

**T-EG018-05**

# OBSOLETE

PLEASE SEE EG042-07 (superseding TSB)

ENGINE  
EG018-05



## Technical Service BULLETIN

April 22, 2005

### Title: **1ZZ-FE ENGINE "NO START" CONDITION**

Models:  
**'05 Corolla & Matrix**

**Introduction** Some 2005 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit an intermittent "no start" condition. Improvements have been made to the Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) manufacturing process to reduce the possibility of this condition occurring. Please use the following procedure to repair the vehicle.

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

#### Production Change Information

CONDITION	MODEL	DRIVETRAIN	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Engine No Start	Corolla	2WD	Shokki	JTDBR3#E#50
			NUMMI	1NXBR3#E#5Z
			TMMC	2T1BR3#E#5C
	Matrix	2WD	TMMC	2T1KR3#E#5C

#### 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 89661-02C11	8A	99
		Matrix	0.5	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**

ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	<p><b>Toyota Diagnostic Tester Kit*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required</li> <li>12 Megabyte Diagnostic Tester Program Card (P/N 01002593-005) with version 12.01a Software (or later) is required</li> </ul> 	TOY220036	1	9
2	<p><b>CAN Interface Module Kit*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required</li> </ul> 	01002744	1	9
3	<p><b>Midtronics Battery Tester*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required</li> </ul> 	00002-MP815-T	1	15

\* Essential SSTs.

\*\* Refers to drawer number in SST Storage System.

**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**

If the vehicle is currently exhibiting a “no start” condition:

- Refer to the Technical Information System (TIS), 2005 model year Corolla Repair Manual: *Diagnostics/SFI System (1ZZ-FE)/Basic Inspection* for the diagnostic procedure for Corolla.
- Refer to TIS, 2005 model year Matrix Repair Manual: *Diagnostics/SFI System (1ZZ-FE (FF))/Basic Inspection* for the diagnostic procedure for Matrix.

**NOTE:**

When the “no start” condition is related to the ECM (PCM) issue, there will be no spark or injector pulse during cranking. Also, the Diagnostic Tester may fail to initialize with the Engine ECM (PCM).

- If the vehicle exhibits the above conditions, replace the 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 the 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*.

**T-EG024-07**

# OBSOLETE

PLEASE SEE EG042-07 (superseding TSB)



## Technical Service BULLETIN

April 27, 2007

Title:

### 1ZZ-FE ENGINE "NO START" CONDITION

Models:

'07 Corolla & Matrix

ENGINE  
EG024-07

**Introduction** Some 2007 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit a "no start" condition. Improvements have been made to the Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) manufacturing process to reduce the possibility of this condition occurring. Please use the following procedure to repair the vehicle.

- Applicable Vehicles**
- **2007** model year **Corolla** and **Matrix (2WD)** vehicles equipped with the **1ZZ-FE engine** and produced **BEFORE** the Production Change Effective VINs shown below.

#### Production Change Information

MODEL	DRIVETRAIN	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Corolla	2WD	TMC	JTDBR3#E*70
		NUMMI	1NXBR3#E*7Z
		TMMC	2T1BR3#E*7C
Matrix			2T1KR3#E*7C

#### Parts Information

MODEL	TRANS	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
Corolla	A/T	89661-02K10	Same	Computer, Engine Control	1
		89661-02K20	Same		
Matrix		89661-02K30	Same		
		89661-02K40	Same		
Corolla and Matrix	M/T	89661-02K50	Same		

#### Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFP	T1	T2
EG7019	R & R Engine Control Computer (ECM)	Corolla	0.4	89661-02K##	01	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.



Required Tools & Material	TOOLS & MATERIALS	QUANTITY
		Metric Socket Set & Hand Tools

Required SSTs	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
		<b>Toyota Diagnostic Tester Kit*</b> NOTE: <ul style="list-style-type: none"> <li>All components from this kit/set are required.</li> <li>12 Megabyte Diagnostic Tester Program Card (P/N 01002593-005) with version 14.1a Software (or later) is required.</li> </ul> 	TOY220036	1
	<b>CAN Interface Module Kit*</b> NOTE: All components from this kit/set are required. 	01002744	1	9

\* Essential SSTs.

\*\* Drawer number in SST Storage System.

**NOTE:**  
**Additional SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.**

**Inspection Procedure** If the vehicle is currently exhibiting a “no start” condition, refer to the Technical Information System (TIS) for the diagnostic procedure.

- 2007 model year Corolla or Matrix Repair Manual, *Engine Hybrid System – Engine Control – “1ZZ-FE Engine Control System: SFI System: Basic Inspection”*

**NOTE:**  
**When the “no start” condition is related to the ECM (PCM), there will be NO spark or injector pulse during cranking. Also, the Diagnostic Tester may fail to initialize with the Engine ECM (PCM).**

- If the vehicle exhibits the above conditions, replace the ECM (PCM).

**Repair Procedure**

1. Replace the ECM (PCM).

Refer to TIS, 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, 2007 model year Corolla or Matrix Repair Manual:

- *Engine Hybrid System – Engine Control – “1ZZ-FE Engine Control System: SFI System: Registration”*

**T-EG042-07**





**Technical Service BULLETIN**

September 20, 2007

Title:

**M.I.L. "ON" DTC P0601, P0606, AND/OR P0607 OR ENGINE "NO START" CONDITION**

Models:

'05 – '07 Corolla & Matrix (1ZZ-FE)

ENGINE  
REVISÉD  
EG042-07

**TSB REVISION NOTICE:**

- October 18, 2007: TSB No. EG018-05 and EG049-06 have been added to the TSB Update Notice as obsolete TSBs.

Previous versions of this TSB should be discarded.

**TSB UPDATE NOTICE:**

The information contained in this TSB supersedes TSB No. EG018-05, EG049-06, and EG024-07. TSB No. EG018-05, EG049-06, and EG024-07 are now obsolete and should be discarded.

**Introduction** Some 2005 – 2007 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit one or both of the following conditions:

- Engine cranks, but will NOT start
- Diagnostic Trouble Codes (DTCs) P0601, P0606, and/or p0607 stored in the Engine Control Module or ECM (SAE term: Powertrain Control Module/PCM)

Please 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** and produced **BEFORE** the Production Change Effective VINs shown below.

**Production Change Information**

MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Corolla	Takaoka	JTDBR3#E#70
	NUMMI	1NXBR3#E#7Z
	TMMC	2T1BR3#E#7C
Matrix		2T1KR3#E#7C

**Warranty Information**

OP CODE	DESCRIPTION	MODEL	TIME	OFF	T1	T2
EG7035	R & R Engine Control Computer (ECM)	Corolla	0.4	89661-0####	01	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	TRANS	PREVIOUS PART NUMBER			CURRENT PART NUMBER	PART NAME	QTY
		2005 MY	2006 MY	2007 MY			
Corolla	A/T	89661-02C0#	89661-02C9#	89661-02K10	89661-02K11	Computer, Engine Control (ECM/PCM)	1
		89661-02C1#	89661-02D0#	89661-02K20	89661-02K21		1
Matrix		89661-0112#	89661-02D4#	89661-02K30	89661-02K31		1
		89661-0113#	89661-02D5#	89661-02K40	89661-02K41		1
Corolla & Matrix	M/T	89661-0Z04#	89661-02D1#	89661-02K50	89661-02K51	1	

**Required Tools & Equipment**

REQUIRED EQUIPMENT	PART NUMBER	QTY	DRW**
<b>TIS Techstream*</b> NOTE: Software version 2.11.004 or later is required. 	TSUNT	1	N/A
<b>Digital Battery System Analyzer*</b> NOTE: • All components from this kit/set are required. 	00002-V8150-KIT	1	19

\* Essential SSTs.

\*\* Drawer number in SST Storage System.

**NOTE:**

- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- The Toyota Diagnostic Tester and CAN Interface Module may also be used to perform the service procedures listed in this bulletin.

**Inspection Procedure A**

If the vehicle is currently exhibiting a "no start" condition, refer to the Technical Information System (TIS) for the diagnostic procedure.

- 2005 model year Corolla or Matrix Repair Manual: *Engine/Hybrid System – Engine Control – "SFI System (1ZZ-FE): Basic Inspection"*.
- 2006 or 2007 model year Corolla or Matrix Repair Manual: *Engine/Hybrid System – Engine Control – "1ZZ-FE Engine Control System: SFI System: Basic Inspection"*.

**NOTE:**

When the "no start" condition is related to the ECM (PCM) issue, there will be NO spark or injector pulse during cranking. Also, TIS Techstream may fail to initialize with the engine ECM (PCM).

- Inspection Procedure B** If the vehicle is currently exhibiting a M.I.L. "ON" with DTC P0601, P0606, and/or P0607 set with the ECM (PCM) in fail–safe mode, refer to TIS:
- 2005 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System – Engine Control – "SFI System (1ZZ–FE): P0601, P0604, P0606, P0607, P0657 Actuator Supply Voltage Circuit/open"*
  - 2006 or 2007 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System – Engine Control – "1ZZ–FE Engine Control System: SFI System: P0601: Internal Control Module Memory Check Sum Error"*
  - 2006 or 2007 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System – Engine Control – "1ZZ–FE Engine Control System: SFI System: P0606: ECM / PCM Processor"*
  - 2006 or 2007 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System – Engine Control – "1ZZ–FE Engine Control System: SFI System: P0607: Control Module Performance"*

**NOTE:**

Prior to condemning the ECM (PCM), confirm NO problems exist with the following circuits/components:

- Tail and stop light bulb operation.
- Secure connection at connector R9 (Rear Combination Light LH).
- Secure connection at connector R11 (Rear Combination Light RH).
- Improper installation and/or operation of a trailer towing wire harness kit.
- Sensor operation and circuit integrity for all 5V reference circuits:  
VC, IGF, THA, THW, VTA1, VTA2, VPA1, VPA2, VCPA, VCP2, PPMP

If a problem is diagnosed with any of the above components/circuits, repair the condition and confirm if the DTC(s) resets. ECM replacement may not be necessary.

If NO other problems are found, replace the ECM (PCM).

**Repair Procedure**

1. Replace the ECM (PCM).

Refer to TIS:

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

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

Refer to the Technical Information System (TIS):

- 2005 model year Corolla or Matrix Repair Manual, *Engine/Hybrid System – Engine Control – "SFI System (1ZZ–FE/2ZZ–GE): 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. Confirm the repair.

**T-EG049-06**

# OBSOLETE

PLEASE SEE EG042-07 (superseding TSB)



## Technical Service BULLETIN

August 2, 2006

### Title: **1ZZ-FE ENGINE "NO START" CONDITION**

Models:  
**'05 – '06 Corolla & Matrix**

ENGINE  
REVISÉD  
EG049-06

#### TSB REVISION NOTICE:

- February 14, 2007: The T1 code has been updated in the Warranty Information table. Previous versions of this TSB should be discarded.

**Introduction** Some 2005 – 2006 model year Corolla and Matrix vehicles equipped with a 1ZZ-FE engine may exhibit a “no start” condition. Improvements have been made to the Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) manufacturing process to reduce the possibility of this condition occurring. Please use the following procedure to repair the vehicle.

- Applicable Vehicles**
- 2005 – 2006 model year **Corolla** and **Matrix** vehicles equipped with the **1ZZ-FE engine**.

#### Parts Information

MODEL	TRANS	PREVIOUS PART NUMBER		CURRENT PART NUMBER	PART NAME	QTY
		2005 MY	2006 MY			
Corolla	A/T	89661-02C0#	89661-02C91	89661-02C92	Computer, Engine Control	1
		89661-02C1#	89661-02D01	89661-02D02		
Matrix		89661-0112#	89661-02D41	89661-02D42		
		89661-0113#	89661-02D51	89661-02D52		
Corolla and Matrix	M/T	89661-0Z04#	89661-02D11	89661-02D12		

#### Warranty Information

OP CODE	DESCRIPTION	MODEL	TIME	OFF		T1	T2
				2005 MY	2006 MY		
895011	R & R Engine Control Computer (ECM)	Corolla	0.4	89661-02C0#	89661-02C91	01	99
		Matrix	0.5	89661-02C1#	89661-02D01		
						89661-0112#	89661-02D11
				89661-0113#	89661-02D41		
				89661-0Z04#	89661-02D51		

#### 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.



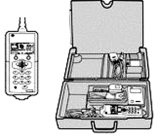
\* Warranty application is limited to correction of a problem based upon a customer's specific complaint.



**Required Tools & Material**

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

**Required SSTs**

ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	<p><b>Toyota Diagnostic Tester Kit*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required</li> <li>12 Megabyte Diagnostic Tester Program Card (P/N 01002593-005) with version 13.3a Software (or later) is required.</li> </ul> 	TOY220036	1	9
2	<p><b>CAN Interface Module Kit*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required.</li> </ul> 	01002744	1	9
3	<p><b>Digital Battery System Analyzer*</b></p> <p>NOTE:</p> <ul style="list-style-type: none"> <li>All components from this kit/set are required.</li> </ul> 	00002-V8150-KIT	1	19

\* Essential SSTs.

\*\* Refers to drawer number in SST Storage System.

**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**

If the vehicle is currently exhibiting a "no start" condition, refer to the Technical Information System (TIS) for the diagnostic procedure, 2005 or 2006 model year Repair Manual:

- Corolla: *Diagnostics: SFI System (1ZZ-FE): Basic Inspection*
- Matrix: *Diagnostics: SFI System (1ZZ-FE (FF)): Basic Inspection*

**NOTE:**  
**When the "no start" condition is related to the ECM (PCM) issue, there will be NO spark or injector pulse during cranking. Also, the Diagnostic Tester may fail to initialize with the Engine ECM (PCM).**

- If the vehicle exhibits the above conditions, replace the ECM (PCM).

**Repair  
Procedure**

1. Replace the ECM (PCM).  
Refer to TIS, 2005 or 2006 model year Repair Manual:
  - Corolla: *Engine Control System: ECM (1ZZ-FE/2ZZ-GE): Replacement.*
  - Matrix: *1ZZ-FE Engine Control System: ECM: Removal, Installation.*
  
2. Register the VIN into the replacement ECM (PCM).  
Refer to TIS, 2005 or 2006 model year Repair Manual:
  - Corolla: *Diagnostics: SFI System (1ZZ-FE): Registration.*
  - Matrix: *1ZZ-FE Engine Control System: SFI System (for 2WD): Registration.*
  
3. Perform the ECU Communication ID Registration.  
Refer to TIS, 2005 or 2006 model year Repair Manual:
  - Corolla: *Theft Deterrent & Door Lock: Engine Immobilizer System: Registration.*
  - Matrix: *Engine Immobilizer: Engine Immobilizer System: Registration.*

**T-TC015-07**





**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# 89661-02C9# 89661-02K10	89661-02K11	Computer, Engine Control (ECM/PCM)	1
			89661-02C1# 89661-02D0# 89661-02K20	89661-02K21		1
	89661-0112# 89661-02D4# 89661-02K30		89661-02K31	1		
	89661-0113# 89661-02D5# 89661-02K40		89661-02K41	1		
	Matrix					

**Required Tools & Equipment**

SPECIAL SERVICE TOOLS (SSTs)	SUPPLIER	PART NUMBER	QTY
<b>TIS Techstream*</b> 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.