# Tech Tips

### TT 87-16-01

Date: June 3, 2016

2016-2017 Jetta, Beetle, Passat A/C Inoperative, Sanden A/C Compressor Clutch, Basic Setting Adaptation

### October 21, 2016: Update to Model, Model Year Applicability and Service Information.

MY 2016 Jetta and Beetle have introduced an A/C clutch on the compressor pulley. These compressors will also continue to have an N280 compressor valve controlling the compressor.

Before replacing the compressor for an inoperative condition be sure the compressor clutch is engaging or operational. If the A/C clutch is not engaging the compressor, diagnosis of the A/C clutch must be performed.



For manual A/C controllers (Jetta, Beetle): before starting diagnosis for the A/C clutch, check that the A/C control module magnetic clutch is enabled.

Go to Control module OBD and check adaptation channel 9 is set to 1.

## I Note:

If the A/C control module has recently been replaced you must perform the adaptation test plan under address 08.

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# **Service Information**

C Test overview	X			
Heating, ventilation, air conditioning system (RG 01; 80-87)				
01 - Self-diagnosis				
08 - A/C/heating electronics (A/C - manual)				
08 - Electrical components				
08 - Functions				
08 - Read meas. values - Manual A/C control module (Rep.Gr.8				
08 - Adaptation (Rep. gr. 87)				
08 - A/C compressor first run (Rep.G	r.87)			
Documents Attach to	the test plan			

Basic settings for Jetta and Beetle with the new design A/C clutch is performed under the test plan tab using adaptation. Recently all A/C modules must be adapted to enable the clutch (See Figure 1).

### Figure 1

Vehicle OB	D: Total DT	Control module OBD Adaptation   Control module OBD		Diagnosis	-	
Control mos Address	dule list (49 en	1 mar 1		Cash	-	
0001	0	Engine Control Module 1/01, Engine electronics) (04E00E022P, 2529, P4 1 4LTES.)	÷.	Measurem		
0002	0	Transmission Control Module (02 - 6-speed automatic transm. 09G (Gen. 3)) (09G927749AA 2944 AJSIN AG6 G3 )		info		
0003	0	Brakes 1 (03 - ABS/EDS/ASR/ESP Mark 60 EC) (1K0907379CB 0174 ESP MK60EC1 )				
0004	0	Steering Angle Sender (Not yet identified) ()		🚱 Admin		
0005	0	Kessy (Not yet identified) ()		Log		
0006	0	Seat Adjustment Passenger Side (Not yet identified) ()				
8000	0	Air Conditioning (08 - A/C /heating electronics (A/C manual) I) (5C0820047CK 0210 J301 Kilmaanlage )				
0009	0	Central Electrics (09 - Veh electr sys ctrl mod BCM PQ25) (7E0937189 0733 BCM PQ25 MMI3)	-	Extras		
letworking	diagram Cor	trol Module List. Components List. DTC memory list. Equipment list		Help		

Control module	Results Test plan					Operating m	nodes #
			DTC memory	• 0	^	😵 Diagnos	sis
0008 - Ar Cor	itioning (KWP2000 / TP20 / 5C0820047C	K /02107014)	DTC memory			🔰 OBD	
Currently sel	ted channel: 9			9		📽 Flash	
				Select channel		🕰 Measun	ement
Measured valu	5					😭 Info	
magnetic clut					٠	😧 Admin	
						Log	
Adaptation							
Current value:				Send test value		Data	÷
Test value:					-	Extras	*
				Apply		Help	
Input				Resetting	+		

### Figure 2

To check if the A/C clutch is enabled, go to the OBD screen. Select 08 Air Conditioning and select adaptation (See Figure 2).

Under the results tab input channel 9 and select channel to display the current status.

Disabled =0

Enabled =1

If the A/C clutch is inoperative after verifying the adaptation, further diagnosis is required. The wiring to the N280 from the A/C clutch relay does not provide feedback to the A/C controller for open or shorted wiring.

Using ODIS always check the A/C shut off code(s) measured values and that the system is fully charged before starting any diagnosis.

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