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.: TPMS

Unfortunately at the time of writing most North American Cars did not come with a compatible ABS unit to enable certain features including TPMS and Automatic Hill Hold Assist (AHHA). So although I have not done these myself (yet) it is well documented and I am providing a more in depth re-write here so you can hopefully find all the information you require. I will include all the needed information here for the TPMS and a separate Project page for installing AHHA since I have actually attempted it but could not complete due to the ABS module.

If you do not find answers to specific questions here please go to the forums such as Audizine to seek help. Since I have not completed these I can not provide any more information beyond what's found on these pages.

There are two types of TPMS out there and this one is strictly for the non sensor type.

.: The Codes

Enable Tire Pressure Monitoring System (TPMS) (Only for specific cars)

Prerequisite:

The ABS unit exist in two versions:

1AT - ESP ready for TMPS and Hill Hold

1AS - ESP not ready for TPMS and Hill Hold

These specific codes can be found in either your maintenance manual or in the trunk where the spare wheel is stored.

The sticker you are looking for looks like this:

WAUHFCILS
8K2 569 4734198
A4 Lim. quat.2.0 R4 155 KW M6S 11/09
CAEB JKP LLT LZ7H/LZ7H N1F/GD
E0A7GB4UB6XM5SG5RW1KWJOZ1LA1AS1BA3FE5TE7X7F0A8GU0G10YK0JGTG63NZ8EHU1AX9B1N32ZQ8Q59Q48Z4D2D7T6C5G7K04X32K23L44KC3Y04135D21SAQ1A4GQ
33.3 3.3 33.3 333

Here is a listing I have compiled with the all the ABS modules I could find.

The following show as 1AT				
Quattro	Front Wheel Drive			
8K0 614 517 BA	8K0 614 517 AT			
8K0 907 379 N	8K0 907 379 M			
8K0 614 517 BG	8K0 614 517 BH			
8K0 907 379 S	8K0 907 379 R			
8K0 614 517 BJ	8K0 614 517 CB			
8K0 907 379 S	8K0 907 379 AC			
8K0 614 517 CC	8K0 614 517 CK			
8K0 907 379 AD	8K0 907 379 AG			
8K0 614 517 CL	8K0 614 517 DM			
8K0 907 379 AH	8K0 907 379 AM			
8K0 614 517 DC	8K0 614 517 EB			
8K0 907 379 AN	8K0 907 379 BD			
8K0 614 517 EC	8K0 614 517 FM			
8K0 907 379 BE	8K0 907 379 BT			
8K0 614 517 FN 8K0 907 379 CA				
The following show as compatible to 1AT and 1AS (may be questionable)				
8K0 614 517 CN	8K0 614 517 BM			
8K0 907 379 AJ	8K0 907 379 T			
K0 614 517 CJ	8K0 614 517 DG			
8K0 907 379 AH	8K0 907 379 AQ			

*This may not be a complete list and I recommend you check compatibility before making a

The following show as 1AS (not compatible)				
Quattro	Front Wheel Drive			
8K0 614 517 AQ	8K0 614 517 BD			
8K0 907 379 L	8K0 907 379 P			
8K0 614 517 BE	8K0 614 517 BR			
8K0 907 379 Q	8K0 907 379 BP			
8K0 614 517 BS	8K0 614 517 CD			
8K0 907 379 AB	8K0 907 379 AE			
8K0 614 517 CE	8K0 614 517 CF			
8K0 907 379 AF	8K0 907 379 AE			
8K0 614 517 CS	8K0 614 517 CR			
8K0 907 379 CQ	8K0 907 379 AK			
8K0 614 517 DS	8K0 614 517 DR			
8K0 907 379 BC	8K0 907 379 BB			
8K0 614 517 AP 8K0 907 379 K				
The following show as compatible to 1AT and 1	The following show as compatible to 1AT and 1AS (may be questionable)			
8K0 614 517 CN	8K0 614 517 BM			
8K0 907 379 AJ	8K0 907 379 T			
K0 614 517 CJ	8K0 614 517 DG			
8K0 907 379 AH	8K0 907 379 AQ			
*This may not be a complete list and I recomme determination based on what you read here.	end you check compatibility before making a			

The retrofit/enabling:

Enable the TPMS MMI item (the menu item will be greyed out - disabled for now):

MMI basic (non-MMI - 2G) (symphony/concert radio): [56 - Radio] [Coding - 07] -> Long Coding Helper -> Byte 8 Bit 6 0 to 1

MMI high (MMI 2G): [07 - Control Head] [Adaptation - 10] -> Channel 01 add 16 to the existing value

3.2021		AudiEnthusiasts TPMS				
CD5 Beta 907. 2: 07-Control Head.	Adaptation					
		Installation List I ((MMI Functionality)			
N/A		N/A	N/A		N/A	
Channel	_	(i) Installation Lis	st I (MMI Functionality)	×		
01	Up	+00001 = Adaptive Cruise Cont	trol installed (PR-8T4)	Id to I	00	
01	Dn	+00002 = Ambient Lighting inst +00004 = Acoustic Parking Sys	tem Front installed (PR-7X2)	IG to L	og _	
Stored value		+00008 = Acoustic Parking Sys	tem Rear installed (PR-7X1/7	X2)		
45340		+00016 = Tire Pressure Monito +00032 = Sunroof installed (PR	ring System installed (PR-/K3 -3FE/3FR)	0// K4// K5)		
New value	Lin	+00064 = Adaptive Air Suspens	sion installed (PR-1BK)			
45340	Up	+00256 = Rain Sensor installed +01024 = Seat Adjustment From	I (PR-8N3) nt installed (PR-3PN)			
The state of the s	Dn	+02048 = Seat Adjustment Rea	r installed (PR-5Z1)			
Test value		+04096 = Multi-Function Steering	ng Wheel installed (PR-1XW)			
		+08192 = Lane Change Assista +16384 = Lane Holding Assista +32768 = Back-Up Camera inst	nt installed int installed talled			
	Test	SI SI	ive	Done, Go	Back	

MMI Plus (MMI 3G):

[5F - Information Electr.] Not know yet how to enable the TPMS menu item with VCDS.... You can however enabled it through the "hidden menu":

If you have not enabled the Hidden Menu yet go here

Enter Hidden Menu by holding down the these two buttons until you see the Hidden Menu:



EM (0.8k) - main(0>28:9:0)	
 EM (0.8k) - main(0>28:9:0) version addressbook aevtest audiomanagement bluetooth browser bths car config diagnose dtc eepromflags 	
▼	

Select "car"

EM (0.8k) - main(0>28:9:0)	
	~
version	
addressbook	
aevtest	\triangleright .
audiomanagement	
bluetooth	
browser	
bths	
≻ car	
config	
diagnose	
dtc	
eepromflags	
•	

Select "cardevicelist"



Now scroll to "RDK:" and push the scroll wheel, this will fill in the block and activate that portion of the menu.

EM (0.8k) - main/car/cardevicelist(34>40:9:0)	
Air condition: Auxiliary heating: HUD: ACC: Air suspension: ROX: Interior light: Exterior light: APS: RVC: Wiper: Central lock system:	

Press your return button then select "carmenuoperation'

29.3.2021

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Scroll to "tires air pressure control" and press the scroll wheel. Now set it to 5 and hit the scroll wheel again.

EM (0.8k) - main/car/carmenuoperation(38>52:9:0)	
ACC: interior light: parking help: AWV: lane dep. warning: line change assist.: exterior light: battery: window: air condition: instrument cluster: tires air pressure control: o c c c c c c c c c c c c c	

Press return to go back you have completed the MMI setup.

Now reset the MMI. This is done by pushing down the Setup – Scroll Wheel and top right menu buttons at the same time. Press all three at the same time then release.



The next steps are to enable the TPMS in the ABS module and the Instrument cluster. Once these are done the connection to the MMI will be complete and you will be able to access the menu.

Step 1 Enable ABS Brake controller

[03 - ABS Brakes]

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	VC Select Con	DS trol Module	
Installed Drivetra	in Chassis Con	nfort/Conv. Electron	hics 1 Electronics
01-Engine	03-ABS Brakes	05-Acc/Start Auth.	08-Auto HVAC
09-Cent. Elect.	10-Park/Steer Assist	15-Airbags	16-Steering wheel
17-Instruments	19-CAN Gateway	36-Seat Mem. Drvr	3C-Lane Change
42-Door Elect, Driver	46-Central Conv.	47-Sound System	52-Door Elect, Pass
53-Parking Brake	55-Xenon Range	56-Radio	5F-Information Electr
62-Door, Rear Left	6C-Back-up Cam.	72-Door, Rear Right	
irect Entry Address Word (01-FF):	Go!	Go Back	

[Security Access - 16]

Comm Status IC=1 TE=0 RE= Protocol: CAN	:0	V	CDS Controller		
Controller Info- VAG Number:	8K	0 907 379 AL	Component:	ESP8 qua	nttro H04 0080
Soft. Coding:	L	ong Coding	Shop #:	Imp: 823	WSC 02391
Extra:	s		Geraet 5657	3 Functions	
	-	e "Safe"		Defer to Se	rvice Manual !
	inese ai	0.0010		rierer to se	
Fault Codes	s - 02	Readiness - 15	Codir	ng II - 11	Coding - 07
Fault Codes Meas. Block	s - 02 s - 08	Readiness - 15 Advanced ID - 1A	Codir Basic S	ng II - 11 ettings - 04	Coding - 07 Adaptation - 10
Fault Codes Meas. Block Supp. Codes	s - 02 s - 08 s - 18	Readiness - 15 Advanced ID - 1A Adv. Meas. Values	Codia Basic S Output	ng II - 11 ettings - 04 Tests - 03	Coding - 07 Adaptation - 10 Security Access - 16

Enter Security Code

VC	DS Beta 912.0: 03-ABS Brakes, Security Access	X
	Brake Electronics (J104/Bosch 8.0) Security Access ten minutes before	
	Enter security access key (0 - 99999):	
	Do it! Cancel Option:	

If your Security code was correct you'll get this screen:

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VCDS Beta 912.0: 03-ABS Brakes,	Security Access	
Brake Electronics (61378 = Coding Enabling	Security access successful Security access accepted	
Enter security access key (0		
	Do it! Cancel Option:	

Select Ok and move onto the coding.

[Coding - 07]

C=1 TE=0 RE= Protocol: CAN	:0 -	Open	Controller		
Controller Info- VAG Number:	8K	0 907 379 AL	Component:	ESP8 qua	ttro H04 0080
Soft. Coding:	L	ong Coding	Shop #:	Imp: 823	WSC 02391
Extra:			Geraet 56573	1	
Basic Function	S These ar	e "Safe"	Advanced F	unctions Refer to Ser	vice Manual!
Fault Codes	s - 02	Readiness - 15	Codin	g II - 11	Coding - 07
Meas. Block	s - 08	Advanced ID - 1A	Basic Se	ettings - 04	Adaptation - 10
	40	Adv. Meas. Values	Output	Tests - 03	Security Access - 16

-> Long Coding Helper

Plea	se write down the original values before attempting to change anything. Incorrect Coding can make a Control Module non-functional!
	0 8K0 907 379 AL ESP8 quattro H04 0080
	Current coding:
	070500
	New coding: Long Coding Helper
orkShop Code (0-99999): 02391 Importer # (0-999): 823 Equipment # (0-99999): 5
	Do It! Cancel

Set Byte 1 Bit 3 from 0 to 1 Or "check" Tire Pressure Monitoring (PR-7K6)

Before Coding

29.3.2021

AudiEnthusiasts TPMS

After Coding

Long Coding 8K0-907-379-AL 3 Bytes long	
Exit Back to standard LCode 2 About LCode	
1) 070D00	
2) Continue with [Arrow down] on keyboard / [ESC] will close LCode	
3) 07 0D 00	
Byte 1 Binary: 00001101	
4)	
Bit 3 🗹 Tire Pressure Monitoring (PR-7K6) active	
Bit 7 🔲 Trailer Hitch installed	
	3 Bytes long

Once you completed the coding click Exit on the top left of the screen.

You will now be brought back to the long coding screen:

Please	e write down t Incorrect Co	the original values I oding can make a (before atte Control Me	empting to odule non	o change ar -functional!	ything.	
	0 - 8K0 907 3	379 AL ESP8 qu	attro H04	0800		~	
		Current	coding:				
		070	0500				
		New	coding:	Long	Coding He	lper	
		070	D00				
Shop Code (0-	99999): 0	2391 Importer #	ŧ (0-999):[823	Equipment	# (0-999	999):
		Do It!	Ca	ncel			

Select "Do It!" and you are complete the ABS coding. If the coding fails and you receive this message double check your coding. If it is correct your ABS module is not compatible with the TPMS and you'll need undo any other changes you have made.

29	.3	.20	21
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VCDS Beta 912.0: 03-ABS Brakes, Recode Module
Please write down the original values before attempting to change anything. Incorrect Coding can make a Control Module non-functional!
0 8K0 907 379 AL ESP8 quattro H04 0080
VCDS
Coding rejected Error 31: Request out of range OK
WorkShop Code (0-99999): 02391 Importer # (0-999): 823 Equipment # (0-99999): 56573
Do It! Cancel

Your next step is to enable the TPMS in the Instrument Cluster:

Follow the same instructions as above without the security and go into module 17.

[17 - Instruments] [Coding - 07] -> Long Coding Helper -> Byte 4 Bit 0 - Change 0 - 1 Or Select Tire Pressure Monitoring (TPMS) installed

Long Coding 8K0-920-930-B 11 Bytes long	
Exit Back to standard LCode 2 About LCode	
1) 83FF09000B001008010001	
2) Continue with [Arrow down] on keyboard / [ESC] will close LCode	
3) 83 [FF 09 00 0B 00 10 08 01 00 01	
Byte 4 Binary: 00001011	
49 Bit 0 ✓ Tire Pressure Monitoring (TPMS) installed Bit 1 ✓ Electro Mechanical Parking Brake (EPB) installed Bit 2 Adaptive Cruise Control (ACC) installed Bit 3 ✓ Adaptive Light (Swivelling Headlights) installed Bit 4 Dynamic Ride Control (DRC) installed Bit 5 Dynamic Steering installed	-
Mark or unmark, for the preferred changes	11 Bytes long

Select Exit as you did above and choose "Do It!"

Plea	ase write down th Incorrect Cod	e original values before a ding can make a Control I	ttempting to ch Module non-fun	ange anything. ctional!	
	0 8K0 920 93	30 B KOMBIINSTR. H	120 0255	~	
		Current coding:			
		83FF09000A0010080	010001		
		New coding:	Long Co	ding Helper	
		83FF09000B0010080	010001		
kShop Code	(0-99999): 02	391 Importer # (0-999)): 823 Equ	iipment # (0-999	99):
		Do It!	Cancel		

That's it, the main programming is now complete. Now you need to go into the menu in the MMI and confirm you tire pressure. It needs to be told that your current pressure is correct so you better check it before you confirm it.

Select Store now provided you have confirmed your tire pressure prior.

Next you will be asked to confirm one more time.

The teach-in process:

The teach-in process is performed once after the SET key is pressed for the low tyre pressure indicator. During the next trip, the control unit saves the measured wheel speeds and the vibration characteristics of the wheels in various vehicle operating states.

29.3.2021

AudiEnthusiasts TPMS

The vehicle operating states are basically defined by the following parameters: vehicle speed, steering angle, transverse acceleration and yaw velocity. These teach-in values subsequently make up the target data which is used for monitoring. After approximately 10 minutes of driving, it is already possible to detect a breakdown (rapid loss of pressure). Approximately 60 minutes of driving are required to detect diffusion loss (slow loss of pressure).

Testing the TPMS system:

Simply lower your tire pressure by a few pounds and take the car for a drive. It should detect the change within a few miles. Make sure you lower enough though a pound probably isn't going to trigger it.

Warning Displays:

*The displays are activated when the tyre pressure drops below an a coded minimum value. When system faults are detected, the yellow warning lamp is activated.

The following displays are possible:

* In the event of a rapid loss of pressure at a single wheel (tyre damage), the red warning lamp is activated. If the vehicle a driver information system, an additional text display appears indicating the position of the wheel affected.

* In case of slow loss of pressure, which occurs gradually at multiple wheels due to diffusion, the red warning lamp is also activated. In this case, the optional text display appears but no positional information is given.

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- HOME
- <u>APPLICATIONS</u>
- <u>VAG COM</u>
- <u>ARTICLES</u>
- INFOTAINMENT (MMI etc..)
- DOWNLOADS
- ABOUT US
- **PROJECTS**
- <u>CONTACT US</u>
- DONATIONS

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