

# M.I.L. "ON" DTC P0171, P0441, and/or P0455

**Service Category** Engine/Hybrid System

**Section** Engine Control

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2008	Corolla	Drive Type(s): 2WD Engine(s): 1ZZ Transmission(s): 5MT, 4AT VDS(s): BR30E, BR32E
2008	Matrix	Drive Type(s): 2WD Engine(s): 1ZZ Transmission(s): 4AT, 5MT VDS(s): KR30E, KR32E

## Introduction

Some 2008 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit a M.I.L. "ON" condition with one or more of the Diagnostic Trouble Codes (DTCs) P0171, P0441, or P0455 stored in the Engine Control Module or ECM (SAE term: Powertrain Control Module/PCM). Please use the following procedure to repair the vehicle.

## Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFF	T1	T2
EG8051	R & R Engine Control Computer (ECM/PCM)	Corolla	0.4	89661-0####	01	99
		Matrix	0.5			

### APPLICABLE WARRANTY

- This repair is covered under the Toyota Federal Emission 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.

## M.I.L. "ON" DTC P0171, P0441, and/or P0455

### Parts Information

MODEL	TRANS	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	A/T w/VSC	89661-02Q90	Same	Computer, Engine Control (ECM/PCM)	1
	A/T w/o VSC	89661-02R00	Same		1
Matrix	A/T w/VSC	89661-02R40	Same		1
	A/T w/o VSC	89661-02R50	Same		1
Corolla & Matrix	M/T	89661-02R10	Same		1

### Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 4.00.017 or later is required.	ADE	TSPKG1	1
Digital Battery System Analyzer* NOTE: All components from this kit/set are required.	SPX/OTC	<a href="#">00002-V8150-KIT</a>	1

\* Essential SST.

#### NOTE

- Additional TIS Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

## M.I.L. "ON" DTC P0171, P0441, and/or P0455

---

### Inspection Procedure

Some 2008 model year Corolla and Matrix vehicles will set a M.I.L. "ON" DTC P0171, P0441, and/or P0455 as a result of the Purge VSV being continuously grounded by the ECM (PCM) instead of the normal duty cycled ground.

1. Confirm normal operation of the Purge VSV.

Refer to the Technical Information System (TIS), 2008 model year Corolla/Matrix Repair Manual:

- [Corolla](#) / [Matrix](#): *Engine/Hybrid System – Engine Control – “1ZZ–FE Engine Control System: SFI System: EVAP System”*

2. If the Purge VSV operates correctly per the Repair Manual diagnostics, replace the ECM (PCM).
3. If the Purge VSV does NOT operate correctly, follow the diagnostic procedures in the Repair Manual to repair.

### Repair Procedure

1. Replace the ECM (PCM).

Refer to TIS, 2008 model year Corolla/Matrix Repair Manual:

- [Corolla](#) / [Matrix](#): *Engine/Hybrid System – Engine Control – “1ZZ–FE Engine Control System: ECM: Removal”*
- [Corolla](#) / [Matrix](#): *Engine/Hybrid System – Engine Control – “1ZZ–FE Engine Control System: ECM: Installation”*

2. Register the VIN into the replacement ECM (PCM).

Refer to TIS, 2008 model year Corolla/Matrix Repair Manual:

- [Corolla](#) / [Matrix](#): *Engine/Hybrid System – Engine Control – “1ZZ–FE Engine Control System: SFI System: Registration”*

3. Perform the Automatic EVAP System Check and verify that NO pending DTCs set.