DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2006100

CMDTC Self Test

1. Connect the M-MDS to the DLC-2.
2. Verify the following vehicle conditions:
   - All the switches are turned off (except the ignition switch).
   - All the doors, bonnet, and liftgate are closed.
   - All the doors, and liftgate re unlocked.
   - All the seat belts are unbuckled.
   - Parking brake lever is pulled.
3. After the vehicle is identified, select the following items from the initialization screen of the M-MDS.
   (1) Select “Self Test”.
   (2) Select “All CMDTCs”.
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 front body control module (FBCM). (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].)

ODDTC Self Test

1. Connect the M-MDS to the DLC-2.
2. Verify the following vehicle conditions:
   - All the switches are turned off (except the ignition switch).
   - All the doors, bonnet, and liftgate are closed.
   - All the doors, and liftgate re unlocked.
   - All the seat belts are unbuckled.
   - Parking brake lever is pulled.
3. 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 “F_BCM”.
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 front body control module (FBCM). (See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].)

Snapshot data

- The data for all DTCs currently detected is stored.

Snapshot data

—: Not applicable

Snapshot data item	Unit		Data contents	Data read/use method	Corresponding data monitor items
AAT	°C	°F	Ambient temperature	—	—
APP_STATUS	Accelerator Pedal Off/Under20%/ Over20%/FAIL		Accelerator pedal position status	—	—
CFG_STATUS	Config Complete/ Not Configured/ Config Error		Instrument cluster configuration status	—	—
ECT_STATUS	Under 0 degrees C/ 0 - Under 80 degrees C/Over 80 degrees C/FAIL		Engine coolant temperature status	—	—

Snapshot data item	Unit	Data contents	Data read/use method	Corresponding data monitor items
IC_VPWR	V	Instrument cluster power supply voltage	• The front body control module (FBCM) constantly receives the power supply voltage value of the instrument cluster sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the power supply voltage of the instrument cluster when the DTC was detected, and it is displayed in the M-MDS.	VPWR*1
IG-ON_TIMER	hh:mm:ss*2	Elapsed time since ignition was switched ON (engine off or on) **Note** • The instrument cluster records the elapsed time since the ignition was switched ON (engine off or on).	• The front body control module (FBCM) constantly receives the elapsed time since the ignition was switched ON (engine off or on) sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the elapsed time since the ignition was switched ON (engine off or on) when the DTC was detected, and it is displayed in the M-MDS.	—
PWR_MODE_KEY	Key Out/Key Recently Out (Position 0)/ Accessory (Position 1)/Post Ignition (Position 2)/Ignition On (Position 2)/ Running (Position 2)/Running - Starting	• Key Out: Ignition switched off • Key Recently Out (Position 0): Elapsed time **within 3 s** since ignition was switched off • Accessory (Position 1): Ignition is switched to ACC • Post Ignition (Position 2): Elapsed time **within 3 s** since ignition was switched ON (engine off or on) • Ignition On (Position 2): Ignition switched ON (engine off) • Running (Position 2): Ignition switched ON (engine on) • Running - Starting: Cranking condition	• The front body control module (FBCM) constantly receives the ignition switch status sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the ignition switch status when the DTC was detected, and it is displayed in the M-MDS.	—
RPM_STATUS	Engine Stop/ Under1500rpm/ Over1500rpm/FAIL	Engine speed status	• The front body control module (FBCM) constantly receives the engine speed sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the engine speed when the DTC was detected, and it is displayed in the M-MDS.	TACHOMTR*1

Snapshot data item	Unit		Data contents	Data read/use method	Corresponding data monitor items
SHIFT_STATUS	P/N/D/R/FAIL		Selector lever position status	• The front body control module (FBCM) constantly receives the selector lever position sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the selector lever position when the DTC was detected, and it is displayed in the M-MDS.	—
TOTAL_DIST	km	Miles	Accumulated total traveled distance from completion of vehicle until front body control module (FBCM) detects DTC (Odometer value in instrument cluster)	The total traveled distance from which the front body control module (FBCM) detects DTCs to the present can be calculated by performing the following procedure. 1. Verify the odometer value in the instrument cluster. 2. Verify the snapshot data item TOTAL_DIST. 3. Subtract 2 from 1.	—
TOTAL_TIME	hh:mm:ss*2		Accumulated total elapsed time since vehicle completion until front body control module (FBCM) detects a DTC **Note** • When the ROOM fuse is removed, and the ignition is switched off, the time is not included in the elapsed time.	The elapsed time from which the front body control module (FBCM) detects DTCs to the present can be calculated by performing the following procedure. 1. Verify the instrument cluster PID item TOTAL_TIME. 2. Verify the snapshot data item TOTAL_TIME. 3. Subtract 2 from 1.	TOTAL_TIME*1
VPWR	V		Front body control module (FBCM) power supply voltage	—	VPWR_B
VSPD_STATUS	Stop/0-10km/h/ Over10km/h/FAIL		Vehicle speed status	• The front body control module (FBCM) constantly receives the vehicle speed sent via CAN signal from the instrument cluster. • If a DTC is detected, the front body control module (FBCM) records the vehicle speed when the DTC was detected, and it is displayed in the M-MDS.	SPEEDOMTR* 1

*1 : Instrument cluster PID (See PID/DATA MONITOR TABLE [INSTRUMENT CLUSTER].)

*2 : The seconds may be indicated after the decimal point.