost Pressure Control, Values are Below Control Limit



08408, P20D8	Exhaust Monitoring, Following Injection Regulation Limit Exceeded
	Turbocharger/Supercharger Boost Control "A" Module Performance

#### **Technical Background**

- 1. Vacuum hose kinked, twisted or leaks.
- 2. Stud with clamp nut on turbo charger broken/missing, or rotated turbocharger housing. As a result the turbine adjustment travel is outside the tolerance.
- 3. Vacuum diaphragm on turbo charger leaks.
- 4. Plastic boost pipe from intake side of turbo to intercooler cracked/leaking.
- 5. Boost hose connection to intercooler leaking.
- 6. Check ECM Software level.

#### **Production Solution**

Optimized assembly process to avoid twisted vacuum line.

Increase compressor housing washer thickness.

Change of material for min. flow adjustment screw.

Improved vacuum diaphragm with charge pressure actuator position sensor -G581-.



#### **Service**

#### Step 1

• Check the vacuum system for any leaks according to the workshop manual, repair group 21 exhaust/turbo charging, G-charger (section 'Checking Vacuum System').

#### Tip:

When checking, observe the following points in particular (Figures 1, 2, and 3):



Hose not inserted into the vacuum container.

Figure 1

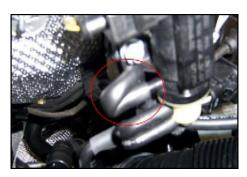


Figure 2

Vacuum hose at the solenoid valve, or in the pipe system, is kinked.

 Re-position hoses to avoid pinching. It is not necessary to replace the hoses.

# Dos Auto

# **Technical Bulletin**



Vacuum hose at the solenoid valve, or in the pipe system, is twisted

 Re-position hoses to avoid pinching. It is not necessary to replace the hoses.

Figure 3

#### Step 2

#### Turbocharger inspection may require the use of a inspection mirror

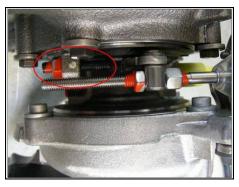
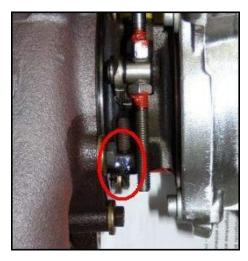


Figure 4

 Inspect the turbocharger stud with clamp nut (min. flow adjustment screw) (Figure 4).

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• Inspect the turbo charger to see whether the stud with clamp nut is broken (Figure 5).

Figure 5

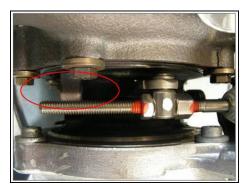


Figure 6

- Inspect the turbo charger to see whether the stud with clamp nut is missing (Figure 6).
- If the stud or clamp nut are missing, replace turbocharger.

# Dos Auto

### **Technical Bulletin**

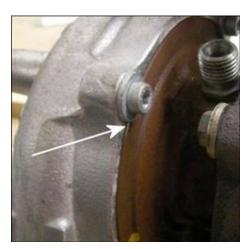


- Carefully inspect the turbocharger housing around the entire housing assembly for an alignment mark (Figure 7). If the alignment mark is misaligned, this indicates that the housing has rotated.
- If misaligned, replace turbocharger.

#### **②**Tip:

Not all turbocharger houses have alignment marks present.

Figure 7



- Carefully inspect the turbocharger housing around the retaining bolts for witness marks (Figure 8), indicating that the housing has rotated.
- If witness marks are present from washers, replace turbocharger.

Figure 8

#### Step 3

- Disconnect the vacuum hose on the turbo charger vacuum diaphragm.
- Connect a hand vacuum pump to the vacuum diaphragm and create a vacuum of about 600 mbar.
- Observe whether the adjusted vacuum is retained.

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#### If the vacuum drops or cannot be achived:

Install vacuum diaphragm with charge pressure actuator position sensor -G581- part number 03L198716A
according to the repair manual, Group 21 turbo charger, G charger > Removal and installation > Vacuum
Diaphragm with Charge Pressure Actuator Position Sensor G581.

#### If vacuum holds:

And all other vacuum system diagnosis is OK, but fault codes P2563, and/or P2564 are stored in ECM fault
memory, replace the vacuum diaphragm with charge pressure actuator position sensor -G581- part number
03L198716A according to the repair manual, Group 21 turbo charger, G charger > Removal and installation >
Vacuum Diaphragm with Charge Pressure Actuator Position Sensor G581.

#### If vacuum holds:

And all other vacuum system diagnosis is OK, but fault codes **P0299**, is stored in ECM fault memory, continue with diagnosis.



For the installation of the vacuum diaphragm with charge pressure actuator position sensor -G581- use the special tools T10422A socket and T10461 spanner.



**<u>DO NOT</u>** replace the complete turbo charger if the vacuum diaphragm with Charge Pressure Actuator Position Sensor -G581- has failed.

#### Step 4

 Inspect the plastic boost pipe that runs from the intake side of the turbocharger to the intercooler for cracks or leaks (Figures 9 and 10).



These cracks can be difficult to see. It may be necessary to pressure test the charge air system according to the repair manual under Engine > Engine Mechanical, Fuel Injection and Glow Plug > 21 turbo charger, G charger => Diagnosis and Testing => Charge Air System, Checking for Leaks.





Figure 9 Figure 10



#### Step 5



Figure 11

- Inspect the boost pressure hose connections to the intercooler for leaks.
- Ensure that the seals are in the proper position and not damaged (Figure 11).
- Damaged or missing seals should be replaced. The seals are available separately, it is not necessary to replace the entire hose.

#### Tip:

Pay close attention to this area if DTC P20D8 is recorded in ECM faults.

#### Step 6

• Ensure that any other Bulletins or Updates for ECM software have been performed. <u>The software programming</u> should be charged to the appropriate bulletin.

# Day Auto

# **Technical Bulletin**

#### Warranty



Multiple warranty tables may be claimed.

To determine if the Procedures Manu		dure is co	overed under Warr	anty, always refer	to the Warranty P	olicies and
Model(s)	Year(s)		Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Jetta, Jetta Wagon	2009		2.0L TDI (CBEA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	20	10	2.0L TDI (CJAA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011	-2014	2.0L TDI (CJAA)	All	All	All
			SAGA	Coding		
Claim Type:		Use app	licable Claim Type	1)		
Service Number: Code			•			nage Location Is on Service No.)
2165 0010		0010			pplicable when ted in Elsa (L/R)	
		Golf, I	Passat	WWO <sup>2)</sup>		
Parts Manufacturer  Jetta, Jetta		Sportwagen 3ME <sup>2)</sup>		E 2)		
Labor Operation <sup>3</sup>	Labor Operation <sup>3)</sup> :					
Remove and Insta	all Engine	Cover		10831900 = 20 TU	l	



Labor Operation <sup>3)</sup> :		21650199 = 20 TU		
Inspect vacuum system (incl. route vacuum hoses correctly)				
Causal Part: Select labor operation		21650199		
Diagnos	tic Time <sup>4)</sup>			
01500000 = 10 TU	J max.	YES		
01210004 = 10 TU	J	YES		
01320000 = 00 TU	J max.	NO		
	01500000 = 10 TU	route vacuum hoses		

Claim Comment: Input "As per Technical Bulletin 2026771" in comment section of Warranty Claim.

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

To determine if the Procedures Manu		dure is co	overed under Warr	anty, always refer	to the Warranty Po	olicies and
Model(s)	Yea	ır(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Jetta, Jetta Wagon	20	09	2.0L TDI (CBEA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	20	10	2.0L TDI (CJAA)	Ali	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011	-2014	2.0L TDI (CJAA)	All	All	All
			SAGA	Coding		
Claim Type:  Use applicable Claim Type 1)						

<sup>1)</sup> Vehicle may be outside any Warranty in which case this Technical Bulletin is informational only

<sup>&</sup>lt;sup>2)</sup> Code per warranty vendor code policy.

<sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates.



Service Number:	Damage Code	нѕт	Damage Location (Depends on Service No.)	
2130	0010	Use applicable windicated in Elsa		
Parts Manufacturer	Jetta, Jetta Sp	ortwagen, Golf	KKK <sup>2)</sup>	
Labor Operation 3):		21300199 = 20 TU		
Inspect turbocharger				
MIN flow adjustment stud compressor housing	and position of			
Labor Operation 3):		21301981 = 290 TU		
Remove and Install Turboonut are missing or if comprotated)	• •			
Labor Operation 3):		26741931 = 330 TU		
Remove and Install Diesel	Particulate Filter			
Causal Part:		03L253056		
	Diagnos	tic Time <sup>4)</sup>		
GFF Time expenditure	01500000 = 10 TU	J max. YES		
Road Test	ad Test 01210002 = 10 TU		YES	
	01210004 = 10 TU	J		
Technical Diagnosis	01320000 = 00 TU	J max.	NO	
Claim Comment: Input "As	per Technical Bulletin 202	26771" in comment	section of Warranty Claim.	

Glaim Comment: input As per resimilar Banetin 2020771 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>&</sup>lt;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 Policy Procedures Manual.



To determine if the Procedures Manu		dure is co	overed under Warr	anty, always refer	to the Wa	arranty Po	olicies and
Model(s)	Year(s)		Eng. Code(s)	Trans. Code(s)	VIN Ran	ge From	VIN Range To
Jetta, Jetta Wagon	20	09	2.0L TDI (CBEA)	All	A	JI	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2010		2.0L TDI (CJAA)	All	All		All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011	-2014	2.0L TDI (CJAA)	All	All		All
SAGA				Coding			
Claim Type:		Use app	licable Claim Type	e <sup>1)</sup>			
Service Number:			Damage Code	нѕт		Damage Location (Depends on Service No	
2130			0010			Use applicable when indicated in Elsa (L/R)	
Parts Man	ufacture	r	Jetta, Jetta Sp	portwagen, Golf KKK <sup>2)</sup>		K <sup>2)</sup>	
Labor Operation <sup>3</sup> Remove and Insta		cover		10831900 = 20 TU			
Labor Operation <sup>3</sup>	Labor Operation 3): Vacuum check Vacuum			21290199 = 10 TU			
Labor Operation <sup>3)</sup> : Replace Vacuum  Diaphragm with Charge Pressure Actuator  Position Sensor -G581			21295533 = 130 TU				
Causal Part:	Causal Part:			03L198716A			
			Diagnost	ic Time <sup>4)</sup>			



GFF Time expenditure	01500000 = 10 TU max.	YES
Road Test	01210004 = 10 TU	YES
Technical Diagnosis	01320000 = 00 TU max.	NO

Claim Comment: Input "As per Technical Bulletin 2026771" in comment section of Warranty Claim.

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

To determine if the Procedures Manu		dure is co	overed under Warr	anty, always refer	to the Warranty P	olicies and
Model(s)	Yea	ır(s)	Eng. Code(s)	Trans. Code(s)	VIN Range From	VIN Range To
Jetta, Jetta Wagon	20	09	2.0L TDI (CBEA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	20	10	2.0L TDI (CJAA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011	-2014	2.0L TDI (CJAA)	All	All	All
			SAGA	Coding		
Claim Type:		Use app	licable Claim Type	) <sup>1)</sup>		
Service Number:		Damage Code	нѕт		nage Location Is on Service No.)	
2141		0010			pplicable when ted in Elsa (L/R)	
Parts Manufacturer			Jetta, Jetta Sp	Jetta, Jetta Sportwagen, Golf SB6 <sup>2)</sup>		

<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.



Labor Operation 3): Remove a Cover	nd Install Engine	10831900 = 20 TU		
Labor Operation 3): Check cha	arge air	21010133 = 70 TU	(2009 Only)	
system for cracks or seal leak	<b>is</b>	21010135 = 70 TU		
Labor Operation <sup>3)</sup> : Remove a Dampening Pan	nd Install Noise	10821900 = 30 TU	10821900 = 30 TU	
Labor Operation <sup>3)</sup> : Remove and Install Pressure pipe		21411983 = 70 TU	21411983 = 70 TU	
Causal Part:		1K0145840AB	1K0145840AB	
	Diagno	ostic Time <sup>4)</sup>		
GFF Time expenditure	01500000 = 10	TU max.	YES	
Road Test	01210004 = 10	TU	YES	
Technical Diagnosis	01320000 = 00	TU max.	NO	

Claim Comment: Input "As per Technical Bulletin 2026771" in comment section of Warranty Claim.

### 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
Jetta, Jetta Wagon	2009	2.0L TDI (CBEA)	All	All	All
Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2010	2.0L TDI (CJAA)	All	All	All

<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 Policy Procedures Manual.



Jetta Sedan, Golf, Golf Wagon, Jetta SportWagen	2011-2014		2.0L TDI (CJAA)	All	All	All	
SAGA Coding							
Claim Type: Use a		Use app	oplicable Claim Type <sup>1)</sup>				
Service Number:		Damage Code		нѕт	Damage Location (Depends on Service No.)		
2141		0010				Use applicable when indicated in Elsa (L/R)	
Parts Manufacturer		r	Golf		WWO <sup>2)</sup>		
			Jetta, Jetta Sportwagen		3ME <sup>2)</sup>		
Labor Operation <sup>3)</sup> : Remove and Install Engine Cover			10831900 = 20 TU				
Labor Operation 3): Check charge air			21010133 = 70 TU (2009 Only)				
system for cracks	system for cracks or seal leaks			21010135 = 70 TU			
Labor Operation <sup>3)</sup> : Remove and Install Noise Dampening Pan				10821900 = 30 TU			
Labor Operation <sup>3)</sup> : Remove and install pressure pipes (includes inspecting and or replacing seals)			21411982 = 40 TU				
Causal Part: Seal, pipe, or Select labor operation			bor operation	21411982			
Diagnostic Time <sup>4)</sup>							
GFF Time expenditure			01500000 = 10 TU max.		YES		
Road Test		01210004 = 10 TU		YES			
Technical Diagnosis		01320000 = 00 TU max.		NO			
Claim Comment: Input "As per Technical Bulletin 2026771" 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.							



#### **Required Parts and Tools**

Note:

Not all parts will be required for each repair.

**ONLY USE PARTS AS NECESSARY.** 

Part Description	Part No:	Quantity
Repair kit for vacuum diaphragm with charge pressure actuator position sensor -G581-	03L 198 716 A	1
Exhaust manifold with turbocharger	03L 253 056	1
Pressure Pipe	1K0 145 840AB	1
Seal ring	3C0 145 117H	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	
Socket	T10422A	
Spanner	T10461	

<sup>3)</sup> Labor Time Units (TUs) are subject to change with ELSA updates.

<sup>&</sup>lt;sup>4)</sup> Documentation required per Warranty Policy Procedures Manual.



#### **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.