

## DTC INSPECTION [INSTRUMENT CLUSTER]

id0902e8960300

### CMDTC Self Test

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 "All CMDTCs".
3. Verify the DTC according to the directions on the screen.
  - If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection after recording the snapshot data.
4. After completion of repairs, clear all DTCs stored in the instrument cluster. (See CLEARING DTC [INSTRUMENT CLUSTER].)

### ODDTC Self Test

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 "IC".
3. Verify the DTC according to the directions on the screen.
  - If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection after recording the snapshot data.
4. After completion of repairs, clear all DTCs stored in the instrument cluster. (See CLEARING DTC [INSTRUMENT CLUSTER].)

### Snapshot data

- The data for all DTCs currently detected is stored.

### Snapshot data table

—: 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	—	—
IC_VPWR	V		Instrument cluster power supply voltage	When DTC is detected, instrument cluster displays power supply voltage value of instrument cluster in M-MDS.	VPWR
IG-ON_TIMER	hh:mm:ss*1		Elapsed time since ignition was switched ON (engine off or on)  <b>Note</b> • The instrument cluster records the elapsed time since the ignition was switched ON (engine off or on).	When DTC is detected, instrument cluster displays elapsed time since ignition was switched ON (engine off or on) in M-MDS.	—

Snapshot data item	Unit		Data contents	Data read/use method	Corresponding data monitor items
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		<ul style="list-style-type: none"> <li>• Key Out: Ignition switched off</li> <li>• Key Recently Out (Position 0): Elapsed time <b>within 3 s</b> since ignition was switched off</li> <li>• Accessory (Position 1): Ignition is switched to ACC</li> <li>• Post Ignition (Position 2): Elapsed time <b>within 3 s</b> since ignition was switched ON (engine off or on)</li> <li>• Ignition On (Position 2): Ignition switched ON (engine off)</li> <li>• Running (Position 2): Ignition switched ON (engine on)</li> <li>• Running - Starting: Cranking condition</li> </ul>	When DTC is detected, instrument cluster displays ignition switch status in M-MDS.	—
RPM_STATUS	Engine Stop/Under1500rpm/Over1500rpm/FAIL		Engine speed status	When DTC is detected, instrument cluster displays engine speed in M-MDS.	TACHOMTR
SHIFT_STATUS	P/N/D/R/FAIL		Selector lever position status	When DTC is detected, instrument cluster displays selector lever position in M-MDS.	—
TOTAL_DIST	km	Miles	Accumulated total traveled distance from completion of vehicle until instrument cluster detects DTC (Odometer value in instrument cluster)	<p>The total traveled distance from which the instrument cluster detects DTCs to the present can be calculated by performing the following procedure.</p> <ol style="list-style-type: none"> <li>1. Verify the odometer value in the instrument cluster.</li> <li>2. Verify the snapshot data item TOTAL_DIST.</li> <li>3. Subtract 2 from 1.</li> </ol>	—
TOTAL_TIME	hh:mm:ss*1		<p>Accumulated total elapsed time since vehicle completion until instrument cluster detects a DTC</p> <p><b>Note</b></p> <ul style="list-style-type: none"> <li>• When the ROOM fuse is removed, and the ignition is switched off, the time is not included in the elapsed time.</li> </ul>	<p>The elapsed time from which the instrument cluster detects DTCs to the present can be calculated by performing the following procedure.</p> <ol style="list-style-type: none"> <li>1. Verify the instrument cluster PID item TOTAL_TIME.</li> <li>2. Verify the snapshot data item TOTAL_TIME.</li> <li>3. Subtract 2 from 1.</li> </ol>	TOTAL_TIME
VPWR	V		Instrument cluster power supply voltage	—	VPWR
VSPD_STATUS	Stop/0-10km/h/Over10km/h/FAIL		Vehicle speed status	When DTC is detected, instrument cluster displays vehicle speed in M-MDS.	SPEEDOMTR
VSS	KPH	MPH	Vehicle speed	—	—

\*1 : The seconds may be indicated after the decimal point.