ON-BOARD DIAGNOSTIC SYSTEM PID/DATA MONITOR FUNCTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5]

id0102h4142100

- The PID/DATA monitor items are shown below.

—: Not applicable

Item	Definition	Unit/Condition
AC_PRES	Refrigerant pressure	KPa {MPa}, mBar {Bar}, psi, in H20
		V
AC_REQ	A/C request signal	Off/On
ACCS	A/C relay	Off/On
ALTF	Generator field coil control duty value	%
ALTT V	Generator output voltage	V
AMB_TEMP	Ambient air temperature	°C, °F
APP	Accelerator pedal position	%
APP1	APP sensor No.1	%
		V
APP2	APP sensor No.2	%
		V
ARPMDES	Target engine speed	RPM
BARO	Barometric pressure	KPa {MPa}, mBar {Bar}, psi, in H20
		V
BATT_CUR*1	Current sensor	A
BATT_DAY*1	Vehicle battery - days in service	—
BATT_RES*1	Battery inferred internal resistance	—
BATT_SOC*1	Battery estimated state of charge	%
BATT_TEMP*1	Battery fluid temperature sensor	°C, °F
BATT_V*1	Battery voltage	V
BBP*1	Power brake unit vacuum sensor	KPa {MPa}, mBar {Bar}, psi, in H20
		V
BFP*1	Brake fluid pressure	KPa {MPa}, mBar {Bar}, psi, in H20
BOO	Brake switch	High/Low
BPA	Brake pressure applied switch	High/Low
CATT11_DSD	Estimated catalytic converter temperature	°C, °F
CHRGLP	Charging system warning light	Off/On
CLU_CUT_SW*2	Starter interlock	Off/On
CPP*2	Clutch pedal position	Off/On
CPP*3	Clutch stroke sensor	%
CPP/PNP*2	Shift lever position	Off/On
ECT	Engine coolant temperature	°C, °F
		V
EQ_RAT11	Equivalence ratio (lambda)	—
EQ_RAT11_DSD	Desired equivalence ratio (lambda)	—
ETC_ACT	Electric throttle control actual	° (deg)
ETC_DSD	Electric throttle control desired	%
		° (deg)
EVAPCP	Purge solenoid valve duty value	%
FAN1	Cooling fan relay No.1	Off/On
FAN3	Cooling fan relay No.3	Off/On
FIA	Fuel injection amount	mg/cylinder
FLI	Fuel level	%
FP	Fuel pump relay	Off/On
FP_DUTY	Fuel pump control module	%
FUEL_P_DSD	Fuel pressure desired	KPa {MPa}, mBar {Bar}, psi, in H20

Item	Definition	Unit/Condition
FUEL_PRES	Fuel pressure sensor	KPa {MPa}, mBar {Bar}, psi, in H20
		V
FUELPW	Fuel injector duration	Sec
FUELSYS	Fuel system status	OL/CL/ OL-Drive/ OL-Fault/ CL-Fault
GEAR*4	Gear commanded	Unknown/1st/2nd/3rd/4th/ 5th/6th/7th/8th/Not in P/ Park/Neutral/Drive/ Reverse
HTR11	A/F sensor heater	Off/On
		%
HTR12	HO2S heater control)	Off/On
		%
IAT	Intake air temperature No.1	°C, °F
		V
IAT2	Intake air temperature No.2	°C, °F
		V
INGEAR	Gears are engaged	Off/On
ISC_FBK	ISC feedback value	%
I-Stop_OFF*1	i-stop OFF switch	Off/On
I-Stop_TRD*1	i-stop transmission D position selected status	Off/On
I-Stop_VSP*1	i-stop vehicle speed history flag	Off/On
I-Stop_VST*1	i-stop vehicle stop flag	Off/On
IVS	CTP condition	Off Idle/Idle
KNOCKR	Knocking retard	° (deg)
LOAD	Engine load	%
LONGFT1	Long term fuel trim	%
LONGFT12	Long term fuel trim (HO2S)	%
LOW_OIL	Engine oil level status	Never Detected/Detected
M_GEAR*2	Manual gear position	Neutral/1st gear/2nd gear/ 3rd gear/4th gear/5th gear/ 6th gear/Reverse/ Undefined/Auto/ In_Progress/YSF/Error
MAF	Mass airflow	g/Sec
		V
MAP	Manifold absolute pressure	KPa {MPa}, mBar {Bar}, psi, in H20
		V
MF_CAT_2	Number of misfires corresponding to possible catalytic converter damage (No.2 cylinder)	—
MF_CAT_3	Number of misfires corresponding to possible catalytic converter damage (No.3 cylinder)	—
MF_CAT_4	Number of misfires corresponding to possible catalytic converter damage (No.4 cylinder)	—
MF_CAT_FCC	Number of misfire determinations (for catalytic converter)	—
MF_CAT_TTL	Number of misfires corresponding to possible catalytic converter damage (total)	—
MF_CAT1	Number of misfires corresponding to possible catalytic converter damage (No.1 cylinder)	—
MF_EMI_2	Number of misfires possibly affecting emission (No.2 cylinder)	—
MF_EMI_3	Number of misfires possibly affecting emission (No.3 cylinder)	—
MF_EMI_4	Number of misfires possibly affecting emission (No.4 cylinder)	—
MF_EMI_FCC	Number of misfire determinations (for emission)	—
MF_EMI_TTL	Number of misfires possibly affecting emission (total)	—
MF_EMI1	Number of misfires possibly affecting emission (No.1 cylinder)	—
MIL	Check engine light	Off/On
MIL_DIS	Travelled distance since the check engine light illuminated	km, ft, mi

Item	Definition	Unit/Condition
NEUTRAL_SW1*3	Neutral switch No.1	Off/On
NEUTRAL_SW2*3	Neutral switch No.2	Off/On
O2S11	A/F sensor	μA
O2S12	HO2S	V
OIL_P_SOL	Engine oil solenoid valve	Off/On
OIL_TEMP	Estimated engine oil temperature	°C, °F
PN_SW*4	Parking/neutral	Open/Closed
RO2FT1	HO2S fuel trim	%
RPM	Engine speed	RPM
SHRTFT1	Short term fuel trim	%
SHRTFT12	Short term fuel trim (HO2S)	%
SPARKADV	Ignition timing	° (deg)
Test	Test mode	Off/On
TP_REL	Relative throttle position	%
TP1	TP sensor No.1	V
		%
TP2	TP sensor No.2	V
		%
TPCT	TP sensor No.1 voltage at CTP	V
TPCT2	TP sensor No.2 voltage at CTP	V
VPWR	Battery positive voltage	V
VSS	Vehicle speed	KPH, MPH
VT EX_DES	Desired exhaust valve timing	° (deg)
VT IN_ACT	Actual intake valve timing	° (deg)
VT IN_DES	Desired intake valve timing	° (deg)
VT_EX_ACT	Actual exhaust valve timing	° (deg)
VT_EX_DUTY	OCV control	%

*1 : With i-stop system
*2 : MTX
*3 : With i-stop system (MTX)
*4 : ATX