

MIL ON With DTC(s) P07407E and/or P27567F

Service Category Drivetrain

Section Automatic Transmission/Transaxle

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2019	Avalon	Transmission(s): 8AT
2018	Camry	Transmission(s): 8AT
2017 - 2018	Highlander, Sienna	Transmission(s): 8AT

REVISION NOTICE

May 26, 2021 Rev2:

- The bulletin title, Introduction, Required Tools & Equipment, and Repair Procedure sections have been updated.

January 22, 2021 Rev1:

- The Calibration Information section has been updated.

Introduction

Some 2017 – 2018 model year Highlander and Sienna, 2018 model year Camry, and 2019 model year Avalon vehicles with and without the stop and start feature may exhibit a MIL ON condition with Diagnostic Trouble Codes (DTCs) P07407E and/or P27567F. The Engine Control Module (ECM) (SAE term: Powertrain Control Module/PCM) logic has been modified to reduce the possibility of this condition. Follow the Repair Procedure in this bulletin to address this condition.

NOTE

For Highlander, Sienna, and Camry model vehicles a mismatched transaxle assembly hardware and ECM (PCM) software combination may result in a harsh shift or shift flare. If this occurs after the original repair, additional ECM (PCM) replacement and reprogramming will be required.

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Production Change Information

This bulletin applies to vehicles equipped with both old AND new type DAT UA80* transmissions.

Reference the serial number production change information for B1 (clutch) change over below.

TRANSMISSION MODEL NO.	PLANT	SERIAL NO. PRODUCTION CHANGE (NEW B1 CLUTCH)		TRANSMISSION PRODUCTION DATE
		SINGLE UNIT NEW B1	SERIAL NO. BREAK POINT	
UA80E/F	TMMWV	-	A3A18E00259	May 29 – 31, 2018
			A4A18E00042	
	AW-J		17M7A22012	December 22, 2017
			UA03L217C25W004	December 25, 2017
	KINUURA	UA03L217C21W###*	-	December 21, 2017
		UA03L217C21Y###*		December 22, 2017
		UA03L217C22W###*		
		UA03L217C22Y###*		
		UA03L217C22W###*		
		UA03L217C22Y###*		

*Confirm the serial number BEFORE proceeding.

Warranty Information

MODEL	OP CODE	DESCRIPTION	TIME	OFP	T1	T2
Sienna, Avalon, Camry	895011	R & R ECM (PCM)	0.5	89661-#####*	8A	99
Highlander			0.6			
Sienna, Highlander, Camry,	800269	Reprogram ECM (PCM)	0.7			
Avalon	800269N		0.7			

*Warranty claim MUST be submitted with the correct 10-digit OFP. Choose the correct OFP for the vehicle being repaired by searching for the parts in the Electronic Parts Catalog using the VIN filter.

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 occurrence of the specified condition described in this bulletin.

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Parts Information

Table 1.

MODEL	MODEL YEAR	JUDGEMENT (B1 CLUTCH)	STOP & START	DRIVELINE	ECM PART NO.	
					PREVIOUS	NEW
Highlander	2017 – 2018	Old	Y	AWD	89661-0E830-B 89661-0E831 89661-0E832 89661-0E833	89661-0E835
			N		89661-0E840-B 89661-0E841 89661-0E842 89661-0E843	89661-0E845
			Y	FWD	89661-0E850-B 89661-0E851 89661-0E852 89661-0E853	89661-0E855
			N		89661-0E860-B 89661-0E861 89661-0E862 89661-0E863	89661-0E865
		New	Y	AWD	89661-0ED60	89661-0ED61
			N		89661-0ED70	89661-0ED71
			Y	FWD	89661-0ED80	89661-0ED81
			N		89661-0ED90	89661-0ED91

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Parts Information (continued)

Table 1. (continued)

MODEL	MODEL YEAR	JUDGEMENT (B1 CLUTCH)	STOP & START	DRIVELINE	ECM PART NO.	
					PREVIOUS	NEW
Sienna	2017	Old	N/A	FWD	89661-08160-B 89661-08163 89661-08164 89661-08165 89661-08166	89661-08167
				AWD	89661-08440-B 89661-08443 89661-08444 89661-08445 89661-08446	89661-08447
		New		FWD	89661-08530 89661-08531	89661-08532
				AWD	89661-08540 89661-08541	89661-08542
	2018	Old		FWD	89661-08400-A 89661-08401	89661-08402
				AWD	89661-08460-A 89661-08461	89661-08462
		New		FWD	89661-08580 89661-08581	89661-08582
				AWD	89661-08590 89661-08591	89661-08592
Camry	2018	Old		FWD	89661-06Y20-A 89661-06Y21 89661-06Y22	89661-06Y23
		New			89661-0X170 89661-0X171 89661-0X172	89661-0X173
2019					New	89661-07661 89661-07662 89661-07663

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Parts Information (continued)

Table 2.

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
	00451-00001-LBL	Authorized Modifications Labels	1

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVI*	ADE	TSADVUNIT	1
Techstream 2.0		TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 16.00.021 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Battery Diagnostic Tool*	DCA-8000P_T	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

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Calibration Information

MODEL	MODEL YEAR	JUDGEMENT (B1 CLUTCH)	STOP & START	DRIVELINE	ECU TYPE	CALIBRATION ID		
						PREVIOUS	NEW	
Highlander	2017 – 2018	Old	Y	AWD	Engine	896630E43300 896630E43200 896630E43100 896630E43000	896630E43400*	
					Transmission	896650E09100 896650E09000	896650E09200*	
			N		Engine	896630E44300 896630E44200 896630E44100 896630E44000	896630E44400*	
					Transmission	896650E10100 896650E10000	896650E10200*	
			Y	FWD	Engine	896630E45300 896630E45200 896630E45100 896630E45000	896630E45400*	
					Transmission	896650E11100 896650E11000	896650E11200*	
					N	Engine	896630E46300 896630E46200 896630E46100 896630E46000	896630E46400*
						Transmission	896650E12100 896650E12000	896650E12200*
		New	Y	AWD	Engine	896630E83000	896630E83100*	
					Transmission	896650E41000	896650E41100*	
					Engine	896630E84000	896630E84100*	
					Transmission	896650E42000	896650E42100*	
			Y	FWD	Engine	896630E85000	896630E85100*	
					Transmission	896650E43000	896650E43100*	
					Engine	896630E86000	896630E86100*	
					Transmission	896650E44000	896650E44100*	

*For Highlander and Sienna model vehicles refer to [T-SB-0001-18](#) Transaxle Assembly and ECM (PCM) Software Confirmation for calibration information.

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Calibration Information (continued)

MODEL	MODEL YEAR	JUDGEMENT (B1 CLUTCH)	STOP & START	DRIVELINE	ECU TYPE	CALIBRATION ID	
						PREVIOUS	NEW
Sienna	2017	Old	N/A	FWD	Engine	896630828600 896630828500 896630828400 896630828300 896630828000	896630828700*
					Transmission	896650807200 896650807100 896650807000	896650807300*
				AWD	Engine	896630836600 896630836500 896630836400 896630836300 896630836000	896630836700*
					Transmission	896650808200 896650808100 896650808000	896650808300*
		New	FWD	Engine	896630846100 896630846000	896630846200*	
				Transmission	896650819000	896650819100*	
			AWD	Engine	896630847100 896630847000	896630847200*	
				Transmission	896650820000	896650820100*	

*For Highlander and Sienna model vehicles refer to [T-SB-0001-18](#) *Transaxle Assembly and ECM (PCM) Software Confirmation* for calibration information.

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Calibration Information (continued)

MODEL	MODEL YEAR	JUDGEMENT (B1 CLUTCH)	STOP & START	DRIVELINE	ECU TYPE	CALIBRATION ID	
						PREVIOUS	NEW
Sienna	2018	Old	N/A	FWD	Engine	896630832100 896630832000	896630832200*
					Transmission	896650811000	896650811100*
				AWD	Engine	896630838100 896630838000	896630838200*
					Transmission	896650812000	896650812100*
		FWD		Engine	896630851100 896630851000	896630851200*	
				Transmission	896650823100 896650823000	896650823200*	
		AWD		Engine	896630852100 896630852000	896630852200*	
				Transmission	896650824100 896650824000	896650824200*	
Camry		Old	N/A	FWD	Engine	8966306L5200 8966306L5100 8966306L5000	8966306L5300**
					Transmission	896650644000	896650644100**
		New			Engine	8966306L4200 8966306L4100 8966306L4000	8966306L4300**
					Transmission	896650654000	896650654100**
Avalon	2019	New		FWD	Engine	896630725100 896630725200 896630725300	896630725400/ 896650701100
					Transmission	896650701000	

*For Highlander and Sienna model vehicles refer to [T-SB-0001-18](#) *Transaxle Assembly and ECM (PCM) Software Confirmation* for calibration information.

**For Camry model vehicles refer to [T-SB-0010-18](#) *Transaxle Assembly and ECM (PCM) Software Confirmation* for calibration information.

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Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit MIL ON condition with DTCs P07407E and/or P27567F present?

- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Is the vehicle a Highlander, Sienna, or Camry model?

- **YES** — Continue to step 3.
- **NO** — For Avalon model vehicles go to step 4.

3. Follow the procedures outlined in the following bulletins to confirm that the correct ECM (PCM) hardware and software are used based on the transaxle assembly part number and serial number:

- For 2017 – 2018 Highlander and Sienna model year vehicles follow the procedures outlined in [T-SB-0001-18](#) *Transaxle Assembly and ECM (PCM) Software Confirmation*.
- For 2018 Camry model year vehicles follow the procedures outlined in [T-SB-0010-18](#) *Transaxle Assembly and ECM (PCM) Software Confirmation*.

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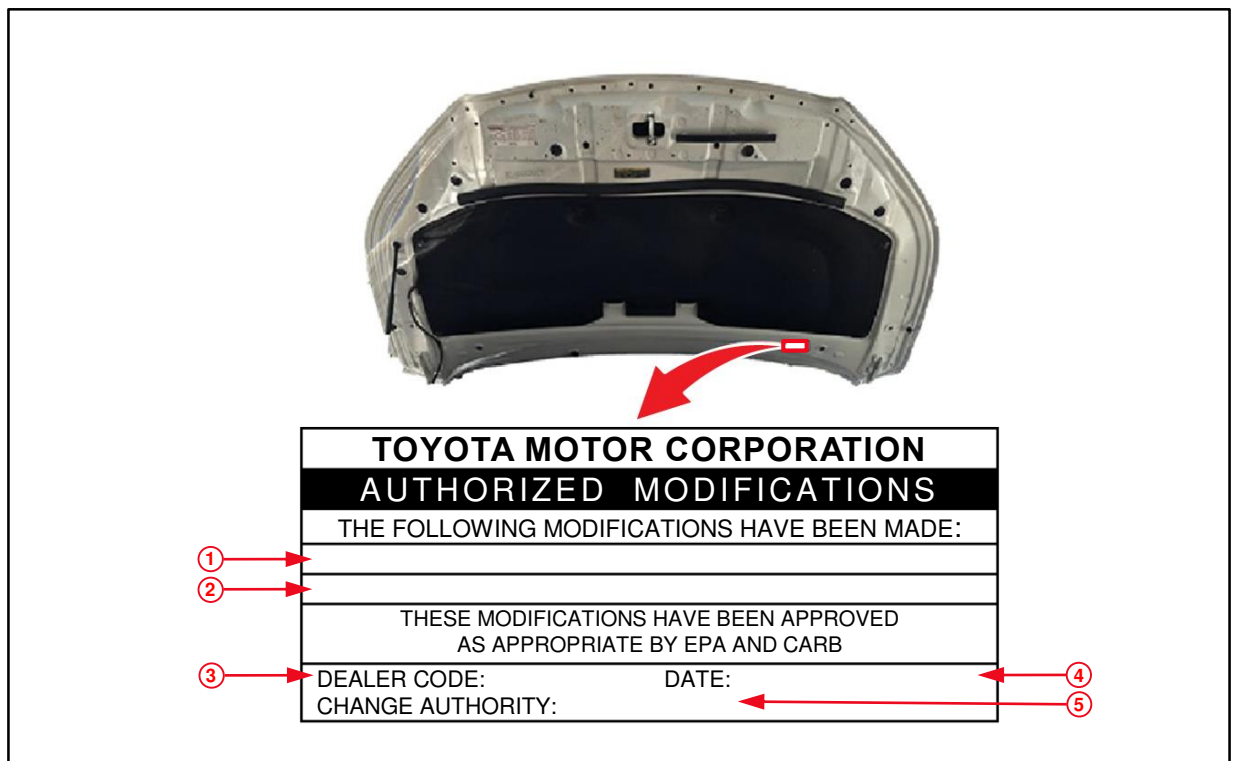
Repair Procedure (continued)

4. Use Techstream to confirm if the ECM (PCM) calibration has been updated and check for the Authorized Modifications Label affixed to the vehicle in the location shown below.

Is the calibration ID listed in Techstream and on the label the latest ECM (PCM) calibration?

- **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- **NO** — Continue to step 5.

Figure 1. Location of Authorized Modifications Label on 2019 Avalon



1	Replacement ECM (PCM) Part Number (e.g., 89662-07664)
2	New Calibration ID (e.g., 896650701100)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (continued)

5. Flash reprogram the ECM (PCM).

NOTE

- The battery diagnostic tool **MUST** be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the battery diagnostic station, refer to the [DCA-8000 Instruction Manual](#) located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in [T-SB-0134-16](#), *Techstream ECU Flash Reprogramming Procedure*, and flash the ECM (PCM) with the NEW calibration file update.

6. Prepare and install the Authorized Modifications Label.
 - A. Using a permanent marker, enter the following information on the label:
 - ECM (PCM) part number [*Refer to the **Parts Information** section for the **NEW PART NUMBER**.*]
 - Calibration ID(s) [*Refer to the **Calibration Information** section for the **NEW CALIBRATION ID**.*]
 - Dealer Code.
 - Repair Date.
 - Change Authority [***This bulletin number***].
 - B. Install the Authorized Modifications Label onto the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.
7. Confirm the condition no longer exists.