

DC-M275 ME2.7.1

FU TC6MOD 29.10.0 Test Communication CARB/EOBD; Mode/Service 6, output Test Thresholds

FDEF TC6MOD 29.10.0 Function definition

The basis of this section is SAE J1979 Mode 6:
Mode 6 should give access to the current test results and test thresholds from not continuously tested functions.

As a starting value at an original start, after power-failure or a Memory fault deletion,`00` must be entered in value and threshold. CAUTION ! Values must be saved in the continual- RAM !

TID \$00 ► Bit coded transfer from control unit supported TID s

DATA:	4								5								6								7							
Bit:	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0	7	6	5	4	3	2	1	0
TID in hex:	01	02	03	04	05	06	07	08	09	0A	0B	0C	0D	0E	0F	10	11	12	13	14	15	16	17	18	19	1A	1B	1C	1D	1E	1F	20
Default with all diagnoses	E8h								80h								00h								00h							

Because with the variant coding some diagnoses can be switched off, the respective TID is not used. The related Bit in TID \$00 will be reset.

In the following tables only the TID \$00 (\$20 etc.) reported values are actually supplied:

For TID's >= 1 the following applies:

The subsequent TID's from the respective test function are provided by the continuous-RAM, the following structure is standard:

- Data 1: pos. response (46h)
- Data 2: TID
- Data 3: Test limit & component-ID (type of threshold and measurement path coding (Mpf))
 - Bit 7=0: bad, when value is a larger threshold
 - Bit 7=1: bad, when value is a smaller threshold
 - Example for description: b7 Mpf
 - 1 15d: means measuring path 15 with fault at value of a smaller threshold
 - 0 39d: means measuring path 39 with fault at value of a larger threshold
- Data 4: High-Byte - value (possiby fill with 00h)
- Data 5: Low-Byte - value
- Data 6: High-Byte - threshold (possiby fill with 00h)
- Data 7: Low-Byte - threshold

In the following tables are conversions mentioned and in brackets are the described labels that serve as appl-notifications and are not part of the function %TC6MOD.

TID \$01 catalyst conversion (only with vk_mot1.b3=1)

Conversion	Data 3 b7 Mpf	Data 4+5 value	Data 6+7 threshold	comment
3.906E-3/INC	0 01d	katw (=ahkat1)	kats (=AHKATMX)	Cat. Bank 1
3.906E-3/INC	0 02d	katw2 (=ahkat3)	kats2 (=AHKATMX)	Cat. Bank 2
7.81E-3/INC	0 03d	katw3 (=ahkat1+ahcat3)	kats3 (=AHKATS)	Sum. fault Bank 1 + Bank 2
3.906E-3/INC	0 04d	katw4 (=ahkat1)	kats4 (=AHKATSB)	Cat. Bank 1
3.906E-3/INC	0 05d	katw5 (=ahkat3)	kats5 (=AHKATSB)	Cat. Bank 2

TID \$02 Lambda Sensors (only with vk_mot1.b3=1)

Conversion	Data 3 b7 Mpf	Data 4+5 value	Data 6+7 threshold	comment
0.01 s/INC	0 01d	lsaw (=tpsvkmf1)	lsas (=TSVKO/TSVKCATO)	probe vK Bank 1 required Period duration
0.01 s/INC	0 03d	lsaw3 (=tpsvkmf3)	lsas3 (=TSVKO/TSVKCATO)	probe vK Bank 2 required Period duration

TID \$03 Secondary Air System (only with vk_mot1.b1=1)

Conversion	Data 3 b7 Mpf	Data 4+5 value	Data 6+7 threshold	comment
1.526E-3/INC	1 03d	slsnw (=fr_b1-frslsa1)	slsns (=DFRSLS)	SLV-Bank 1; Delta fr with pump on Bank 1
1.526E-3/INC	1 05d	slsnw3 (=fr_b3-frslsa3)	slsns3 (=DFRSLS)	SLV-Bank 2; Delta fr with pump on Bank 2

TID \$05 Tank Ventilation System (only with vk_abg.b7=1)
Measuring path-number 37d only with vk_abg.b5=1

Conversion	Data 3 b7 Mpf	Data 4+5 value	Data 6+7 threshold	comment
1.19E-4 hPa/s /INC	1	tesw (=gudauf)	tess (=GGRTED)	16Bit, vacuum pressure diag., gross leak
5.96E-5 hPa/s /INC	0 45d	tesw2 (=qudabk)	tess2 (=KFUATED)	16Bit, vacuum pressure diag., fine leak
5.96E-5 hPa/s /INC	0 37d	tesw3 (=gudabk)	tess3 (=KFUAFSKB)	16Bit, vacuum pressure diag., micro leak

TID \$09 Fuel Supply System

Conversion	Data 3 b7 Mpf	Data 4+5 value	Data 6+7 threshold	comment
	0 01d	kvsfxw (=framx_b1)	kvsfxs (=FRADX)	multipl. Adaptation value Bank 1
	1 01d	kvsfnw (=framn_b1)	kvsfns (=FRADN)	multipl. Adaptation value Bank 1
	0 05d	kvsfxw3 (=framx_b3)	kvsfxs3 (=FRADX)	multipl. Adaptation value Bank 2
	1 05d	kvsfnw3 (=framn_b3)	kvsfns3 (=FRADN)	multipl. Adaptation value Bank 2

+: Offset 8000h; 1.526E-5/INC

ABK TC6MOD 29.10.0 Abbreviations

Variable	Source	Referenced by	Type	Name
KATS	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATS2	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATS3	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATS4	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATS5	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATW	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATW2	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATW3	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATW4	DKAT	TC6MOD	EIN	Mode6 - Storage value
KATW5	DKAT	TC6MOD	EIN	Mode6 - Storage value
KVSFNS	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFNS3	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFNW	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFNW3	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFXS	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFXS3	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFXW	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
KVSFXW3	DKVS	TC6MOD,UEB	EIN	Mode6 - Storage value
LSAS	DLSA	TC6MOD,UEB	EIN	Mode6 -Output value
LSAS3	DLSA	TC6MOD,UEB	EIN	Mode6 - Output value
LSAW	DLSA	TC6MOD,UEB	EIN	Mode6 - Output value
LSAW3	DLSA	TC6MOD,UEB	EIN	Mode6 - Output value
SLSNS	DSLS	TC6MOD	EIN	Mode6 - Storage value (Word)
SLSNS3	DSLS	TC6MOD	EIN	Mode6 - Storage value (Word)
SLSNW	DSLS	TC6MOD	EIN	Mode6 - Storage value (Word)
SLSNW3	DSLS	TC6MOD	EIN	Mode6 - Storage value (Word)
TESS	DTESK	TC6MOD	EIN	Mode6 - Storage value
TESS2	DTESK	TC6MOD	EIN	Mode6 - Storage value
TESS3	DTESK	TC6MOD	EIN	Mode6 - Storage value
TESW	DTESK	TC6MOD	EIN	Mode6 - Storage value
TESW2	DTESK	TC6MOD	EIN	Mode6 - Storage value
TESW3	DTESK	TC6MOD	EIN	Mode6 - Storage value
VK_ABG	VAR	DASM, DFSO, DKAT, DLSA, DTESK, ...	EIN	Variant coding exhaust
VK_MOT1	VAR	ABGKL, DDST, DKAT, DLSA, DLSH, ...	EIN	Result of var.-coding: motor-code E/A 1

FB TC6MOD 29.10 Functional Description

APP TC6MOD 29.10 Application Information

KDH TC6MOD 29.10 Customer Service information

Section is KD-relevant.

CARB TC6MOD 11.10 CARB-Dokumentation