ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FW6A-EL, FW6AX-EL]

id050227290100

Reading DTCs Procedure

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
   (1) Select “Self Test”.
   (2) Select “Modules”.
   (3) Select “TCM”.

Note

- Freeze frame data/snapshot data appears at the top of the help screen when the displayed DTC is selected.

Freeze frame data

- The freeze frame data consists of data for vehicle and transaxle control system operation conditions when malfunctions in the transaxle control system are detected and stored in the TCM.
- Freeze frame data is stored at the instant the malfunction indicator lamp illuminates, and only a part of the DTC data is stored.

Snapshot data

- The data for all DTCs currently detected is stored.
  Recorded DTC timing
  — For DTCs with one drive cycle, data is recorded during the malfunction determination period.
  — For DTCs with two drive cycles, data is recorded during non-determination (1st diagnosis) periods.

3. Then, select the “Retrieve CMDTCs” and perform procedures according to the directions on the M-MDS screen.
4. Verify the DTC according to the directions on the screen.
   - If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.
5. After completion of repairs, clear all DTCs stored in the TCM. (See Freeze frame data item table.)

Freeze frame data item table

Note

- Refer to PID/DATA monitor table for confirm the transaxle control system operation status while the TCM does not store the DTC. (See ON-BOARD DIAGNOSTIC SYSTEM PID/DATA MONITOR INSPECTION [FW6A-EL, FW6AX-EL].)
- Freeze frame data items are not displayed, according to detected DTC.

—: Not applicable

Freeze frame data item	Unit	Description	Corresponding PID/DATA monitor item
LOAD	%	Calculated engine load	—
ECT	°C {°F}	Engine coolant temperature	ECT
RPM	RPM	Engine speed	RPM
VS	KPH {MPH}	Vehicle speed	VSS
IAT	°C {°F}	Intake air temperature	—
TP	%	Throttle valve position No.1	—
RUNTM	hh:mm:ss	Time from engine start	—
VPWR	V	Module supply voltage	VPWR
APP_D	%	Accelerator pedal position No.1	—

Snapshot data item table

Note

- Refer to PID/DATA monitor table for confirm the transaxle control system operation status while the TCM does not store the DTC. (See ON-BOARD DIAGNOSTIC SYSTEM PID/DATA MONITOR INSPECTION [FW6A-EL, FW6AX-EL].)
- Snapshot data items are not displayed, according to detected DTC.

—: Not applicable

Snapshot data item	Unit	Description	Corresponding PID/DATA monitor item
LOAD	%	Calculated engine load	—
ECT	°C {°F}	Engine coolant temperature	ECT
RPM	RPM	Engine speed	RPM
VSS	KPH {MPH}	Vehicle speed	VSS
IAT	°C {°F}	Intake air temperature	—
EG_RUN_TIME	—	Time from engine start	—
VPWR	V	Module supply voltage	VPWR
APP1	%	Accelerator pedal position No.1	—
GEAR_SEL	1/2/3/4/5/6	Gear shift position	GEAR_SEL
TSS	RPM	Turbine/input shaft speed	TSS
TFT	°C {°F}	ATF temperature	TFT
OSS	RPM	Output shaft speed	OSS
LOCK_UP	Off/SLIP/On	Torque converter (TCC condition)	LOCK_UP
OIL_PRES_SW2	Off/On	Oil pressure switch No.2 condition	OP_SW2
OIL_PRES_SW1	Off/On	Oil pressure switch No.1 condition	OP_SW1
SS_ON_OFF	Off/On	On/off solenoid condition	SS_ON-OFF
TORQUE_DES	Nm	Desired engine torque	TORQUE_DES
APP	%	Accelerator pedal position No.1	—
G_INHIBIT_6	Off/On	6GR is inhibited due to malfunction.	—
G_INHIBIT_5	Off/On	5GR is inhibited due to malfunction.	—
G_INHIBIT_4	Off/On	4GR is inhibited due to malfunction.	—
G_INHIBIT_3	Off/On	3GR is inhibited due to malfunction.	—
G_INHIBIT_2	Off/On	2GR is inhibited due to malfunction.	—
G_INHIBIT_1	Off/On	1GR is inhibited due to malfunction.	—
G_INHIBIT_R	Off/On	R position is inhibited due to malfunction.	—
G_INHIBIT_N	Off/On	N position is inhibited due to malfunction.	—
OIL_PRES_SW4	Off/On	Oil pressure switch No.4 condition	OP_SW4
OIL_PRES_SW3	Off/On	Oil pressure switch No.3 condition	OP_SW3
EOP_RLY	Off/On	Electric AT oil pump relay condition	EOP_RLY
SHIFT_CTRL	DEFAULT/ MANUAL/ C_CONTROL/ HIGH_TEMP/ D_MANUAL/ FAIL_SAFE	Shift control mode	SHIFT_CTRL
SLIP_VALUE	RPM	Actual slip value between TSS and OSS	—
HTM_DIS	km {mile}	Travel distance since determination of ATF high temperature mode	HTM_DIS
MST_REC_SFT	—	The gear shift position before shifting gears is displayed.	SE_TYPE
SFT_CTL_STS	—	The shift control execution condition is displayed.	SC_STATE
SERIAL_DTC	—	DTC	—
TR	—	Transaxle range sensor position.	TR

Clearing DTCs Procedures

1. Connect the M-MDS to the DLC-2.
2. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
   (1) Select “Self Test”.
   (2) Select “Modules”.
   (3) Select “TCM”.
   (4) Select “Retrieve CMDTCs”.
3. Verify the DTC according to the directions on the screen.
4. Press the clear button on the DTC screen to clear the DTC.
5. Switch the ignition off.
6. Close all of the doors, bonnet, trunk lid, and liftgate, lock the doors, and wait for **3 min**.
7. Switch the ignition to ON (engine off or on) and wait for **5 s or more**.
8. Perform DTC inspection. (See Reading DTCs Procedure.)
9. Verify that no DTCs are displayed.