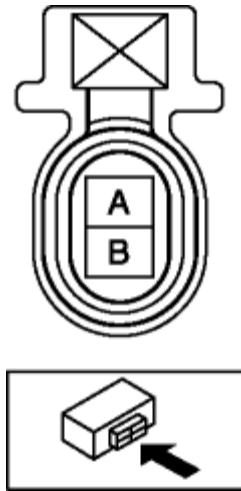


2012 - Mazda6 - Engine

OIL CONTROL VALVE (OCV) INSPECTION [MZI 3.7 V6]

Coil Resistance Inspection

1. Disconnect the negative battery cable.
2. Remove the engine cover. (See [ENGINE COVER REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
3. Set the power steering reserve tank out of the way. (See [POWER STEERING OIL PUMP REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
4. Disconnect the OCV connector.
5. Measure the coil resistance between terminals A and B using a tester.
 - If it is not within the specification, replace the OCV.



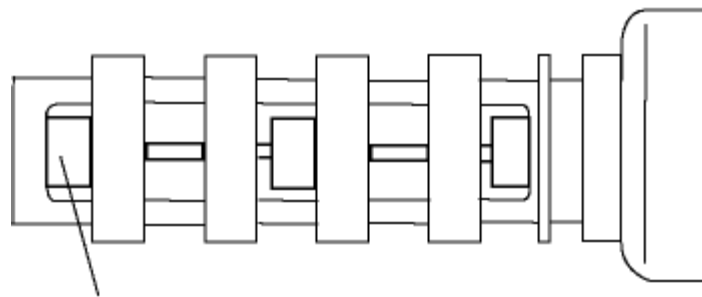
Oil control valve resistance

- 5—14 ohms
6. Install in the reverse order of removal.

Spool Valve Operation Inspection

1. Disconnect the negative battery cable.
2. Remove the OCV. (See [OIL CONTROL VALVE \(OCV\) REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
3. Verify that the spool valve in the OCV is in the maximum valve timing retard position as indicated in the figure.

VALVE TIMING RETARD



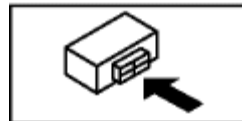
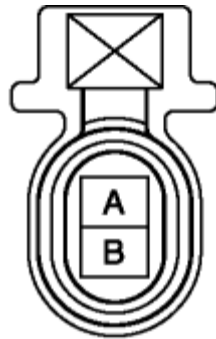
**SPOOL VALVE
(MAXIMUM VALVE TIMING RETARD POSITION)**

- If not as specified, replace the OCV.

4. Verify that the battery is fully charged.

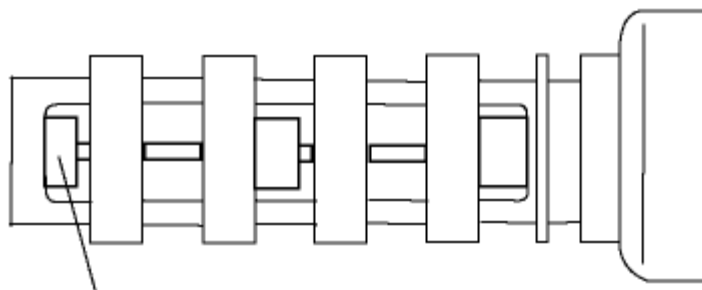
- If not as specified, recharge the battery.

5. Apply battery positive voltage between the OCV terminals and verify that the spool valve operates and moves to the maximum valve timing advance position.



**VALVE TIMING
ADVANCE**

**VALVE TIMING
RETARD**



**SPOOL VALVE
(MAXIMUM VALVE TIMING ADVANCE POSITION)**

- If not as specified, replace the OCV.

NOTE:

- When applying battery positive voltage between the OCV terminals, the connection can be either of the following:

- Positive battery cable to terminal A, Negative battery cable to terminal B
- Positive battery cable to terminal B, Negative battery cable to terminal A

6. Stop applying battery positive voltage and verify that the spool valve returns to the maximum valve timing retard position.

- If not as specified, replace the OCV. (See [OIL CONTROL VALVE \(OCV\) REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

7. Install in the reverse order of removal.

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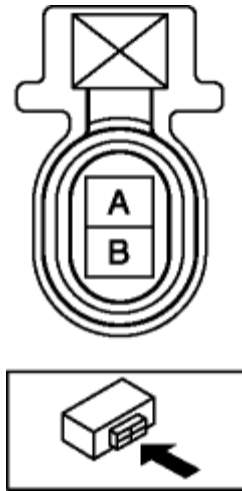
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2012 - Mazda6 - Engine

OIL CONTROL VALVE (OCV) INSPECTION [MZI 3.7 V6]

Coil Resistance Inspection

1. Disconnect the negative battery cable.
2. Remove the engine cover. (See [ENGINE COVER REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
3. Set the power steering reserve tank out of the way. (See [POWER STEERING OIL PUMP REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
4. Disconnect the OCV connector.
5. Measure the coil resistance between terminals A and B using a tester.
 - If it is not within the specification, replace the OCV.



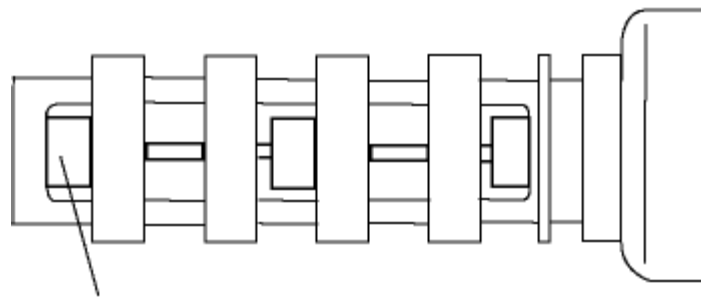
Oil control valve resistance

- 5—14 ohms
6. Install in the reverse order of removal.

Spool Valve Operation Inspection

1. Disconnect the negative battery cable.
2. Remove the OCV. (See [OIL CONTROL VALVE \(OCV\) REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#) .)
3. Verify that the spool valve in the OCV is in the maximum valve timing retard position as indicated in the figure.

VALVE TIMING RETARD



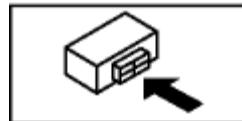
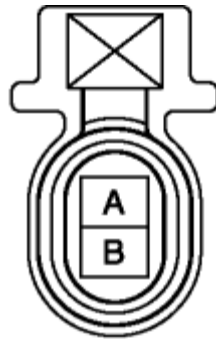
**SPOOL VALVE
(MAXIMUM VALVE TIMING RETARD POSITION)**

- If not as specified, replace the OCV.

4. Verify that the battery is fully charged.

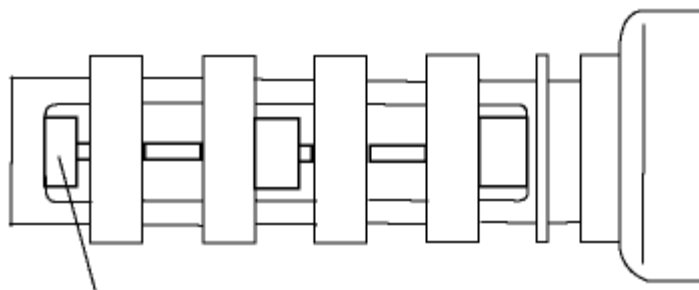
- If not as specified, recharge the battery.

5. Apply battery positive voltage between the OCV terminals and verify that the spool valve operates and moves to the maximum valve timing advance position.



**VALVE TIMING
ADVANCE**

**VALVE TIMING
RETARD**



**SPOOL VALVE
(MAXIMUM VALVE TIMING ADVANCE POSITION)**

- If not as specified, replace the OCV.

NOTE:

- When applying battery positive voltage between the OCV terminals, the connection can be either of the following:

- Positive battery cable to terminal A, Negative battery cable to terminal B
- Positive battery cable to terminal B, Negative battery cable to terminal A

6. Stop applying battery positive voltage and verify that the spool valve returns to the maximum valve timing retard position.

- If not as specified, replace the OCV. (See [OIL CONTROL VALVE \(OCV\) REMOVAL/ INSTALLATION \[MZI 3.7 V6\]](#).)

7. Install in the reverse order of removal.

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