DI7DI–01

DTC	P1656	OCV Circuit Malfunction (Bank 1)

CIRCUIT DESCRIPTION

Refer to DTC P1349 on page DI–117.

DTC No.	DTC Detection Condition	Trouble Area
P1656	Open or short in OCV circuit	• Open or short in OCV circuit • OCV valve • ECM

WIRING DIAGRAM

Refer to DTC P1349 on page DI–117.

INSPECTION PROCEDURE

HINT:

Read freeze frame data using TOYOTA hand–held tester or OBD II scan tool. Because freeze frame records the engine conditions when the malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air–fuel ratio was lean or rich, etc. at the time of the malfunction.

TOYOTA hand–held tester:

1	Check OCV circuit.

PREPARATION:

(a) Start the engine and warm it up.

(b) Connect the TOYOTA hand–held tester and select VVT from the ACTIVE TEST menu.

CHECK:

Check the engine speed when operating the OCV by the TOYOTA hand–held tester.

OK:

VVT system is OFF (OCV is OFF): Normal engine speed

VVT system is ON (OCV is ON): Rough idle or engine stalled

OK ⟩ **Check for intermittent problems (See page DI–3).**

NG ↓

2	Check operation of OCV (See page DI–117).

NG ⟩ **Replace OCV.**

OK ↓

2000 MR2 (RM760U)

| 3 | Check voltage between terminals OCV+ and OCV– of ECM connector (See page **DI–117**, step 3). |

NG > Check and replace ECM (See page **IN–28**).

OK

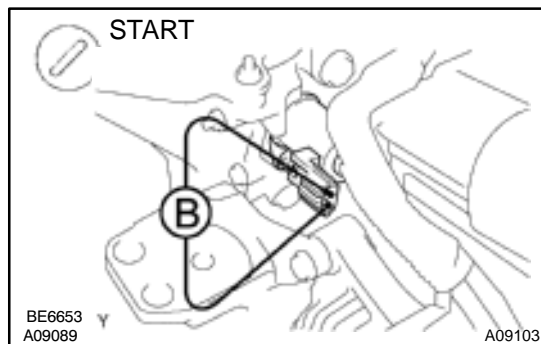| 4 | Check for open and short in harness and connector between OCV and ECM (See page **IN–28**). |

NG > Repair or replace.

OK

Check for intermittent problems
(See page **DI–3**).

OBD II scan tool (excluding TOYOTA hand–held tester):

| 1 | Check operation of OCV. |

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PREPARATION:
(a)   Start the engine and warm it up.
(b)   Disconnect the OCV connector.
(c)   Apply battery positive voltage between the terminals of the OCV.

CHECK:
Check the engine speed.

OK:
Rough idle or engine stalled

NG > Replace OCV.

OK

| 2 | Check voltage between terminals OCV+ and OCV– of ECM connector (See page **DI–117**, step 3). |

NG ⟩ **Check and replace ECM (See page IN–28).**

OK

| 3 | **Check for open and short in harness and connector between OCV and ECM (See page IN–28).** |

NG ⟩ **Repair or replace.**

OK

Check for intermittent problems (See page DI–3).