

Service Category	General		
• •		Market USA and	Toyota Supports
Section	Outline-General	Mexico	ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2024	Grand Highlander, Grand Highlander HV, Highlander, Highlander HV, Land Cruiser, Mirai, Tacoma, Tacoma HV	
2022 - 2024	Tundra, Tundra HV	
2021 - 2024	Venza HV	
2023 - 2024	bZ4X, Corolla, Corolla Cross, Corolla Cross HV, Corolla Hatchback, Corolla HV, Crown, GR Corolla, Prius, Prius Prime, Sequoia HV	

REVISION NOTICE

April 18, 2024 Rev2:

- Applicability has been updated to include 2024 model year Tundra, Tundra Hybrid, Venza Hybrid, bZ4X, Corolla, Corolla Cross, Corolla Cross Hybrid, Corolla Hybrid, Crown, GR Corolla, Corolla Hatchback, Prius, Prius Prime, Sequoia Hybrid, Highlander, Grand Highlander, Grand Highlander Hybrid, Land Cruiser, Tacoma, Tacoma Hybrid, and Mirai vehicles and 2023 model year Corolla Hatchback and Prius Prime vehicles.
- The Introduction section has been updated.
- The Operation Procedure section has been removed.
- The Standard ECU Configuration Procedure and ECU Configuration Value Writing Procedure sections have been added.

March 15, 2023 Rev1:

- Applicability has been updated to include 2022 2023 model year Tundra, Tundra Hybrid, and Venza Hybrid vehicles and 2023 model year bZ4X, Corolla, Corolla Cross, Corolla Cross Hybrid, Corolla Hybrid, Crown, GR Corolla, Prius, and Sequoia Hybrid vehicles.
- The Introduction section has been updated.

Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2021 – 2024 model year Toyota vehicles may require the download and installation of vehicle specific software or configuration software when the Electronic Control Unit (ECU) is replaced. GTS+ software has been modified to indicate when configuration software is required. A new Configure column has been added to the GTS+ Health Check Results screen to show when configuration software is available for a specific ECU.

Follow the Operation Procedure in this bulletin to complete the ECU Software Configure Process. Certain ECU replacements require CUW reprogramming (Standard ECU Configuration) while others may only require C-Best Writing (ECU Configuration Value Writing). Please select the appropriate procedure below, depending on the ECU replaced.

- Procedure A: Standard ECU Configuration (CUW Reprogramming)
- Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only)

Refer to the applicability chart below for a list of Models and ECUs that will require configuration software when the specified ECU is replaced:

YEAR(S)	MODEL(S)	ECU(S) REQUIRING CONFIGURATION SOFTWARE
	bZ4X	Airbag / Body / Brake / HV / MG / EMPS / Blindspot / Front Side Radar
	Corolla, Corolla HV, GR Corolla, Corolla Hatchback	Airbag / Body / EMPS / Engine / HV / Inverter / Power Distribution Box / Body / 4WD
	Corolla Cross / Corolla Cross HV	Airbag / Body
	Crown	Absorber Control / Airbag / ANC / Body / Brake / ECM / EMPS / HV / Inverter / Blindspot / Front Side Radar
	Prius / Prius Prime	Airbag / Blindspot / Body / Engine / EMPS / Front Side Radar / HV / Inverter / Front Side Radar
2024	Sequoia HV	Airbag / ANC / Body / Brake / ECT / EMPS / Engine / HV / TCM / ANC
	Tundra / Tundra HV	ANC / Body / Brake / ECT / EMPS / HV / TCM / Airbag
	Highlander / Highlander HV	Body / EMPS
	Grand Highlander / Grand Highlander HV	ECM / HV / Inverter / TCM / EMPS / ANC / Blindspot / Body / Airbag / Front Side Radar
	Land Cruiser	ECM / HV / TCM / Airbag / EMPS / ANC / Body / Front Side Radar
	Tacoma / Tacoma HV	EMPS / ANC / Body
	Mirai	Front Side Radar / Airbag / Blindspot / Body

Introduction (continued)

YEAR(S)	MODEL(S)	ECU(S) REQUIRING CONFIGURATION SOFTWARE
	bZ4X	Airbag / Body / Brake / HV / MG
	Corolla / Corolla HV / Corolla Hatchback / GR Corolla	Airbag / Body / EMPS / Engine / HV / Inverter / Power Distribution Box
	Corolla Cross / Corolla Cross HV	Airbag / Body
2023	Crown	Absorber Control / Airbag / ANC / Body / Brake / ECM / EMPS / HV
	Prius / Prius Prime	Airbag / Blindspot / Body / Engine / EMPS / Front Side Radar / HV / Inverter
	Sequoia HV	Airbag / ANC / Body / Brake / ECT / EMPS / Engine
2022 – 2023	Tundra / Tundra HV	ANC / Body / Brake / ECT / EMPS
2021 – 2024	Venza HV	Body / EMPS

NOTE

ECU is a Toyota term used to describe integrated computerized devices responsible for managing the operation of a system or subsystem. In this bulletin, ECU is used as a generic label for the following SAE J1930 standard references:

- Powertrain Control Module (PCM).
- Engine Control Module (ECM).
- Transmission Control Module (TCM).
- Any other Toyota specific control unit.

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Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	-	_	-	_

Required Tools & Equipment

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

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- GTS+ software version 2024.01.002.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787 (USA) or 01-55-50103041 (Mexico) or by visiting *TIS – Diagnostics – Tools & Equipment – Techstream Order Portal.*

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 (USA) or 01-800-504-5330 (Mexico) or by visiting *Home – Service Resources – Toyota Special Service Tools (SSTs)*.

Operation Procedure

Procedure A: Standard ECU Configuration (CUW Reprogramming)

1. AFTER ECU replacement, connect GTS+, select the applicable vehicle and options, and select Next.

Figure 1.	e 1.
-----------	------

🔁 T(DYOTA GTS+ ((·)) ONLINE		Region : NA - 🗗 ?
Veł	nicle Connection		
Conf Requ	irm the Information and press Next ired information		
VIN:			
	Division:	ΤΟΥΟΤΑ	~
	Model:	CROWN HEV	~
	Model Year:	2023	~
	Engine:	T24A-FTS	~
	Manual		
•	Planuat		

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

2. After performing a Health Check, GTS+ will automatically detect the replacement ECU that needs configuration. On the Health Check Results page, select Yes in the Configure column to begin the configuration process.

Figure 2.

📃 🐵 ТОУОТА GTS+ 🔞	ONLINE			Region	: NA	•	л Я	i i	?
2023 Crown HEV T24A-FTS						Batte	ry:13.	7V	
Health Check Result									
STATUS									
02/14/2024 11:07:00 Campaign Status: <u>OPEN</u> PERMANENT: NO ECU Security Key: -	Compensation Pressure [psi(gauge)] Front: Rear:	Ð	Techstream has es A network connection is required to	stablished a no ensure all TIS function	etwork cons nality is available	nection t	o TIS. npaign valida	tion.	
Caution									
Enhanced Generic	Completed: 02/14/2024 11:09:30								
	System			Monitor Status	Configure	RoB	DTC	Update	^
+ Blind Spot Monitor "B"				-	No	2	0	No	
+ Blind Spot Monitor "A"				-	No	2	0	No	
+ Acoustic Vehicle Alerting System				-	No	-	0	No	
- Active Noise Control				-	Yes	-	0	No	_
DTC information									
Calibration information									
System		Calibrati	on			Update			
	8624F78020H0					No			
	8624G78020!!					No			
+ Power Integration No.1				-	No	0	0	No	-
						• <) [20	$\overline{\odot}$	
Trive Ver2023.04.003.02 Subscription Expiration:3	353d							((·) ONLINI

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

3. If your ECU Configuration requires multiple calibration files, you will be prompted with the screen below. Confirm the calibrations to be downloaded. Then press the Reprogramming Start button to proceed.

If your ECU Configuration does not require multiple calibration files, this screen will not be displayed. Continue to step 4.

Figure 3.

\Xi 🚾 TOYOTA GTS+ (0) ONLINE						1) (P	∄ i	?
2023 Crown HEV T24A-FTS						Batte	ry:13.	4V
Software as a Part	ftware as a Part							
The following ECUs may be reprogrammed. Review the Current Calibration ID, New Calibration After reviewing, select the System and Calibration I	ID, and Comment in the table b D that you wish program.	elow.						
System	Туре	Current Calibration ID	New Calibration ID	Comment	Reprogram	nming Implem	ent	
EMPS	Restoration		8A31134070	-		63		
							l	
				,				
Mr Ver2023.04.003.02 Subscription Expiration:349d					Back	Reprogra	mming S	Start

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

4. GTS+ will identify the necessary calibration file required. Press Next to start the file download and continue to step 5.

Figure 4.



NOTE

Selecting output will create a text file listing the required CUW files at the file path below.

Figure 5.

\Xi 🐵 TOYOTA GTS+ (0) ONLINE	Region : NA	∿ ് i	?								
2023 Crown HEV T24A-FTS		Battery:13.7V	1								
Software as a Part											
File list has been created.Name of the file is "L_JTDAFAAFIP3000156_20240214111236.txt". The file is saved in the following folder.											
C:\Users\Public\Documents\GTSPlus\SoftwareAsaPart	C:\Users\Public\Documents\GTSPlus\SoftwareAsa										
		Exit									
∑ 31: Ver2023.04.003.02 Subscription Expiration:353d		((*))	ONLINE								

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

5. Select OK to proceed to the login screen.

Figure 6.								
\Xi 🞯 TOYOTA GTS+ (0) ONLINE			Region : OT	~	5	ď	i	?
CROWN HEV TZSH35 T24A-FTS	6. TOYOTA [GTS+ (%) ONLINE THEY TZSH35 T24A-FTS [Trigge as a Part Trigge as a Pa				Ba	ttery:	13.7	V
Software as a Part								
1 cal file(s) need to be downloaded. If you press "Next", communication with server will start.								
If it is not possible to download the file, then press "Output" and outp	out the file list.							
	Software as a Part	\$33200-DI-001						
	you need login.							
		ОК						
[☆] :Ď: Ver2023.04.003.02 Subscription Expiration:353d							(0)	ONLINE

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

6. Input your TIS password and select LOG IN.

Figure 7.

ΤΟΥΟΤΑ	
SIGN IN	

Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

7. The required calibration has been downloaded, press Next to begin reprogramming the ECU.



Operation Procedure (continued)

Procedure A: Standard ECU Configuration (CUW Reprogramming) (continued)

8. Refer to Service Bulletin No. <u>T-SB-0107-20</u> ECU Flash Reprogramming With Security Signature and complete the programming as instructed there.

Figure 9.

😁 ΤΟΥΟΤΑ CUW+											
Calibration Update Wizard											
Version 2023.04.003.02											
Welcome to Calibration Update Wizard											
This application is designed for professional automotive technicians who service Toyota, Lexus, and Scion vehicles.											
Some vehicles produced	after January 2020 require a PC co	nnected to the Internet to complete th	ne reprogramming process.								
NOTE:	If you are using a serial mous COM port or disconnect the	e, either plug the diagnostic teste serial mouse and reboot your mac	er into a different :hine.								
The languages 👻	Cancel		Next								
Copyright (C) 2022 TOYOTA MOTOR CORPORA	TION. All Rights Reserved.										

NOTE

On some models, DTCs may be set as a result of reprogramming. If DTCs are present, clear them, and run the Health Check again. Troubleshoot ANY remaining current, pending, or history codes. Permanent codes will NOT be cleared using GTS+. Permanent codes do NOT illuminate the MIL and do NOT require troubleshooting. They will clear during normal driving once the Universal Trip Drive Pattern is performed.

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only)

The following procedure covers Brake and Body ECUs ONLY.

1. AFTER ECU replacement, connect GTS+ to the vehicle and select Next.

Figure 10.

🐵 то	OYOTA GTS+ (··) ONLINE		Region : NA - C2 ?
Veh	icle Connection		
Confir Requi	rm the Information and press Next ired information		
VIN:			
	Division:	ΤΟΥΟΤΑ	•
	Model:	CROWN HEV	~
	Model Year:	2023	~
	Engine:	T24A-FTS	~
]
₽	Manual		

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

2. After performing a Health Check, GTS+ will automatically detect the replacement ECU that needs configuration. On the Health Check Results page, select Yes in the Configure column to begin the configuration process.

Figure 11.

📃 🐵 ΤΟΥΟΤΑ GTS+	(··) ONLINE			Region : I	NA	- .	S	്	i	?
2023 Crown HEV T24A	-FTS						Bat	cery:	13.8	/
Health Check Result										
STATUS										
02/21/2024 15:04:51 Campaign Status: <u>OPEN</u> PERMANENT: NO	02/21/2024 15:04:51 Compensation Pressure Campaign Status: OPEN [psi(gauge)] Compensation Pressure PERMANENT: NO Front:				a network contractionality is available	onnection lable, such as o	to TI campaign	S. validatio	on.	
ECU Security Key: -										
2 Caution										
Enhanced Generic	Completed: 02/21/2024 15:06:46									
+	System			Monitor Status	Configure	RoB	DTC	UF	odate	^
+ Air Conditioner				-	No	0		0	No	
+ SRS Airbag				_	No	3		0	No	
- Main Body				-	Yes	11		0	No	
DTC information										
DTC does not exist.										
Calibration information										
System Calibration						Update	:			
	8922F30180C0					No				
+ Central Gateway				-	No	0		0	No	-
								3	5	1
The Ver2023 04 003 02 Subscription Expirat	tion:360d								(o)	ONLINE

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

3. Perform IG OFF first then IG ON, and press Next to proceed.

Figure 12.								
😑 🞯 TOYOTA GTS+ (💿 ONLINE			Region : NA	•	3	ď	i	?
2023 Crown HEV T24A-FTS					Ba	ttery:	13.8\	
	Software as a Part	\$33200-DL-015						
	Please perform IG OFF first then IG to proceed.	ON, and press Next						
		Next						
S dt Ver2023.04.003.02 Subscription Expiration:360d							(0)	DNLINE

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

4. Press Next to continue to Vehicle Configuration Value writing process.



Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

5. Press Next to begin Vehicle Configuration Value writing process.

Figure 14.								
😑 🞯 TOYOTA GTS+ 💮 ONLINE			Region : NA	-	S	ď	i	?
2023 Crown HEV T24A-FTS					Ba	ttery:	13.8	V
Software as a Part								
Advance to the next processing.								
	Software as a Part	\$33200-DL-016						
	Writing Vehicle Configuration Value	to Main Body will start.						
		Next						
	/							
							Ne	kt
🛞 遺 Ver2023.04.003.02 Subscription Expiration:360d							(0)	ONLINE

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

6. Once writing is complete, press Next to continue.

Figure 15.								
😑 🞯 TOYOTA GTS+ 🔇 ONLINE			Region : NA	÷	S	ď	i	?
2023 Crown HEV T24A-FTS					Ba	ttery:	13.8	V
Software as a Part								
Advance to the next processing.								
	Software as a Part	\$33200-DL-017						
	Writing has completed.							
		Next						
Image: Solution of the second sec								
							Ne	xt
[♥] XD: Ver2023.04.003.02 Subscription Expiration:360d							- W.	

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

7. After the Vehicle Configuration Value writing is complete, updated vehicle information will be sent to the server. Press Next to send vehicle information.

Figure 16.



Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

8. Select OK to proceed to the login screen.

Figure 17.							
🗮 🞯 TOYOTA GTS+ ((·)) ONLINE			Region : NA	S	ď	i	?
2023 Crown HEV T24A-FTS				Ba	ttery:	13.8	V
Send Vehicle Information							
This function is used to send Vehicle Information. When you press "Next", GTS+ starts communication with the	vehicle and sends Vehicle Information.						
	Send Vehicle Information	S33201-DL-002					
	you need login.						
		OK Cancel					
						Ne	xt
🚫 🚓 Ver2023.04.003.02 Subscription Expiration:360d						(0) ONLIN

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

9. Input your TIS password and select LOG IN.

Figure 18.

ΤΟΥΟΤΑ	
SIGN IN	

Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

10. Select Scan again to perform a follow-up Health Check.



Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

11. Press Yes to perform a Health Check on ALL ECUs.



Operation Procedure (continued)

Procedure B: ECU Configuration Value Writing (Body and Brake ECU Only) (continued)

12. After performing a Health Check, confirm No is displayed in the Configure column, and DTC and RoB data are cleared for the newly configured ECU.

Figure 21.

Ξ	🗄 📴 TOYOTA GTS+ (!!) 🕫	NLINE			Region : I	NA	-	Ŋ	ď i	1	?	
2	2023 Crown HEV T24A-FTS							Batt	ery:13	.8V		
Н	lealth Check Result											
~	STATUS											
	02/21/2024 15:13:35 Com Campaign Status: <u>OPEN</u> [psi(PERMANENT: NO Fron ECU Security Key: - Rear	npensation Pressure (gauge)] nt: r:	•	Techstream A network connection is rec	has established uired to ensure all TIS	a network co	onnectio lable, such as	n to TIS campaign v	5. ralidation.			
	Caution											
	Enhanced Generic	Completed: 02/21/2024 15:15:18						_				
	*	System			Monitor Status	Configure	RoB	DTC	Upda	te	^	
	+ Air Conditioner				-	No	0	0	No	1.1.1		
1	+ <u>SRS Airbag</u>				-	No	3	0	No			
	DTC information DTC does not exist.				-	NO			No		l	
	Calibration information		Calibar		1		-			- I		
	System	8922E30180C0	Caubra	tion			No	e				
	+ Control Gateway	07221 50100000			-	No		0	No	믝		
	<u>Central Gateway</u>				-						-	
							•	<u>ک</u> () (Ŋ	
<u>ک</u> .	Ar Ver2022 04 002 02 Subscription Expiration: 260d									((·)) ON	NLINE	

NOTE

On some models, DTCs may be set as a result of reprogramming. If DTCs are present, clear them, and run the Health Check again. Troubleshoot ANY remaining current, pending, or history codes. Permanent codes will NOT be cleared using GTS+. Permanent codes do NOT illuminate the MIL and do NOT require troubleshooting. They will clear during normal driving once the Universal Trip Drive Pattern is performed.