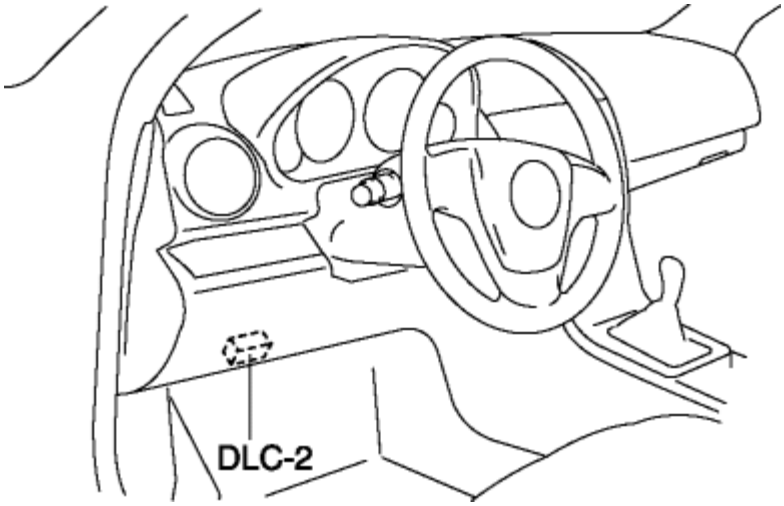
2012 - Mazda6 - Transmission/ Transaxle

ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [AY6A-EL]

Reading DTCs Procedure

1. Connect the M-MDS(IDS) to the DLC-2.



2. After the vehicle is identified, select the following items from the initialization screen of the IDS.

   a. Select "Self Test".

   b. Select "Modules".

   c. 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 snap shot data stores the currently detected DTC data.
  - The recording timing for the freeze frame data/snap shot data differs

depending on the number of DTC drive cycles.

- For a DTC with a drive cycle number 1, only the malfunction determination data is recorded.
- For a DTC with a drive cycle number 2, both the malfunction determination and undetermined data is recorded.

Freeze frame data table

NOTE:

- Refer to PID 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 [AY6A-EL]**.)
- Freeze frame data items are not displayed, according to detected DTC.

Freeze frame data item	Unit	Data contents	Corresponding data monitor items
LOAD	%	Charging efficiency	LOAD
ECT	°C {°F}	Engine coolant temperature	ECT
RPM	RPM	Engine speed	RPM
VS	KPH {MPH}	Vehicle speed	VSS
TP	%	Throttle position sensor	THOP
RUNTM	hh:mm:ss	Time since engine start	—
VPWR	V	Power supply voltage	VPWR

Snapshot data table

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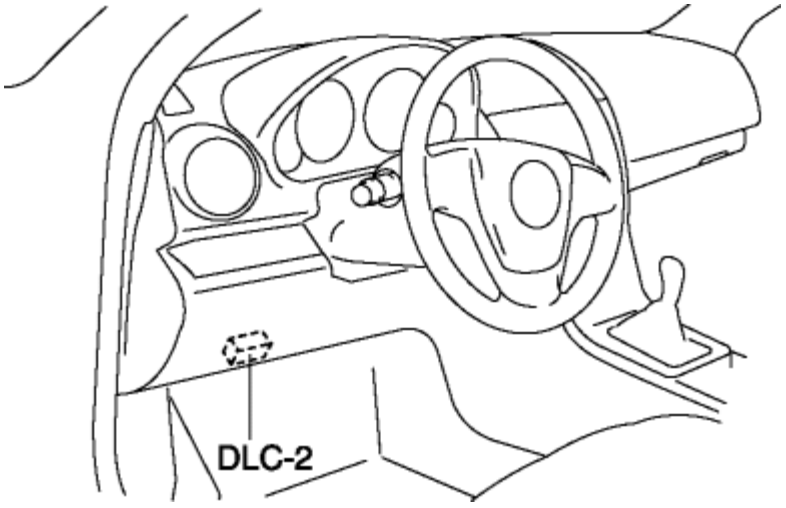
RPM	RPM	Engine speed	RPM
VSS	KPH {MPH}	Vehicle speed	VSS
TP1	%	Throttle position sensor	THOP
EG_RUN_TIME	hh:mm:ss	Time since engine start	—
VPWR	V	Power supply voltage	VPWR

3. Verify the DTC according to the directions on the screen.
    - If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection. (See **ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [AY6A-EL]**.)
4. After completion of repairs, clear all DTCs stored in the TCM. (See **Clearing DTCs Procedure**.)

Clearing DTCs Procedure

1. Connect the M-MDS(IDS) to the DLC-2.



2. After the vehicle is identified, select the following items from the initialization screen of the IDS.
    a. Select "Self Test".
    b. Select "Modules".

c. Select "TCM".

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 (LOCK).
6. Switch the ignition ON and wait for 5 s or more.
7. Perform DTC inspection. (See **Reading DTCs Procedure**.)
8. Verify that no DTCs are displayed.

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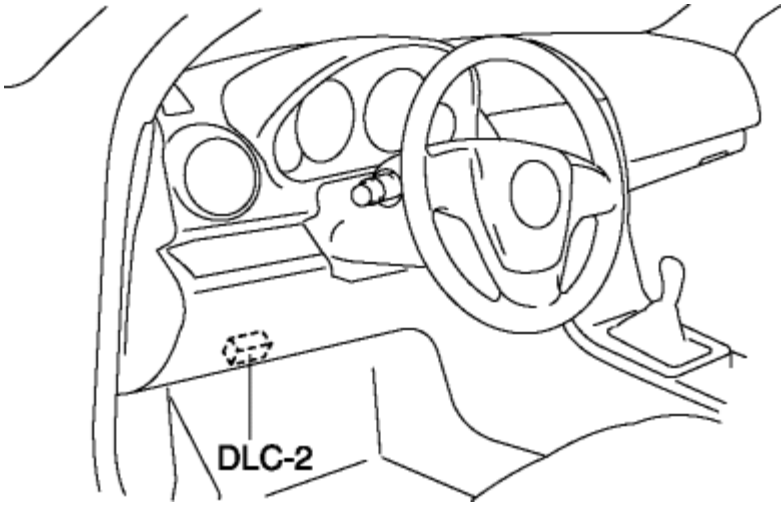

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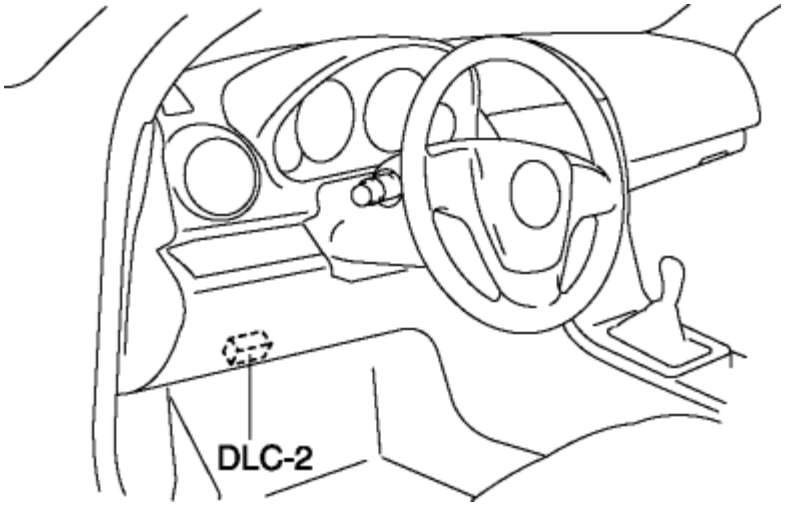

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