

Replacement ECU Software Configure Process

Service Category Steering

Section Power Assist Systems

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2022 - 2023	Tundra, Tundra HV	
2021 - 2023	Venza HV	
2023	bZ4X, Corolla, Corolla Cross, Corolla Cross HV, Corolla HV, Crown, GR Corolla, Prius, Sequoia HV	

REVISION NOTICE

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 – 2023 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. Techstream software has been modified to indicate when configuration software is required. A new Configure column has been added to the Techstream 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.

Replacement ECU Software Configure Process

Introduction (continued)

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
2023	bZ4X	Airbag / Body / Brake / HV / MG
	Corolla / Corolla HV	Airbag / Body / EMPS / Engine / HV / Inverter / Power Distribution Box
	Corolla Cross / Corolla Cross HV	Airbag / Body
	Crown	Absorber Control / Airbag / ANC / Body / Brake / ECM / EMPS / HV
	GR Corolla	4WD / Airbag / Body / EMPS / Engine / Power Distribution Box
	Prius	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 – 2023	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.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

Replacement ECU Software Configure Process

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.
- GTS+ software version 2022.04.004.02 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

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

*Essential SST.

NOTE

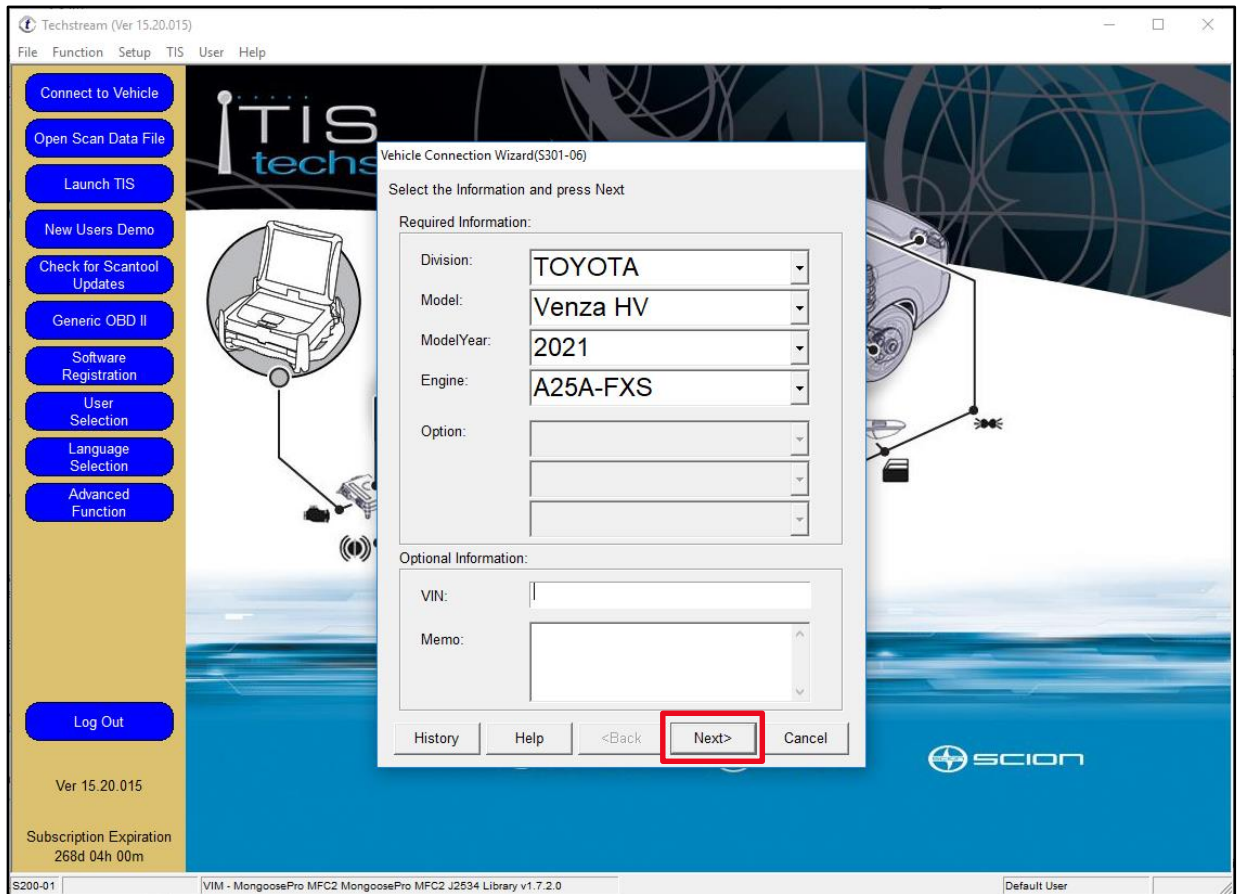
Additional SSTs may be ordered by calling 1-800-933-8335.

Replacement ECU Software Configure Process

Operation Procedure

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

Figure 1.



Replacement ECU Software Configure Process

Operation Procedure (continued)

- Perform a Health Check. During the Health Check, Techstream will automatically detect the replacement ECU needs configuration software. On the Health Check Results page, select Yes in the Configure column to begin the configuration software download process.

Figure 2.

Health Check Results

- Health Check does not display live data.
- Changes in vehicle condition will not update automatically.
- To update Health Check, click the Refresh button on the bottom of the Health Check screen.

Campaign Status: PERMANENT: YES
ECU Security Key: -

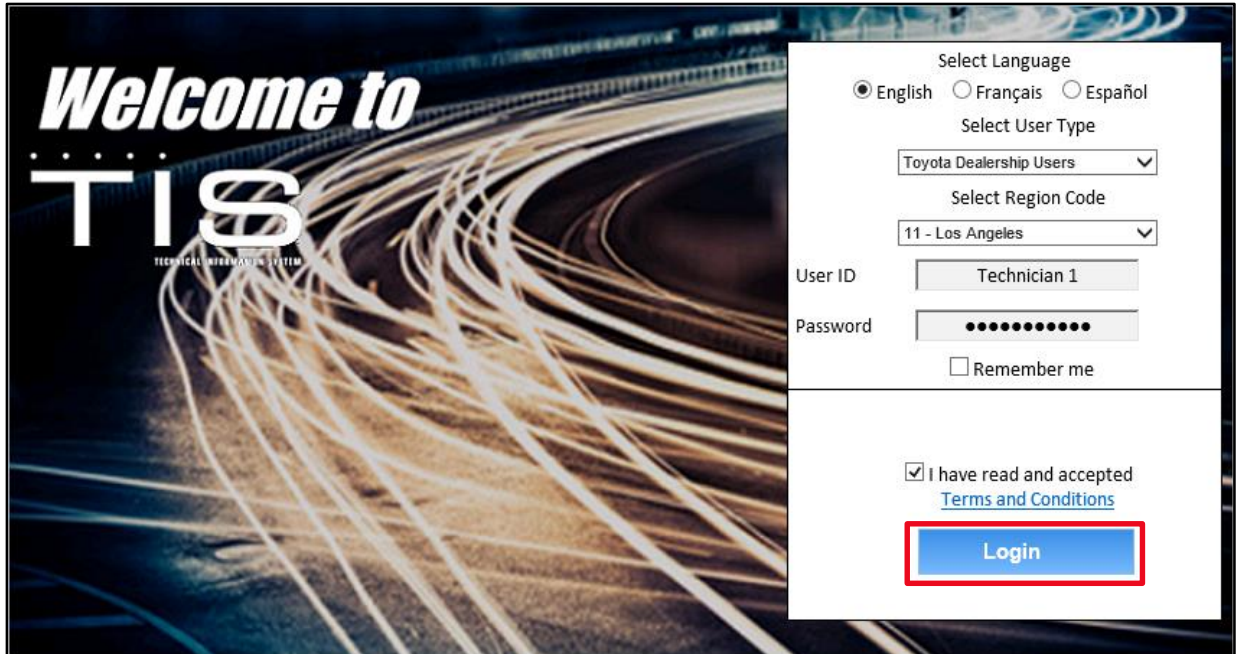
System	Monitor Status	DTC Related Information					RoB	Calibration	Update	Configure
		DTC	Curr Conf	Pend	Hist	Test Failed				
Engine	Com	P261093	X	X		X	8955F5000100	No	Yes	
EMPS	-						8965F4801000	No	Yes	
							8821F50010A0	No		
Clearance Warning	-	U023287	X							
		U023387	X							
		U117787	X						No	
		U117887	X							
Main Body	-	U131157	X							
Transmission	-						8922F4201001	No	Yes	
Hybrid Control	-						8821F50010A0	No	No	
Central Gateway	-						3911F0801000	No	No	
Gear Shift Control Module	-						8821F50010A0	No	No	

Replacement ECU Software Configure Process

Operation Procedure (continued)

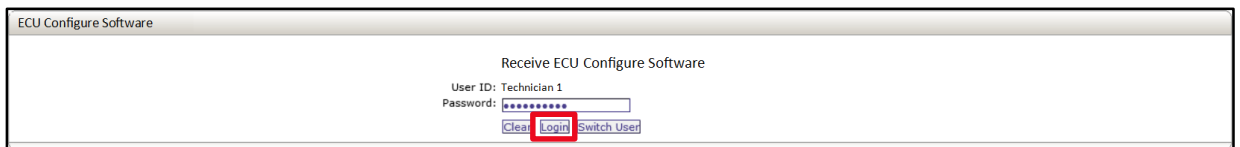
3. Login to TIS.

Figure 3.



4. Enter a password for secondary authentication and select Login.

Figure 4.



5. When the ECU Configure Software confirmation screen is displayed, return to Techstream.

Figure 5.

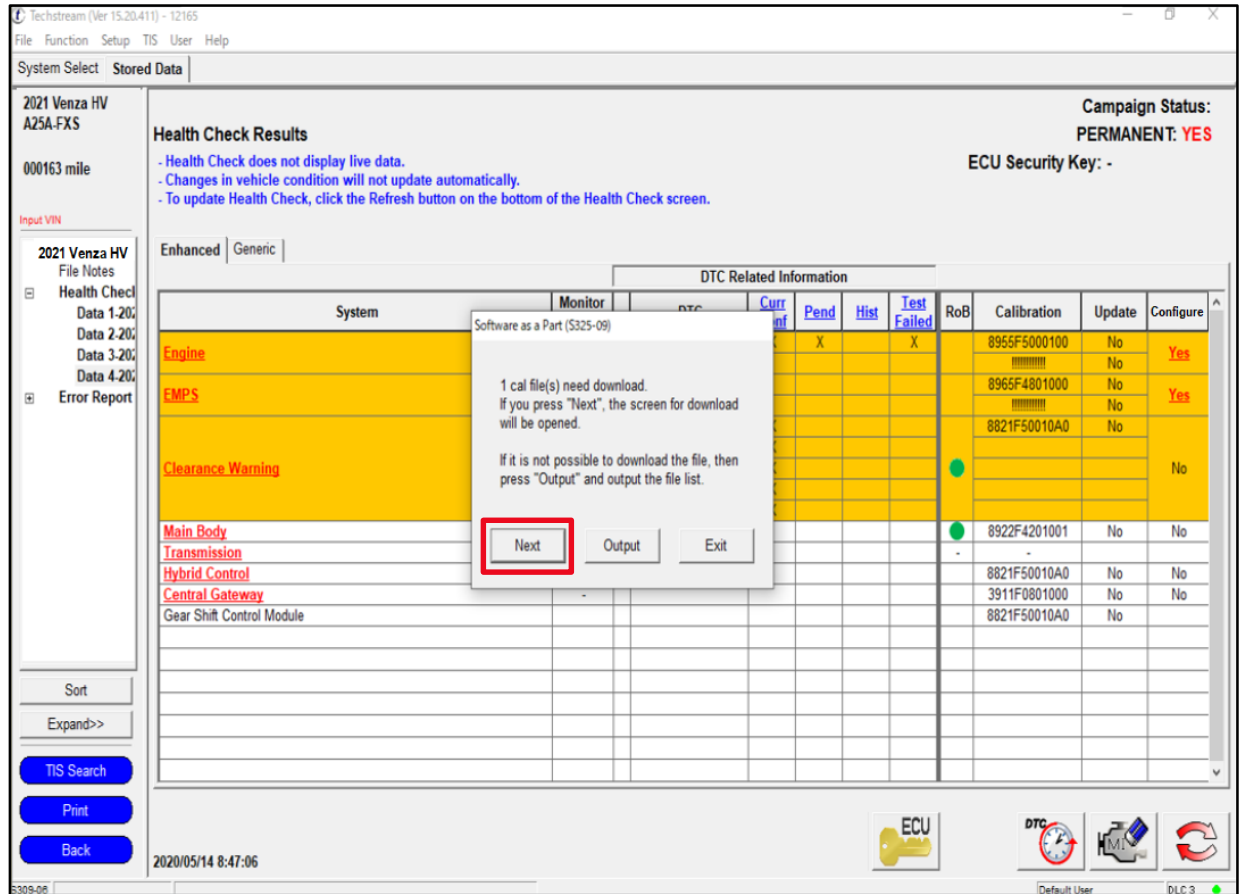


Replacement ECU Software Configure Process

Operation Procedure (continued)

6. Has the configuration software been previously downloaded?
 - **YES** — Continue to step 7.
 - **NO** — Select Next as shown in the figure below and continue to step 7.

Figure 6.



NOTE
 Selecting Output will display a list of the required configuration software for each ECU. This feature is available to print the list of required ECU software when needed.

Replacement ECU Software Configure Process

Operation Procedure (continued)

7. Downloading the software may take several minutes. When the download is complete, select Next to start the Calibration Update Wizard (CUW).

Figure 7.

The screenshot shows a diagnostic tool interface for a 2021 Venza HV. The main window displays 'Health Check Results' with a table of DTC-related information. A dialog box is overlaid on the screen, indicating that the target calibration file has been downloaded and that pressing 'Next' will start reprogramming. The 'Next' button in the dialog box is highlighted with a red rectangle.

System	Monitor Status	DTC	Curr Conf	Pend	Hist	Test Failed	RoB	Calibration	Update	Configure
Engine		P261093	X	X		X		8955F5000100	No	Yes
EMPS								8955F4901000	No	Yes
Clearance Warning								8821F50010A0	No	No
Main Body								8922F4201001	No	No
Transmission										
Hybrid Control								8821F50010A0	No	No
Central Gateway								3911F0801000	No	No
Gear Shift Control Module								8821F50010A0	No	No

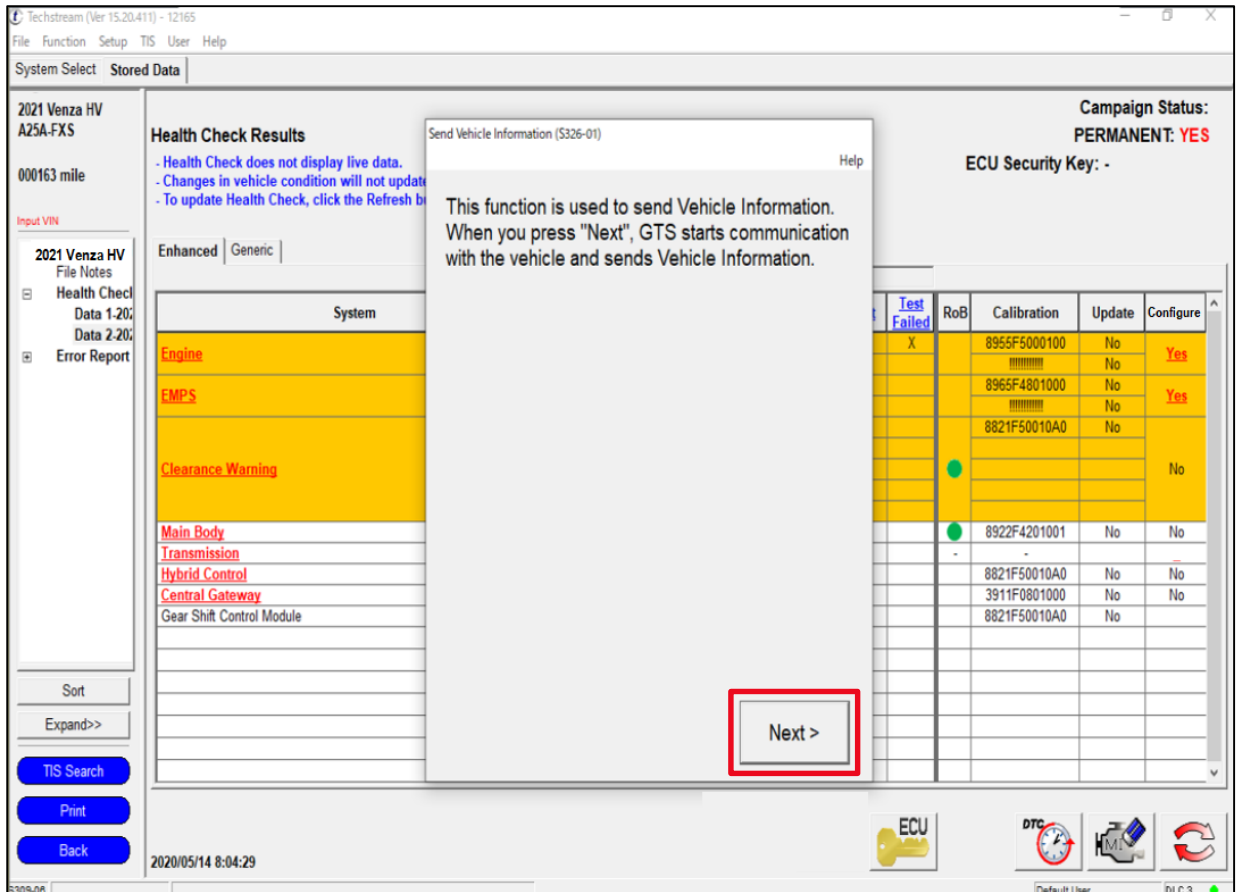
8. Refer to Service Bulletin No. [T-SB-0107-20](#) ECU Flash Reprogramming With Security Signature and complete the programming as instructed there.

Replacement ECU Software Configure Process

Operation Procedure (continued)

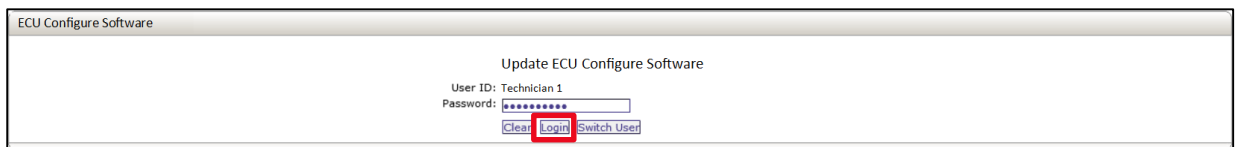
- When programming is complete, Techstream will send the updated vehicle information to TIS. Select Next.

Figure 8.



- Enter a password for secondary authentication and select Login.

Figure 9.

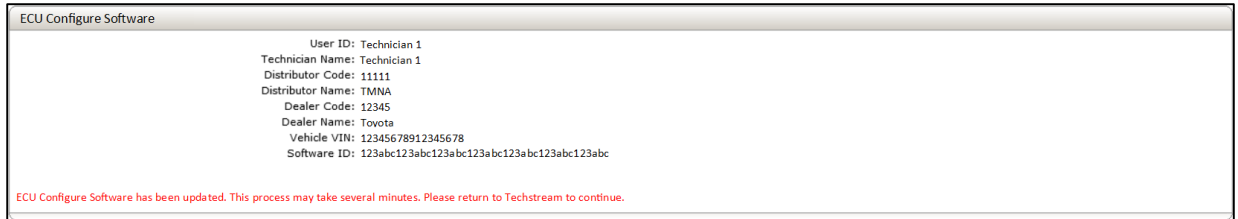


Replacement ECU Software Configure Process

Operation Procedure (continued)

- Return to Techstream when the ECU Configure Software confirmation displays, as shown below.

Figure 10.



- Once Vehicle Information has been sent to TIS, select Exit, clear any DTCs that may have been set, and perform a final Health Check to confirm no additional software updates are available.

Figure 11.

