IMPORTANT UPDATE

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN K0A

ENGINE ECU SOFTWARE UPDATE

CERTAIN 2018 CAMRY & 2018 SIENNA

(Reference the separate Technical Instructions for 2018 Tundra and Sequoia)

Update 4/5/2019: Note added on p. 6.

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are required to currently hold <u>at least one</u> of the following certification levels:

- Certified (any specialty)
- Expert (any specialty)
- Master
- Master Diagnostic Technician

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were completed by another dealer.

III. PREPARATION

A. TOOLS, SUPPLIES & EQUIPMENT

- Standard Hand Tools
- Techstream 2.0 / TIS Techstream / Techstream Lite
- GR8 Battery Diagnostic Station
- T-SB-0134-16

B. PARTS

The only parts required for this campaign is the label below

Part Number	Part Description	Quantity
00451-00001-LBL	Authorized Modification Label*	1
*Labels can be ordered in pa	acks of 25 from the MDC through D	Dealer Dailv website.

IV. BACKGROUND

The engine ECUs in the subject vehicles are equipped with software to monitor the rear oxygen sensors. Under a specific condition, this software may not detect a malfunctioning sensor due to an error in the software. As a result, affected vehicles do not meet certain onboard diagnostic (OBD) regulations.

V. DETERMINE STATUS OF CURRENT CALIBRATION



1. CHECK FOR DTC'S

a. Using a Techstream, perform a Health Check to check for any Diagnostic Trouble Codes.

Note: This Campaign covers only the Calibration ID update to the Engine and ECT system, as detailed in these instructions. It does not cover the diagnosis or replacement of any other systems on the vehicle.

2. CONFIRM THE ECM CALIBRATION ID

- a) Perform a Health Check.
- b) Confirm the current calibration ID in the ECM (and transmission ECU).
- c) Referencing the table below, verify if the ECM (and transmission ECU) has the updated Calibration(s).

NOTE:

- The current calibration ID of either is shown depending on the vehicle model and specifications.
- In SIENNA, it is necessary to check the 2 IDs of the engine ECU and the transmission ECU.

Techstream (Ver 13.0 File Function Setup System Select Store	00.022) - 11925 TIS User Help d Data							- 0 - x	1						
2018 Sienna 2GR-FKS	Tire Pressure / Threshold Value [psi(gauge)]										Sample Cal	1	Ds Shown		
000826 mile	Sensor 1: 32.75 / 26.19 Sensor 2: 32.55 Sensor 3: 32.94 / 26.19 Sensor 4: 32.35														
STDY230CKJ8887894 2018_Sienna, ^ File Notes B Health Ch Data 1. B CAN Bus C	Health Check Results - Health Check does not display live data. - Changes in vahicle condition will not update automat - To update Health Check, click the Refresh button on th	tically. he bottom of t	the Health Check	screen.			Campaig PERMAN	gn Status: IENT: NO	2		System) \	Calibration	Update	I
Engine Transmiss	Enhanced Generic		DTC	Related Inform	nation				1		Engine		896630851000	Yes	
Radar Cru Radar Cru ABS/VSC/ EMPS	System Engine Transmission	Monitor Status	DTC	Conf P	end Hist Fa	RoB	Calibration 895630851000 895650823000	Update Yes			Transmission	1	896650823000	Yes	-
Air Condit SRS Airba Dre Cellial	Radar Cruise2 Radar Cruise1	-					-		h		Radar Cruisez	11	-		1
Combinati Starting C	ABS/VSC/TRAC EMPS						F152608130 8965B45070	No No	Н		Radar Cruise1	Ī	-		-
Navigation Front Rep *	LKA/LDA (Sub) Circumference Monitoring Camera Control Module LKA/LDA	-		+ +			8679F4505001	No	Н	1	Tire Pressure Monitor	t	-		1
Expand>>	Front Recognition Camera	• -				- ·	8646F0801100 8646G3302101	No No	Н		ABS/VSC/TRAC	l t	F152608130	No	-
TIS Search Print	Air Conditioner						886500821002	No -			EMPS	1	8965B45070	No	-
Back	Campaign Status: ?				Į	i (🐼 🚫	2 😂		J		4			
\$309-06	·					þ	Default User	pic a						018	32410101

VI. VEHICLE PREPERATION

1. VEHICLE PREPARATION

- a. Confirm the following conditions:
 - Vehicle in the IG position (engine off).
 - Transaxle in Park.
 - Parking brake engaged.
 - Turn off all electrical accessories (i.e. climate control, audio system, etc.)
 - Headlight switch in the DRL OFF position.
 - Windshield wiper switch in the OFF position.

2. CONNECT THE 12v BATTERY TO A POWER SUPPLY (GR8)

- a. Connect the GR8 or other type of a power supply (not a battery charger) to the 12v battery.
- b. Select the Power Supply Mode from the Charge Menu of the GR8.



A power supply *MUST* be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

Note: A power supply must be connected directly to the 12v battery terminals and <u>NOT</u> the remote jump posts under the hood (if equipped).

3. VERIFY TECHSTREAM SETUP

- a. Verify that the Techstream meets the following conditions:
 - The latest version of software is loaded.
 - The Techstream battery is fully charged. If not, connect the Techstream to a 120v source.
 - The DLCIII cable is in good condition.



The Techstream's battery voltage must be maintained during the update procedure. If necessary, plug the Techstream into a 120v outlet during this procedure.

Note: If the Techstream's communication with the vehicle fails during the update procedure, the Engine ECU will be damaged.

The CID Update Procedure is detailed in <u>T-SB-0134-16</u>. Please reference this Bulletin for more detailed procedures and information.

VII. WEBSITE CALIBRATION CHECK

Toyota K0A (SSC KOA ENGINE ECU UPDATE)	1. LOGI a. Log	N KOA WEBSITE gin into the website
Login Complete all required (*) fields below.	UR Use Pas	L: <u>https://toyota-k0a.imagespm.info/</u> ername: <i>Dealer Code</i> ssword: xxxxx
##### * Password: ••••• Login Forgot Password?	STOP	There are a small number of vehicle that require a specific calibration that does not follow the table on the next page. Follow the instructions on the website before proceeding with the calibration update.
Search for VIN Enter the 17-digit Vehicle Identifiation Number to begin the search for this campaign. VIN: Search	b. Ent disp upc	er the VIN into the website and follow the instructions played in the website before starting the calibration date

VIII. UPDATE CALIBRATION



Always confirm the both CID of the engine and the transmission in SIENNA, and judge whether reflash is necessary or not.

If either the engine or transmission CID does not match the NEW CID, ECU reflash is necessary.

If the ECM has already been calibrated with the new calibration the campaign is complete.

Vehicle Specification		ECU Calibrations						
Model	Drive	System	Current CID	New CID				
		Engine and ECT	8966308 32000	Engine: <u>896630832100</u>				
	Transmission	8966508 11000 *	Transmission: 896650811000*					
	FWD	Engine and ECT	8966308 <mark>51000</mark>	Engine & Transmission:				
SIENNA	Transmission	8966508 23000	896630851100 / 896650823100					
	Engine	8966308 <mark>38000</mark>	Engine: <u>896630838100</u>					
	AWD	Transmission	8966508 12000 *	Transmission: 896650812000*				
		Engine	8966308 52000	Engine & Transmission:				
		Transmission	8966508 24000	<u>896630852100 / 896650824100</u>				
		Engine		Engine: <u>8966306L5200</u>				
CA	CAMRY		8966306L 4000 8966306L 4100	Engine & Transmission:				
		Transmission	89665064 4000	<u>8966306L4200 / 896650654000</u>				

STOP

Be extremely careful to select the correct <u>NEW CID</u> that corresponds to the <u>Current CID</u>.

Note: If the ECM already has the New CID, the campaign is complete.

The CID Update Procedure is detailed in <u>T-SB-0134-16.</u> Please reference this Bulletin for more detailed procedures and information.

Note: To insure the update process is completed before turning the ignition off, it is recommended to add a 10 second delay between step H and step I of <u>T-SB-0134-16</u>. For example, after the Flash Calibration process has completed (Step H), wait 10 seconds before turning off the ignition (Step I).

IX. COMPLETE REPAIR



1. PERFORM VERIFICATION HEALTH CHECK

- a. Using a Techstream, perform a Health Check.
- b. Clear DTC's that may have set during the re-flash procedure.
- c. Re-run the Health Check to confirm that no DTC's reappear.



THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CID's to the National database.

2. CONFIRM CID UPDATE

a. On the Stored Data tab, confirm the following for the Engine and ECT Systems:



The Calibration number has been updated

DO NOT UPDATE THE VEHICLE CALIBRATION A SECOND TIME. There may still be an update available for the vehicle after the initial reflash.

018 Sequoia UR-FE	Tire Press	ure / Thre	shold	Value [ps					
15C52	Sensor 1:	34.42 /	27.68	Sensor					
1000Z mile	Sensor 3:	34.67 /	27.68	Sensc					
	Sensor 5:	34.42 /	27.68				Campaig	n Status [.] Y	£
	Lissith Ch	a alt Daavi					DEDMANE	NT NO	
2018 Seguoia	Health Ch	eck Resul	ts				PERMANE	IN I: NO	
File Notes	- Health Ch	eck does no	t display	y live dat					
Health Checl	- Changes I	h vehicle co	ck click	the Refre					MUSI be
Data 1-1/2	- to update realth check, click the kelle							updated	
Data 2-1/2	E.L.								
	Enhanced	Generic				-			1
			5	vstem	SB	RoB	Calibration	Update 🏠	Mav still sav
					<u>الــــــــــــــــــــــــــــــــــــ</u>		200012001	No	YES after fir
	Engine an	d ECT					300148001	NO	reflash
	Cruise Cor	atrol			_		A4401000		depending o
	ABS/VSC/	TRAC			+		E15260C170	No	the vehicle
	PPS	INAC		/·	-		8965B34010	No	the vehicle.
	Tire Press	ure Monitor					897AF0010000	No	
	LKA/LDA				-				
Sort				<u> </u>	-		8646F0C02200	No	
Expand>>	Front Reco	ognition Car	nera	/	+		8646G0C02200	No	VEHICLE A
	Occupant	Detection				1.00	-		SECOND TIM
TIS Search	Air Conditi	ioner					-		
	<u></u>								1
	1								

3. PRINT CUSTOMER HEALTH CHECK REPORT

a. From the Stored Data tab, select the Customer Health Check Report button (TIS will launch when button is pressed).

Techstream (Ver 8.3	0.023) - 11067					
File Function Setup	TIS User Help					
System Select Store	ed Data					
2010 Prius 2ZR-FXE	Tire Pressure / Threshold Va	lue (psi(ga	uge)] 🛛 🌊			
JTDKN3DU9A1010658	Sensor 1: 27.5 / N/A S Sensor 3: 27.5 / N/A S Sensor 5: N/A / N/A	ensor 2: ensor 4:	29.0 / N/A 30.1 / N/A			Customer Health
2010_Prius_2ZR	Health Check Results					Check Button
Health Checi	System	Monitor	DTC	Curr Pend Hist Perm	SB Calibration	
Data 1-20	Engine and ECT				34715100 A4701000	
	Hybrid Control				896B34701800 896B54701100 898844701400 898844702300	l
	Cruise Control				· ·	
	Tire Pressure Monitor				100 B 100 B	
	ABS/VSC/TRAC				F152647106	2
	EMPS	-			· ·	
	Occupant Detection					
	<u>Air Conditioner</u>					
	Combination Meter				838004737004 838004737004 838004737004	
	Main Body				590C1U2A**0*	
	D-Door Motor				· · /	
Sort	Smart Key					
Country 1	P-Door Motor					
Expand>>	RR-Door_Motor	1.1				
	RL-Door Motor					
IIS Search	Master_Switch				11 .	*
Print Back	2014/01/21 18:18:35			(h)	The second	
5309-05	Campaign Status:2				Default User	

- b. Log in to TIS.
- c. Input Vehicle Mileage and Repair Order number.
- d. Check the "Performed" campaign button for campaign KLA.
- e. Select the Report button.
- f. Confirm Customer Health Check Report information is correct.
- g. Print Customer Health Check Report from TIS.
- h. Sign and provide to the customer.

4. ATTACH THE AUTHORIZED VEHICLE MODIFICATION LABEL

- a. Fill out the label.
- b. Affix the label to the under-side of the hood.



1	ECM P/N
2	New Calibration ID
3	Dealer Code
4	Date Completed
5	Campaign Code (XXX)

X. REASSEMBLY

1. REMOVE THE POWER SUPPLY FROM THE BATTERY

◄ VERIFY REPAIR QUALITY ►

- Confirm the system Calibration has been updated successfully.
- Confirm there are no DTC's after the Calibration update.

XI. APPENDIX

A. PARTS DISPOSAL

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return**.

B. CAMPAIGN DESIGNATION DECORDER

