

Service Action Circular

Code: TK

February 1996

Subject: 1996 Model Volkswagen Passat TDI Vehicles Check / Replace Turbocharger

Dear Volkswagen Dealer:

This is to inform you of the initiation of a service action program involving early production 1996 model Passat TDI vehicles. The vehicles affected are within the following vehicle identification number range:

WVW___3A_TE000001 - WVW___3A_TE130028

Please note that the above VINs represent the lowest and highest serial number range of affected vehicles. Use of the V-Crest campaign inquiry system will allow you to determine whether or not a particular vehicle requires the corrective work.

The program relates to the turbocharger manufactured by the supplier *"KKK"* which is installed in some TDI vehicles. The affected turbocharger could have sustained damage due to lack of lubrication, if it was operated at high speed when the engine was first started up.

Remedial

Action

All potentially affected vehicles in dealer inventory must be checked prior to retail sale to determine the identity of the turbocharger. If the turbocharger is manufactured by *"KKK"*, it must be replaced.

Program Verification

It is important that you check the V-Crest system for the "open" TK code prior to working on any vehicle. Volkswagen will not reimburse you for duplicate work. Some vehicles may have been corrected at a port facility and will no longer show the "open" TK code.

Customer-Owned

Vehicles

While we do not expect that owners who are already driving these vehicles will experience this problem, VWAG has decided that all *"KKK"* turbochargers be replaced with a *"Garrett"* unit. Please check and, if necessary, replace the turbocharger whenever one of these owners comes in for service.

Parts Supply

Turbochargers installed into the potentially affected vehicles were supplied by two (2) manufacturers: *"KKK"* and *"Garrett"*. <u>Replace only *"KKK"* units</u>.

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Important: Please Provide A Copy To All Personnel With Recall-Related Responsibilities ! Volkswagen of America, Inc.

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Since we cannot establish the number of vehicles in your inventory which are equipped with a *"KKK"* turbocharger, we request that you immediately check the affected vehicles in you inventory according to instructions in the work procedure, and then order the necessary parts.

The **replacement parts must be ordered by vehicle identification number** The parts required are as follows:

<u>Quantity</u>	Description	Part Number	
1	Turbocharger	028 145 701Q	
1	Gasket	028 145 757	
1	Gasket	1H0 253 115A	
2	Clamp	N 100 911 01	
4	Nut	N 902 002 01	

The necessary replacement parts will be shipped to you via overnight carrier.

Port Vehicles

All vehicles delivered to you after approximately January 15, 1996 have the correct turbocharger and do not require any further action.

Work Procedure

CHECK <u>ONLY</u> THOSE VEHICLES WHICH HAVE THE **TK** CODE IN THE V-CREST SYSTEM.

"GARRETT" ILLUSTRATION I

A. Check Turbo Charger

- o Open hood
- o Remove engine cover

"KKK" ILLUSTRATION II

- o Check from right side of engine compartment for location of turbocharger (engine firewall side)
- o Check for turbocharger manufacturer as follows:
- If the turbocharger's air cooler outlet pipe (see Illustrations I and II) has the red hose located at **B** as shown in Illustration I, the manufacturer is *"Garrett"* and NO REPLACEMENT IS REQUIRED.
- If the tred hose is not connected to the turbocharger's air cooler outlet pipe (hose is connected to housing located at - A - as shown in Illustration II), the manufacturer is *"KKK"* and the turbocharger REQUIRES REPLACEMENT, as outlined in step B.

B. Replace Turbocharger

a) Removal

- Secure radio code
- Disconnect battery
- Remove cylinder splash shield
- < Remove hoses between manifold and turbocharger (1) and turbocharger and air cleaner (2)

< Disconnect red hose (7) from turbocharger

- Disconnect turbocharger oil return line

- < Remove mounting nut (1) from below and mounting bolts (2) from above
- Disconnect oil feed line support
- Disconnect oil feed line
- Remove turbocharger by lifting upward
- Disconnect blue hose from wastegate before completely removing turbocharger

b) Installation of New Turbocharger 028 145 701Q

- Pre-check tightening of new "Garrett" turbocharger's housing screws for typical location see Illustration I (C)
- Lift new "Garrett" turbocharger into engine compartment
- Reconnect blue hose to wastegate on turbocharger and secure with new clamp N 100 911 01
 - < Grease mounting bolts (2), stud (1), threads and bolt heads contacting surfaces with high temperature resistant grease which was supplied to you with this communication, free of charge.
 - Connect turbocharger to exhaust manifold; hand tighten mounting bolts (2) and nut (1)

- < Use new gasket (22), part number 1H0 253 115A, for exhaust pipe / turbocharger connection
- Use new nuts, N 902 002 01, for exhaust pipe / turbocharger connection; tighten to 20 Nm (15 ft lbs)

- Tighten exhaust manifold / turbocharger bolts / nut to 35 Nm (26 ft lbs)
- Tighten exhaust pipe / turbocharger nuts to 25 Nm (18 ft lbs)
- Reconnect oil return pipe, using new seal, 028 145 757, and tighten to 15 Nm (11 ft lbs)
- Reconnect oil supply line support and tighten to 25 Nm (18 ft lbs)
- Reconnect oil supply pipe
- Reconnect red hose to wastegate and secure with new clamp, N 100 911 01
- Reinstall manifold / turbocharger / air cleaner hoses
- Reconnect battery
- Reinstall cylinder splash shield
- Start engine IDLE ONLY and let idle for approximately one minute

CAUTION: DO NOT REV ENGINE!

Parts Return

Each exchanged turbocharger must be properly tagged / packed and returned in the original box to your facing parts depot.

To ensure proper payment, be sure to enter the correct reimbursement data into the system <u>only</u> for VINs showing a TK code in the V-Crest system.

Data Entry Procedure

DAMAGE CODE	TIME <u>UNITS</u>		WORK SCOPE		
		INVEN	INVENTORY or CUSTOMER-OWNED VEHICLES - Check turbocharger manufacturer; if "Garrett", NO replacement required		
TK 11	20 T.U.				
			INVENTORY VEHICLES ONLY - Check tubocharger manufacturer; if "KKK", REPLACE turbocharger		
TK12	210 T.U.	1	Turbocharger Gasket	028 145 701Q 028 145 757	
		1	Gasket	020 145 757 1H0 253 115A	
		2	Clamp	N 100 911 01	
		4	Nut	N 902 002 01	
			CUSTOMER-OWNED VEHICLE - Replace turbocharger - Wash / Vacuum vehicle		
TK 13	210 T.U.	1	Turbocharger	028 145 701Q	
		1	Gasket	028 145 757	
		1	Gasket	1H0 253 115A	
		2	Clamp	N 100 911 01	
		4	Nut	N 902 002 01	

The system automatically enters the labor and part numbers applicable to each of the above listed reimbursement codes.

Dealer Personnel Information

Please provide a copy of this communication to every person in your dealership who has campaign-related responsibilities.

Thank you for your cooperation.

Sincerely,

Andreas H. Steglich Product Compliance Team Leader

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