



Technical Service BULLETIN

February 16, 2005

Title:

M.I.L. "ON" DTC P0171, P0441, P2420, AND/OR P0455

Models:

'05 Corolla & Matrix

**ENGINE
EG006-05**

Introduction Some 2005 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit a M.I.L. "ON" condition with any of the following Diagnostic Trouble Codes P0171, P0441, P2420, or P0455 stored in the Engine Control Module or ECM (SAE term: Powertrain Control Module/PCM). Manufacturing improvements have been implemented to reduce the possibility of these conditions occurring. Please use the following procedure to repair the vehicle.

- Applicable Vehicles**
- **2005** model year **Corolla** and **Matrix** vehicles with **1ZZ-FE engines** produced **BEFORE** the Production Change Effective VINs shown below.

Production Change Information

CONDITION	MODEL	DRIVETRAIN	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
M.I.L. "ON" DTC P0171, P0441, P2420, P0455	Corolla	2WD	Shokki	JTDBR3#E#52060200
			NUMMI	1NXBR3#E#5Z381835
			TMMC	2T1BR3#E#5C354981
	Matrix	2WD	TMMC	2T1KR3#E#5C354981

Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFF	T1	T2
895011	R & R Engine Control Computer (ECM)	Corolla	0.4	89661-01120 89661-01121 89661-01130 89661-01131 89661-02C10	8A	99
		Matrix	0.5	89661-02C11 89661-0Z040 89661-0Z041 89661-02C00 89661-02C01		

Applicable Warranty*:

This repair is covered under the Toyota Federal Emissions Warranty. This warranty is in effect for 96 months or 80,000 miles, whichever occurs first, from the vehicle's in-service date.

* Warranty application is limited to correction of a problem based upon a customer's specific complaint.







Parts Information

MODEL	TRANSMISSION	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	A/T	89661-02C00	89661-02C02	Computer, Engine Control	1
		89661-02C01			
		89661-02C10	89661-02C12		
		89661-02C11			
Matrix		89661-01120	89661-01122		
		89661-01121			
		89661-01130	89661-01132		
		89661-01131			
Corolla and Matrix	M/T	89661-0Z040	89661-0Z042		
		89661-0Z041			

Required Tools & Material

TOOLS & MATERIALS	QUANTITY
Standard Metric Socket Set & Hand Tools	As Required

Required SSTs

SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QUANTITY
Toyota Diagnostic Tester Kit* 	01001271	1
CAN Interface Module Kit* 	01002744	1
Midtronics Battery Tester* 	00002-MP815-T	1
12 Megabyte Diagnostic Tester Program Card with version 12.01a Software (or later)* 	01002593-005	1

* Essential SSTs.

NOTE:
Additional Diagnostic Tester Kits, CAN Interface Modules, Program Cards or other SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

Inspection Procedure M.I.L. "ON" DTC P0171, P0441, P2420, and/or P0455**Inspection Procedure**

Some 2005 Corolla and Matrix vehicles will set a M.I.L. "ON" DTC P0171, P0441, P2420, and/or P0455 as a result of the Purge VSV being continuously grounded by the ECM (PCM) instead of the normal duty cycled ground.

Please confirm normal operation of the Purge VSV. Refer to the Technical Information System (TIS), 2005 model year Corolla or Matrix Repair Manual: *Diagnostics: SFI System (1ZZ-FE): EVAP Inspection Procedure*. If Purge VSV operates OK, replace ECM (PCM).

Repair Procedure

1. Replace ECM (PCM). Refer to TIS, 2005 model year Corolla or Matrix Repair Manual: *Engine Control System: ECM (1ZZ-FE/2ZZ-GE): Replacement*.
2. Register VIN into the replacement ECM (PCM). Refer to TIS, 2005 model year Corolla or Matrix Repair Manual: *Diagnostics: SFI System (1ZZ-FE/2ZZ-GE): Registration*.

NOTE:

Confirm battery state-of-charge prior to immobilizer registration using the SST Midtronics Battery Tester (P/N 00002-MP815-T).

3. Register ECM (PCM), Communication ID Registration and Master/Sub Key registration. Refer to TIS, 2005 model year Corolla or Matrix Repair Manual: *Theft Deterrent & Door Lock: Engine Immobilizer System: Registration*.