KOEO/KOER SELF TEST [SKYACTIV-G 2.0]

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KOEO 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 “PCM”.
3. Then, select the “KOEO On Demand Self Test” and perform procedures according to directions on the M-MDS screen.
4. Verify the DTC according to the directions on the M-MDS 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 PCM, while referring to “AFTER REPAIR PROCEDURE”.

KOER Self Test

Note

- If a KOER self test is performed with the engine coolant temperature at **less than 60 °C {140 °F}**, a DTC for the variable valve timing may be detected even if the variable valve timing is normal.
- For vehicles with the variable valve timing control, execute a KOER self test after the variable valve timing learning is finished.
  — A KOER self test cannot be executed if the variable timing valve learning in not finished.
  — The variable valve timing learning is cleared if the PCM backup power supply is interrupted (including battery removal), or after reprogramming.
  — To perform variable valve timing learning, the engine speed needs to be increased momentarily to **approx. 2,000 rpm**.

1. Connect the M-MDS to the DLC-2.
2. Start engine and run it at idle.
3. After the vehicle is identified, access the ECT PID using the M-MDS.
4. Verify the ECT PID value is **above 60 °C {140 °F}**.
5. Select the following items from the initialization screen of the M-MDS.
   (1) Select “Self Test”.
   (2) Select “Modules”.
   (3) Select “PCM”.
6. Then, select the “KOER On Demand Self Test” and perform procedures according to directions on the M-MDS screen.
7. Verify the DTC according to the directions on the M-MDS screen.
   - If any DTCs are displayed, perform troubleshooting according to the corresponding DTC inspection.
8. After completion of repairs, clear all DTCs stored in the PCM, while referring to “AFTER REPAIR PROCEDURE”.