

MIL ILLUMINATED W/DTC P0300 - ECM/CRANK SENSOR/PLATE

TECHNICAL SERVICE BULLETIN

Reference Number(s): CAT. F, NO. 006/98, Date of Issue: December 31, 1998

Related Ref Number(s): CAT. F, NO. 006/98

ARTICLE BEGINNING

MIL ILLUMINATION WITH DTC P0300

Model(s): 1997 Mazda MX-5

Category: F (01) - Fuel & Emission Control System

Bulletin No.: 006/98

Date: December 31, 1998

NOTE: This bulletin supersedes F 006/98 dated 05/28/98. The APPLICABLE MODELS/VIN has been revised.

APPLICABLE MODELS/VIN

All 1997 MX-5 with VINs lower than JM1 NA35**V0 727842 (Condition A). All 1997 MX-5 (Condition B).

DESCRIPTION

MIL (Malfunction Indicator Light) illuminates and DTC (Diagnostic Trouble Code) P0300 is stored in the PCM (Powertrain Control Module). This condition is caused by either of the following two conditions:

CONDITION A

While driving at an engine speed of approx. 6,000 RPM, the above problem is caused by mislogic of the ECM (PCM).

CONDITION B

While driving at an engine speed of approx. 4,800 RPM, the above problem occurs when the gap between the crankshaft pulley and the crankshaft position sensor are out of specification. Customers complaining of this subject should have their vehicle inspected, and if necessary, repaired according to this bulletin.

REPAIR PROCEDURE

1. Verify customer complaint.

2. Use the flow chart in Fig. [Fig. 1](#) , to determine cause:

CONDITION "A" - ECM REPLACEMENT

1. Replace the ECM (PCM) with a modified part per section 01 - 40 Control System in the Workshop Manual.
2. Verify repair.

CONDITION "B" - AIR GAP ADJUSTMENT

1. Using a feeler Gauge, adjust the air gap between the crankshaft pulley projection and the position sensor. See [Fig. 2](#) . Adjust within the following range. Air Gap 0.5mm - 0.8 mm (0.020 - 0.031in.).
2. Rotate the crankshaft and confirm that all the air gaps (4 positions) are within the above range. If they cannot be adjusted, replace the crankshaft pulley plate with a new part and readjust the air gaps.
3. Verify repair.

[Fig. 1: Cause Flow Chart](#)

[Fig. 2: Crankshaft Pulley/Crankshaft Position Sensor](#)

PARTS INFORMATION

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Part Number	Description	Qty.
BP 3A 18 881R 0B	Engine Control Module (Rebuilt)	1
BPS1 18 221	Crankshaft Position Sensor	1
B6BF 11 408B	Crankshaft Pulley Plate	1
INTERCHANGEABILITY NOTE - "A" means an old part can be replaced with a new part, however, a new part cannot be replaced with an old part.		

WARRANTY INFORMATION

NOTE: This information applies to verified customer complaints on vehicles covered under normal warranty. Refer to the SRT microfiche for warranty term information.

Warranty Type: A

Symptom Code: 6X

Damage Code: ECM Replacement 9W Air Gap Adjustment 97

Part Number Main Cause: See Part(s) Information

Quantity:

ECM Replacement (1)

Air Gap Adjustment (0)

Operation Number/Labor Hours:

ECM Replacement F0812XRX / 0.4

Air Gap Adjustment XX982XRX / 0.3