

Service

Category	Power Source/Network		
		Market USA and	Toyota Supports
Section	Networking	Mexico	Toyota Supports

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION	
2022 - 2024	86, Corolla Cross, Tundra HV		
2024	Grand Highlander, Grand Highlander HV, Highlander, Highlander HV		
2021 - 2024	Mirai, RAV4 Prime, Sienna HV, Tundra, Venza HV		
2023 - 2024	bZ4X, Corolla, Corolla Cross HV, Crown, GR Corolla, Mirai, Prius, Prius Prime, Sequoia HV, Yaris		

REVISION NOTICE

April 11, 2024 Rev2:

- Applicability has been updated to include 2023 2024 model year 86, Corolla, Corolla Cross, Corolla Cross Hybrid, Crown, GR Corolla, Mirai, Prius, Prius Prime, RAV4 Prime, Sequoia Hybrid, Sienna Hybrid, Tundra, Tundra Hybrid, Venza Hybrid, and Yaris and 2024 model year bZ4X, Highlander, Highlander Hybrid, Grand Highlander, and Grand Highlander Hybrid vehicles.
- The entire bulletin has been updated to represent GTS+ Software.

July 08, 2022 Rev1:

• Applicability has been updated to include 2022 model year 86, Corolla Cross, Mirai, Tundra, and Tundra Hybrid vehicles and 2023 model year bZ4X vehicles.

Any previous printed versions of this bulletin should be discarded.

Introduction

When certain vehicle ECUs are replaced, the ECU Security Key must be written in order for that ECU to communicate on the vehicle network. The GTS+ Software Health Check Results screen has been enhanced to help identify if a replacement ECU requires an ECU Security Key. Follow the procedures in this bulletin to write the ECU Security Key to the replacement ECU.

Figure 1.

\Xi 🐵 TOYOTA GTS+ 倾	ONLINE		Region : NA	-	S	്	i	?
2023 Tundra HEV V35A-F	TS			Ba	ttery	:13.5	V	
Health Check Result								
STATUS								
02/08/2024 11:48:27 Campaign Status: <u>OPEN</u> PERMANENT: YES ECU Security Key <mark>Necessary</mark>	Compensation Pressure [psi(gauge)] Front: Rear:		Techstream has established a network co A network connection is required to ensure all TIS functionality is avail				n.	

Warranty Information

For USA and Mexico Markets

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		
Techstream Lite (Green Cable)		TSLP2DLR01		

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- 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*	<u>DCA-8000P T</u>	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).

Procedures

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Confirm ECU Security Key Writing Requirement

After ECU replacement, it is important to confirm if ECU Security Key writing is necessary. There are two methods available to confirm if the ECU Security Key writing function is required within the GTS+ software: performing a Health Check and using the ECU Security Key button.

Health Check

Performing a Health Check will confirm if ECU Security Key writing is needed. The GTS+ Health Check Results screen has been enhanced to include an ECU Security Key indicator. The ECU Security Key indicator will display "Necessary" when an ECU Security Key needs to be written and "-" when ECU Security Key writing is NOT required.

Figure 2.

	Region : NA 🔹 🔨 🗗 🕯	?
2023 Tundra HEV V35A-FTS	Battery:13.	5V
Health Check Result		
STATUS		
	hstream has established a network connection to TIS. nunetion is required to ensure all TIS functionality is available, such as campaign validation.	
Caution		
Enhanced Generic Completed: 02/08/2024 11:51:40		_
+ System	Monitor Status Configure RoB DTC Update	î.
Engine Trailer Brake Controller	Inc No 0 0 No - No <u>1</u> 1 No	
DTC information		
DTC Description C115A15 Output Circuit Short to Battery	Curr/Conf Pending History Test Failed FFD SB x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x	
Calibration information	X NO	-
System Calibration	Update	
8954F0C07400	No	
+ Combination Meter	- No 0 <mark>Yes</mark>	
Acoustic Vehicle Alerting System	- No - 1 No	
DTC information (b) Ver2023.04.003.02 Subscription Expiration:359d	Ŏ 🕾 🗲 🗑 🖄	

Confirm ECU Security Key Writing Requirement (continued)

ECU Security Key Button

Selecting the ECU Security Key button is another method to confirm if ECU Security Key writing is required. From the Main Menu screen, select the ECU Security Key button.

Figure 3.						
😑 🐵 TOYOTA GTS+ 🔲 ONLINE	Region : NA	•	S	₫	i	?
2023 Tundra HEV V35A-FTS			Ba	ttery	13.4	/
Main Menu						
Tire Pressure / Threshold Value [psi(gauge)]						
Sensor1: 40.15 / 27.68 Sensor2: 40.90 / 27.68 Sensor3: 39.41 / 27.68 Sensor4: 40.65 / 27.68 Sensor5: N/A / N/A						
Image: System Select Image: System Select Image: System Select Image: Stored Data Image: Stored Data Image: Stored Data Image: S	Send Vehicle Informa		O (
က္ဆံ Ver2023.04.003.02 Subscription Expiration:359d					(0)	ONLIN

NOTE

Selecting this option can allow ECU Security Key writing even if it is not required. If the ECU Security Key does NOT need to be written, a message will appear stating "ECU Security Key is already written."

Figure 4.

ECU Security Key			
This function performs ECU Security Key writing on the targeted ECU. When "Next" is pressed, communication with the vehicle will start.			
	FOLICE IN IX	_	
	ECU Security Key	\$33100-DL-007	
	ECU Security Key is already written Would you like to write it, even the	bugh it is written?	
	Ye	s No	

ECU Security Key Writing Process

NOTE

The process outlined in this section will use the Health Check Result screen to confirm if ECU Security Key writing is required.

1. Connect GTS+ to the vehicle and press the arrow button to go to the next step.

NOTE

In some instances, automatic vehicle detection may not be available due to specific ECU replacement. If the vehicle information does NOT automatically populate, manually select the appropriate vehicle information.

Figure 5.

		Region : NA	· 2	!?
Vehicle Connection				
Confirm the Information and press Next Required information				
VIN reacquisition VIN manual input				
Division:	ΤΟΥΟΤΑ		~	
Model:	Tundra HEV		~	
Model Year:	2023		~	
Engine:	V35A-FTS		~	
Manual				\rightarrow
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ECU Security Key Writing Process (continued)

2. Perform a Health Check.

If the ECU Security Key indicator in the upper lefthand corner of the Health Check screen displays "Necessary," navigate to the Main Menu and select the ECU Security Key button as shown below.

Figure 6.

😑 🐵 TOYOTA GTS+ (0) ONLI	NE			Regio	n : NA		19 (3 i	?
2023 Tundra HEV V35A-FTS							Batte	ery:13.	5V
Health Check Result									
STATUS									
		Ð	Techstream has A network connection is required					lation.	
Caution									
Enhanced Generic	Completed: 02/08/2024 11:51:40								
+	System			Monitor Status	<u> </u>	RoB	DTC	Update	2
+ Engine Trailer Brake Controller				Inc -	No No	0	0	No No	
DTC information									
DTC	Description			Curr / Conf Per	nding <u>History</u>	Test Fai			
C115A15 Output Circuit Short to B	Battery			х			*	No	
Calibration information									
System	8954F0C07400	Calibra	ation			Update No			
+ Combination Meter					No	0	0	Yes	
Acoustic Vehicle Alerting System				1	No	-	1	No	
DTC information									*
						•	<u>)</u> 86	Ō	

Figure 7.



ECU Security Key Writing Process (continued)

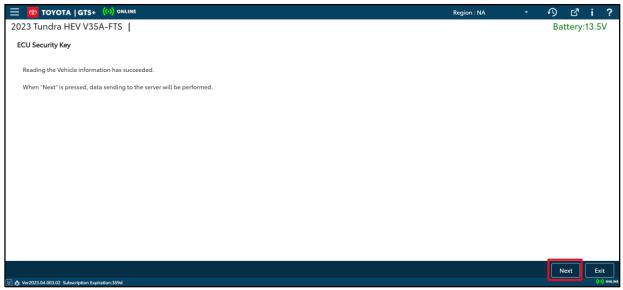
3. Select Next to begin ECU Security Key writing.



	Region : NA	*	9	Z	i ?
2023 Tundra HEV V35A-FTS			Batte	ery:13	3.4V
ECU Security Key					
This function performs ECU Security Key writing on the targeted ECU. When "Next" is pressed, communication with the vehicle will start.					
			Next	٦ſ	Exit
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4. GTS+ will read the vehicle information. Select Next to send the information to the server.





ECU Security Key Writing Process (continued)

5. Select OK to login.

Fi	a	n	re	1	0	
	3	-			•••	

\Xi 🐵 TOYOTA GTS+ ((·)) ONLINE				♥ I	
2023 Tundra HEV V35A-FTS				Battery:	13.5V
ECU Security Key					
Reading the Vehicle information has succeeded.					
When "Next" is pressed, data sending to the server will be performed.					
	FCU Security Key	533100-DI -001			
	you need login.				
		ок			
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6. Enter your TIS password and select LOG IN.

Figure 11.

SIGN IN Password LOG IN	ΤΟΥΟΤΑ
Password	
	SIGN IN
LOG IN	Password
	LOG IN

ECU Security Key Writing Process (continued)

7. Cycle the ignition to IG-OFF, and then IG-ON. Select Next.



\Xi 🐵 ΤΟΥΟΤΑ GTS+ (ω) ONLINE	Region : NA	•	Э (2	i	?
2023 Tundra HEV V35A-FTS			Batte	ery:1	3.5V	5.
ECU Security Key						
Checking the writing result. Please perform IG OFF first then IG ON, and press Next to proceed.						
			Next		Exit	
ি ∰ Wer2023.04.003.02 Subscription Expiration:359d					(H) a	INLINE

8. Select OK.

Figure 13.

😑 📴 TOYOTA GTS+ 🕪 ONLINE	Region : NA	•	5	ď	i	?
2023 Tundra HEV V35A-FTS			Bat	ttery:	3.4	/
ECU Security Key						
Writing ECU Security Key information is complete.						
				[OK	
🗑 🏤 Ver2023.04.003.02 Subscription Expiration:359d					(()	ONLINE

ECU Security Key Writing Process (continued)

9. Confirm the ECU Security Key has been properly written by performing a Health Check and confirming the ECU Security Key indicator shows "-", and then clear ALL DTCs.

Figure 14.

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2023 Tundra HEV V35A-F	TS					Ba	ttery:	:13.5	V
Health Check Result									
STATUS									
02/08/2024 11:48:27 Campaign Status: <u>OPEN</u> <u>PERMANENT: YES</u> ECU Security Key: -	Compensation Pressure [psi(gauge)] Front: Rear:	Q	Techstream has establi A network connection is required to ensure a					1.	

NOTE

The ECU Security Key indicator will show "Necessary" if the Security Key was NOT written properly. If NOT written properly, return to step 2.