



**Technical Service
BULLETIN**

September 20, 2007

Title:

**HARSH SHIFT AND M.I.L. "ON"
DTC P2716**

Models:

'05 - '07 Corolla & Matrix (1ZZ-FE)

TRANSMISSION & CLUTCH
TC015-07

TSB UPDATE NOTICE:

The information contained in this TSB supercedes TSB No. TC014-06.
TSB No. TC014-06 is now obsolete and should be discarded.

Introduction

Some 2005 - 2007 model year Corolla and Matrix vehicles equipped with an automatic transaxle may exhibit a harsh shift condition and a M.I.L. "ON" with DTC P2716 stored. Improvements have been made to the Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) to reduce the possibility of this condition occurring. Use the following procedure to repair the vehicle.

Applicable Vehicles

- **2005 - 2007 model year Corolla and Matrix (2WD) vehicles equipped with the 1ZZ-FE engine.**

Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFP	T1	T2
895011	R & R Engine Control Module (ECM/PCM)	Corolla	0.4	89661-#####	8A	99
		Matrix	0.5			

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 YEAR	MODEL	TRANS	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY		
2005, 2006, 2007	Corolla	A/T	89661-02C0#	89661-02K11	Computer, Engine Control (ECM/PCM)	1		
			89661-02C9#					
			89661-02K10					
			89661-02C1#					
	Matrix		89661-02D0#	89661-02K21		1		
			89661-02K20					
			89661-0112#				89661-02K31	1
			89661-02D4#					
89661-02K30								
89661-0113#	89661-02K41	1						
89661-02D5#								
89661-02K40								

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SSTs)	SUPPLIER	PART NUMBER	QTY
TIS Techstream* NOTE: Software version 2.11.004 or later is required. 	ADE	TSUNT	1

* Essential SSTs.

NOTE:
Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

Inspection Procedure

If the vehicle is currently exhibiting a harsh shift condition and M.I.L. "ON" with DTC P2716 stored, refer to the Technical Information System (TIS) and follow the diagnostic procedures below.

- 2005 model year Corolla Repair Manual, *Drivetrain - Automatic Transmission/Transaxle - "Electronic Controlled Automatic Transaxle [ECT]: P2716 Pressure Control Solenoid 'D' Electrical"*
- 2006 or 2007 model year Corolla Repair Manual, *Drivetrain - Automatic Transmission/Transaxle - "A245E Automatic Transaxle: Automatic Transaxle System: P2716: Pressure Control Solenoid 'D' Electrical (Shift Solenoid Valve SLT)"*
- 2005 model year Matrix Repair Manual, *Drivetrain - Automatic Transmission/Transaxle - "A246E: Electronic Controlled Automatic Transaxle [ECT]: P2716 Pressure Control Solenoid 'D' Electrical"*
- 2006 or 2007 model year Matrix Repair Manual, *Drivetrain - Automatic Transmission/Transaxle - "A246E Automatic Transaxle: Automatic Transaxle System: P2716: Pressure Control Solenoid 'D' Electrical (Shift Solenoid Valve SLT)"*

**Repair
Procedure**

1. Replace the ECM (PCM).

Refer to TIS:

- 2005 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System - Engine Control - "1ZZ-FE 2ZZ-GE: ECM: Replacement"*
- 2006 or 2007 model year Corolla or Matrix Repair Manual:
 - *Engine/Hybrid System - Engine Control - "1ZZ-FE Engine Control System: ECM: Removal"*
 - *Engine/Hybrid System - Engine Control - "1ZZ-FE Engine Control System: ECM: Installation"*

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

Refer to TIS:

- 2005 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System - Engine Control - "1ZZ-FE: SFI System: Registration"*
- 2006 or 2007 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System - Engine Control - "1ZZ-FE Engine Control System: SFI System: Registration"*

3. Test drive the vehicle to confirm the repair.