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By delia.lopez at 11:40 am, Aug 26, 2010

**TOYOTA**

**TOYOTA MOTOR NORTH AMERICA, INC.**

WASHINGTON OFFICE

601 THIRTEENTH STREET, NW, SUITE 910 SOUTH, WASHINGTON, DC 20005

TEL: (202) 775-1700

FAX: (202) 463-8513

August 26, 2010

**10V-387  
(4 Pages)**

Mr. Daniel C. Smith  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Re: 2005-2008 Toyota Corolla/Matrix  
Part 573, Defect Information Report

Dear Mr. Smith:

In accordance with the requirements of the National Traffic and Motor Vehicle Safety Act of 1966 and 49 CFR Part 573, on behalf of Toyota Motor Corporation ["TMC"], we hereby submit the attached Defect Information Report concerning certain Toyota Corolla and Matrix vehicles.

The vehicles included in this report are currently the subject of NHTSA's Engineering Analysis EA10-006. We have considered the agency's views and trust that this submission will resolve the issues in this investigation.

Should you have any questions about this matter, please contact me at (202) 775-1707.

Sincerely,

TOYOTA MOTOR NORTH AMERICA, INC.



Chris Santucci, Manager  
Technical & Regulatory Affairs

CS:mh  
Attachments

## DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

New United Motor Manufacturing, Inc. ["NUMMI"]  
45500 Fremont Boulevard, Fremont, CA 94538-6368 (now closed)

Toyota Motor Manufacturing Canada Inc. ["TMMC"]  
1055 Fountain Street North, Cambridge, Ontario, Canada N3H 5K2

Toyota Motor Corporation ["TMC"]  
1, Toyota-cho, Toyota-city, Aichi-ken, 471-8571, Japan

Affiliated U.S. Sales Company

Toyota Motor Sales, USA, Inc. ["TMS"]  
19001 South Western Avenue, Torrance, CA 90509

General Motors Corporation Global Headquarters ["GM"]  
100 Renaissance Center Drive, PO. Box 100 Detroit, MI 48265

Component containing Defect

Engine Control Module (ECM)  
DELPHI  
5725 Delphi Drive, Troy, Michigan 48098-2815  
248-813-2000

2. Identification of Affected Vehicles:

Based on production records, we have determined the affected vehicle population as in the table below.

Make/ Car Line	Model Year	Manufac- turer	VIN		Production Period
			VDS	VIS	
Toyota Corolla	2005 - 2008	NUMMI	BR3#E	5Z342399 - 8Z999999	April 19, 2004 through January 2, 2008
		TMMC	BR3#E	5C316577 - 8C939844	
		TMC	BR32E	50053035 - 70137755	
			BR32E	52048917 - 52067858	
Toyota Corolla Matrix	2005 - 2008	TMMC	KR3#E	5C318785 - 8C720560	April 19, 2004 through January 2, 2008
Pontiac Vibe	2005 - 2008	NUMMI	SL6#8	5Z400001 - 8Z425560	April 26, 2004 through January 2, 2008

Note: Although the involved vehicles are within the above VIN ranges, not all vehicles within these ranges were sold in the U.S.

No other Toyota or Pontiac vehicles sold in the United States use the same Engine Control Module as the affected vehicles.

3. Total Number of Vehicles Potentially Affected:

Toyota Corolla:	984,894
Toyota Corolla Matrix:	143,765
Pontiac Vibe:	161,754
Total:	1,290,413

4. Percentage of Vehicles Estimated to Actually Experience Malfunction:

Unknown

5. Description of Problem:

The Engine Control Module for the subject models equipped with the 1ZZ-FE engine and two-wheel drive may have been improperly manufactured. There is a possibility that a crack may develop at certain solder points or on varistors on the circuit board. In most cases, if a crack occurs at certain points or on certain varistors, the engine warning lamp could be illuminated, harsh shifting could result, or the engine may not start. In limited instances, if cracking occurs on particular solder points or varistors, the engine could stop while the vehicle is being driven.

6. Chronology of Principal Events:

November 30, 2009

NHTSA opened a Preliminary Evaluation (PE09-054) regarding ECM malfunction resulting in engine stall while driving.

January 6, 2010

NHTSA sent Toyota an Information Request in connection with the Preliminary Evaluation.

March 2, 2010

Toyota responded to the Information Request. Please refer to the response for details.

March 2010 – August 2010

Toyota started collecting ECMs from the field in order to further investigate failure modes which might lead to engine stopping. Toyota also collected ECMs from in-use vehicles and conducted durability testing to assess whether this problem may be a continuing trend on vehicles on the road. Toyota found that four out of the 32 collected ECMs malfunctioned after thermal shock testing. It was also confirmed that cracking could develop at certain solder points on the circuit board of the ECM which could lead to engine stopping while a vehicle was being driven, and that this trend was likely to continue.

August 19, 2010

Based on the result of the investigations above, Toyota concluded that this problem would likely continue to occur, and, therefore, in order to address customer concerns, decided to conduct a voluntary safety recall of all vehicles within the affected range.

This safety recall will also be conducted in Canada.

7. Description of Corrective Repair Action:

All known owners of the subject vehicles will be notified by first class mail to return their vehicles to a Toyota or Pontiac dealer. The dealer will inspect the production number of the ECM and replace the ECM if necessary.

Reimbursement Plan for pre-notification remedies for Toyota Vehicles (Toyota Corolla, Toyota Corolla Matrix)

The owner letter will instruct vehicle owners who have had the ECM replaced for this condition prior to this campaign to seek reimbursement by mailing a copy of their repair order, proof-of-payment, and proof-of-ownership for reimbursement consideration.

Reimbursement Plan for pre-notification remedies for General Motors Vehicles (Pontiac Vibe)

Pursuant to 577.11(e), General Motors will provide reimbursement to owners for repairs completed on or before ten days after GM mails owner letters, pursuant to the plan submitted on January 22, 2009.

8. Recall Schedule:

Toyota will mail an interim owner notification beginning in the middle of September 2010 to advise owners of this recall and the fact that they will receive a future notice when parts become available to complete repairs. They will also be advised of Toyota's reimbursement plan for those who may have paid for ECM replacement prior to this campaign. The second mailing will be scheduled when replacement parts are available.

A copy of the draft initial owner notification will be submitted as soon as it is available. Copies of dealer instructions will also be submitted as they are issued.

General Motors will notify NHTSA separately of its owner mailing schedule and supply a copy of the owner letter at that time.

9. Distributor/Dealer Notification Schedule:

Toyota's notifications to distributors/dealers will be sent in the beginning of September 2010.

General Motors will notify NHTSA separately of its dealer mailing schedule and supply a copy of the dealer bulletin at that time.