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Subject: CLEARING ECCENTRIC SHAFT PLATE PROFILE MEMORY FROM PCM	Bulletin No: 01-010/08
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BULLETIN NOTE

This bulletin supersedes the previous bulletin 01-030/05, issued on 11/22/2005 and 01-010/08 issued on 3/4/2008. The APPLICABLE MODEL(S) / VINS and REPAIR INFORMATION have been revised.

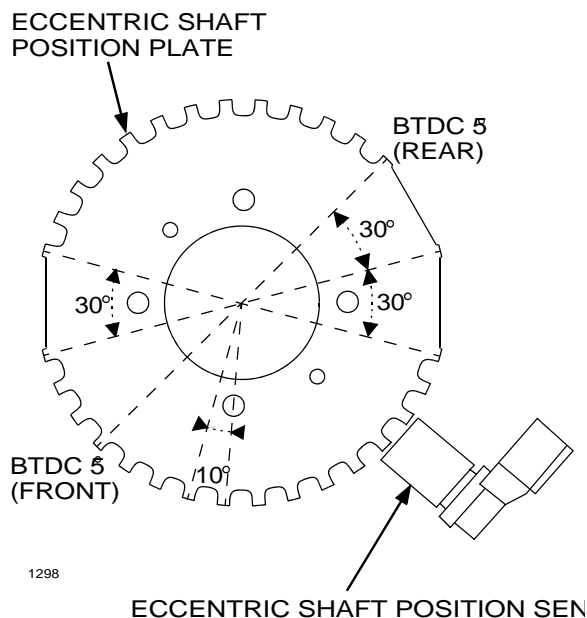
APPLICABLE MODEL(S)/VINS

2004-2010 RX-8

DESCRIPTION

Some vehicles may experience a MIL with DTC P0300-0302 (misfire) when running, after the engine has been replaced. After replacing the engine (this includes the eccentric shaft position plate), the eccentric shaft plate profile needs to be cleared from PCM memory. If not cleared, the memory of the previous eccentric shaft position sensor will remain in the PCM, causing the PCM to misdiagnose the eccentric shaft position sensor signal, resulting in the DTC P0300-P0302 stored in memory.

The RX8 is equipped with a unique system that memorizes the tooth pattern or "profile" of the eccentric shaft position plate. The eccentric shaft plate profile is stored in an area of the PCM with non-volatile RAM (NV RAM) which cannot be cleared by disconnecting the vehicle's battery, or clearing keep alive memory (KAM). If the eccentric shaft plate profile is not cleared after certain repairs, MIL illumination and misfire DTCs may occur. Customers having this concern should have their vehicles repaired using the following procedure.



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Refer to the special procedure to clear the NV RAM after performing repairs with the following conditions:

- Removal / replacement of the engine.
- Removal / replacement of the eccentric shaft position sensor from the engine.
- Removal / replacement of the front pulley / eccentric shaft position plate from the engine.
- Replacement of the PCM.
- Performing repairs for engine misfire DTCs- P0300, P0301 and P0302.

REPAIR PROCEDURE

NOTE:

- 2004-2008 and 2009 and later model year procedures are different.

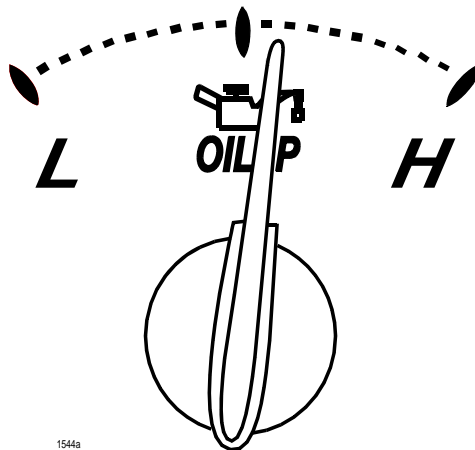
2004-2008

1. Turn ignition switch to "ON" position, but do not start engine.
2. Pump the brake pedal at least 20 times within 8 seconds after the ignition switch is turned ON.

NOTE:

- Manual transmission equipped vehicles produced after VIN 40132647 and automatic transmission equipped vehicles produced after VIN 40132607 or vehicles with PCM updated to "L" calibration or later can confirm the clearing procedure was performed. If procedure was successful, the oil pressure gauge needle will move to right of center slightly (nearer H).
- Vehicles produced prior to these VIN's or vehicles without "L" calibration do not have an indicator to confirm the clearing procedure was performed.

OIL PRESSURE GAUGE NEEDLE WILL
MOVE TO RIGHT OF CENTER SLIGHTLY



3. Drive vehicle and confirm misfire related DTCs are not stored.

NOTE:

- If the malfunction cannot be corrected even though the procedure was successful, the eccentric shaft position plate may be damaged. Inspect the eccentric shaft position plate. Refer to MS3 online instructions or Workshop Manual section 01-40 ECCENTRIC SHAFT POSITION PLATE INSPECTION and repair as necessary.

2009-2010

1. Record customer radio station presets (FM1/2, AM, SAT).
2. Disconnect negative battery cable for a minimum of 1 minute.
 - With negative battery cable disconnected, depress and release brake pedal one time.
3. Reconnect negative battery cable.
4. If equipped with DSC, perform the STEERING ANGLE SENSOR INITIALIZATION PROCEDURE located in MS3 online instructions or Workshop Manual section 04-15.
5. Input customer radio station presets.
6. Initialize power windows. Refer to MS3 online instructions or Workshop Manual section 09-12 POWER WINDOW INITIALIZATION PROCEDURE.