ECU Security Key Writing

Service Category Power Source/Network

Section Networking

Market USA and Mexico

Toyota Supports
ASE Certification

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.

ECU Security Key Writing

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.
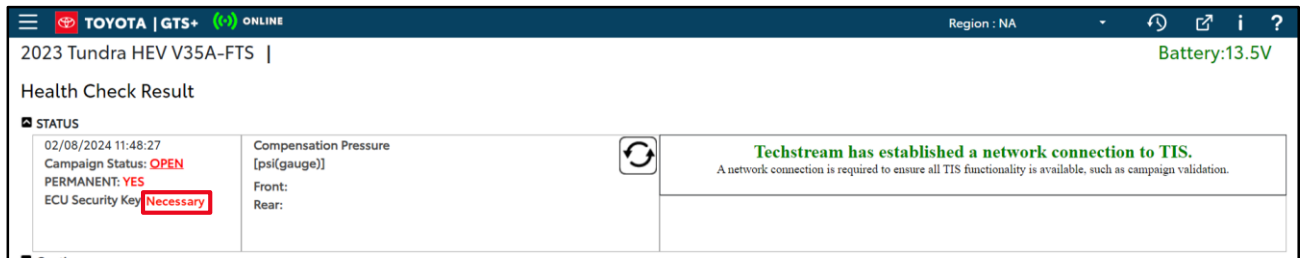
Warranty Information

For USA and Mexico Markets

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

ECU Security Key Writing

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 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).*
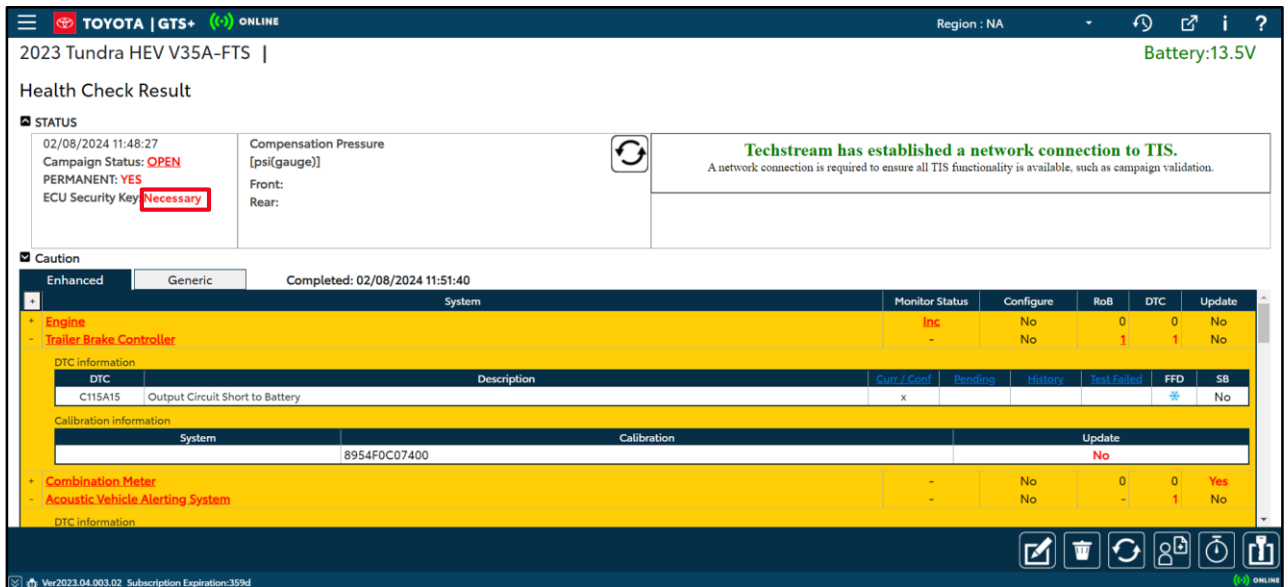
Procedures

ECU Security Key Writing

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.

ECU Security Key Writing

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.
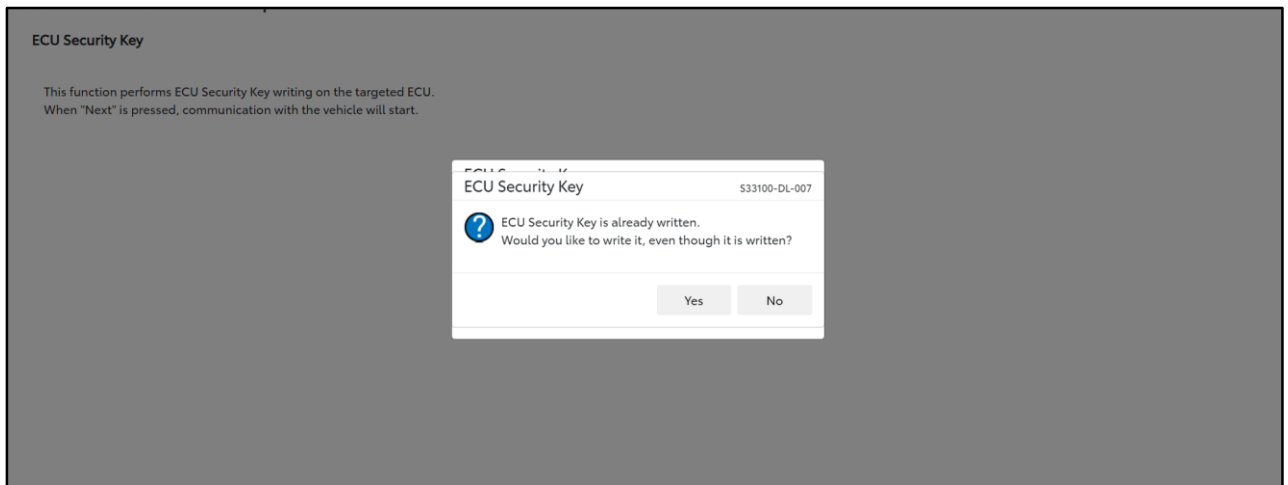
Figure 3.
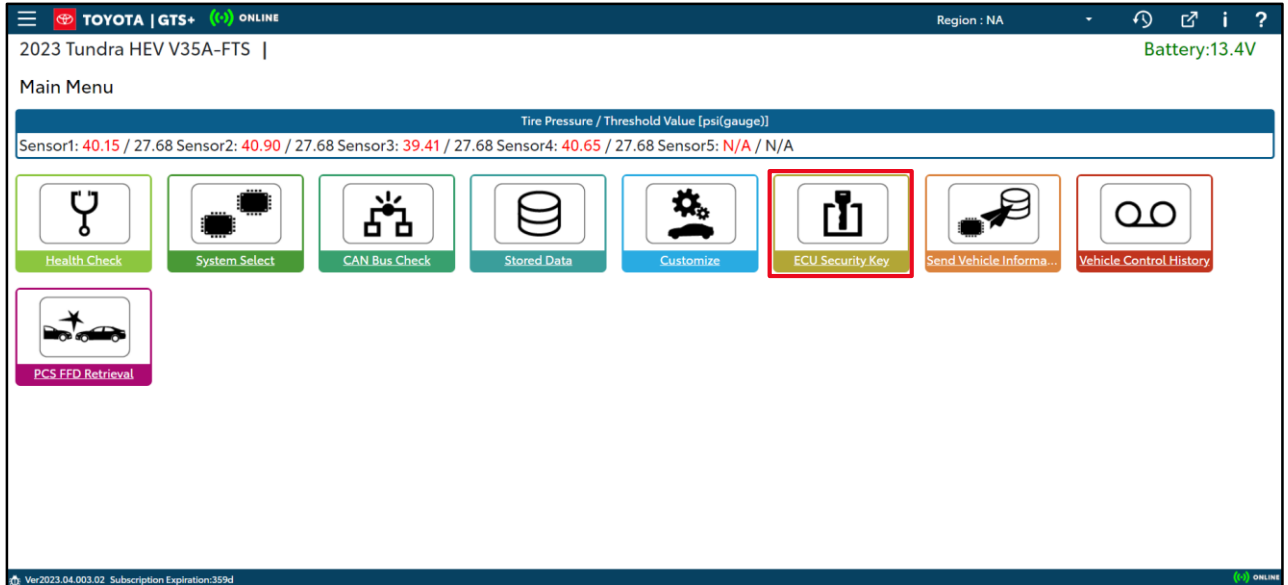
NOTE

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 Writing

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.
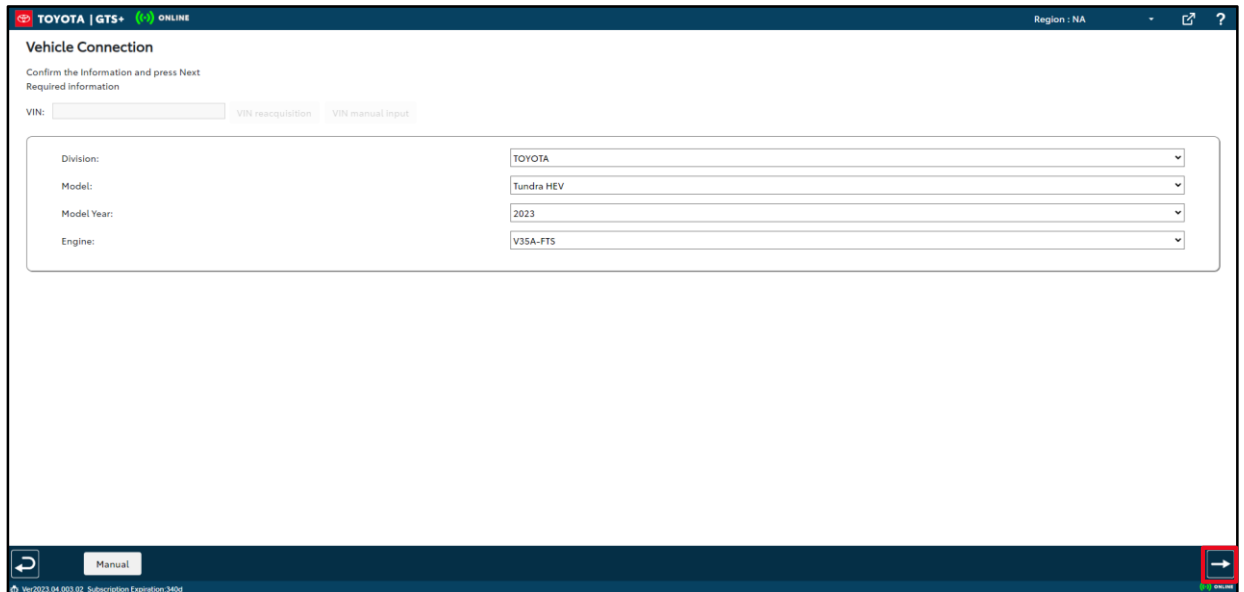
ECU Security Key Writing

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.
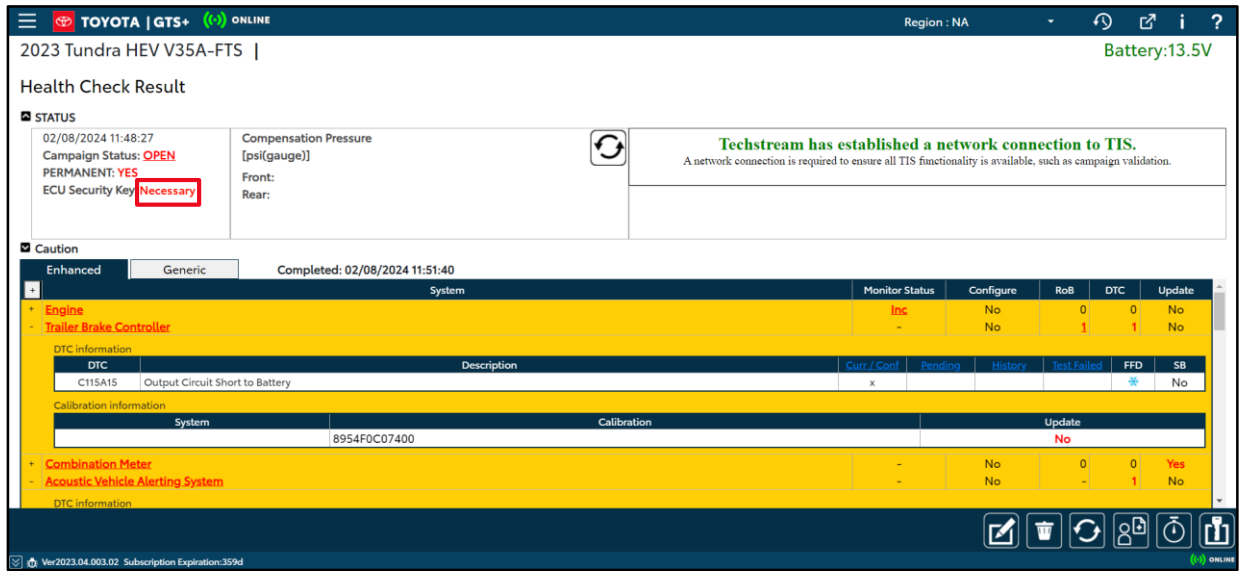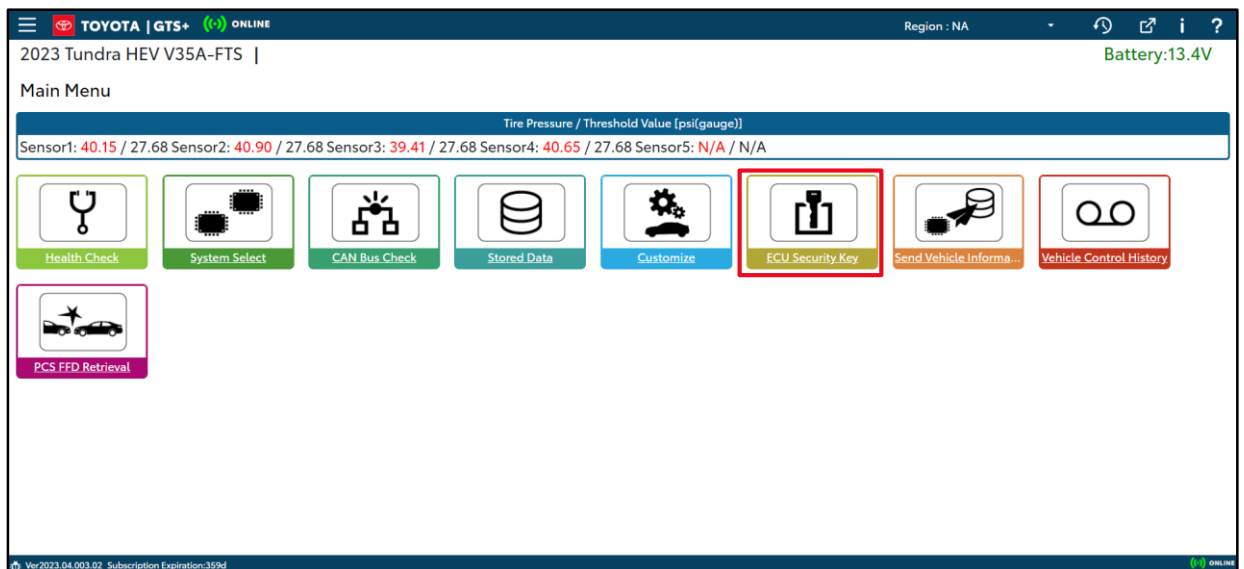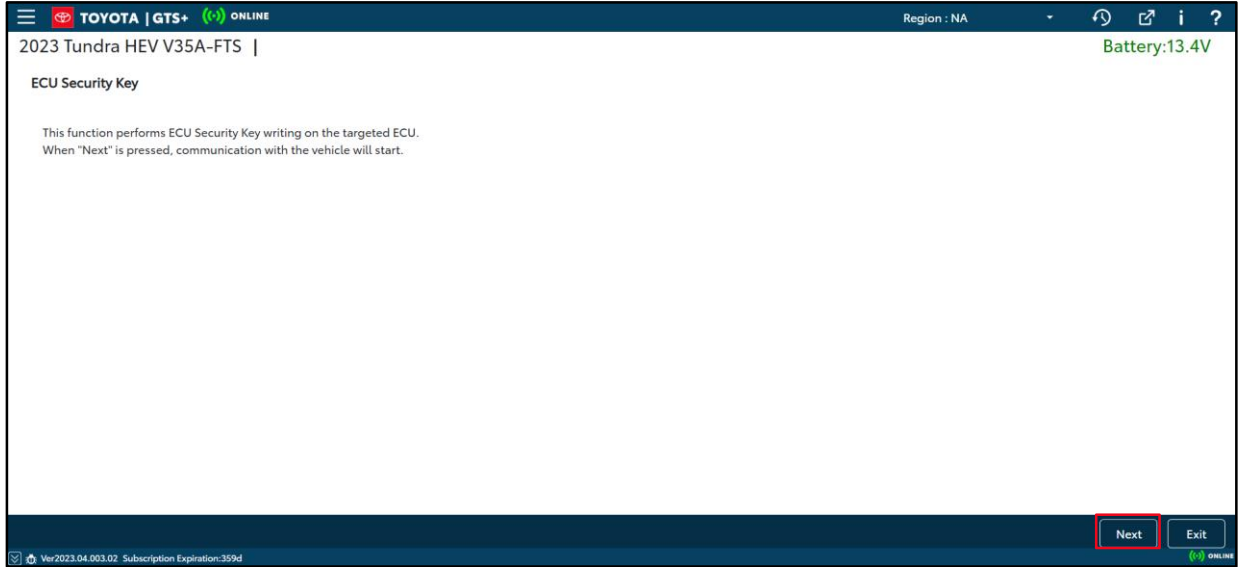
Figure 6.

Figure 7.

ECU Security Key Writing

ECU Security Key Writing Process (continued)

3. Select Next to begin ECU Security Key writing.

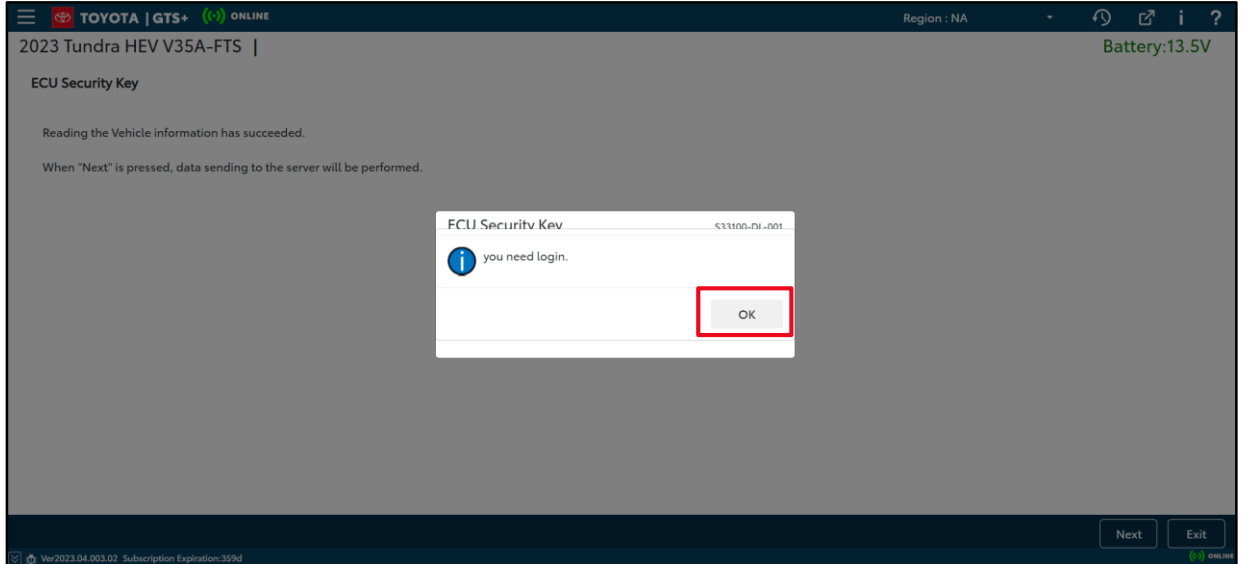4. GTS+ will read the vehicle information. Select Next to send the information to the server.
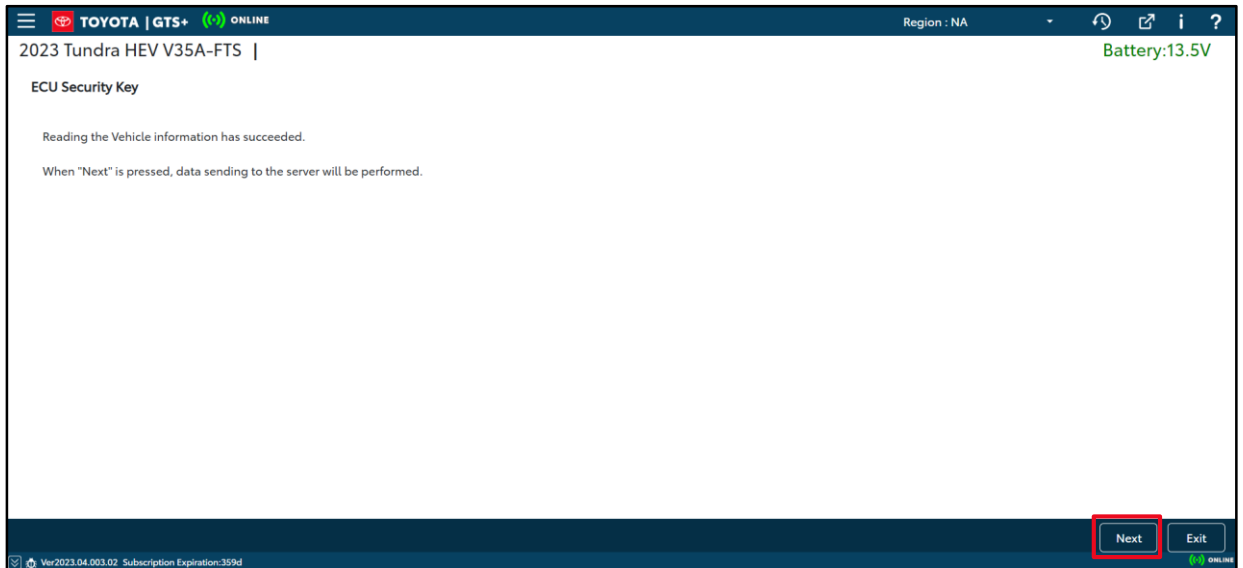
ECU Security Key Writing
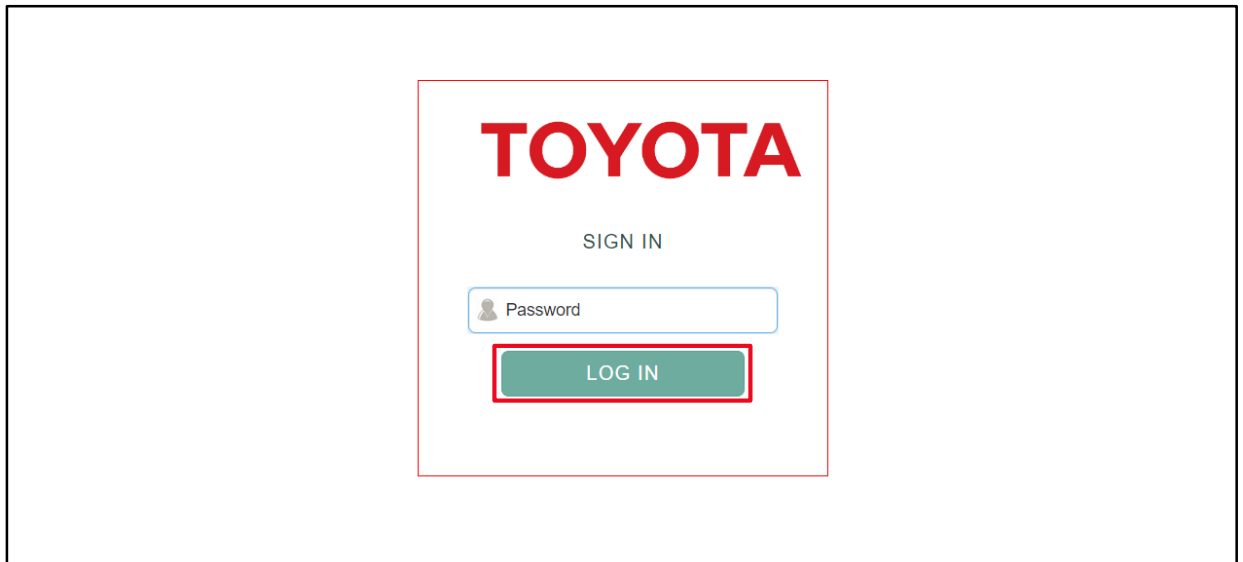

ECU Security Key Writing Process (continued)

5. Select OK to login.

    Figure 10.

6. Enter your TIS password and select LOG IN.
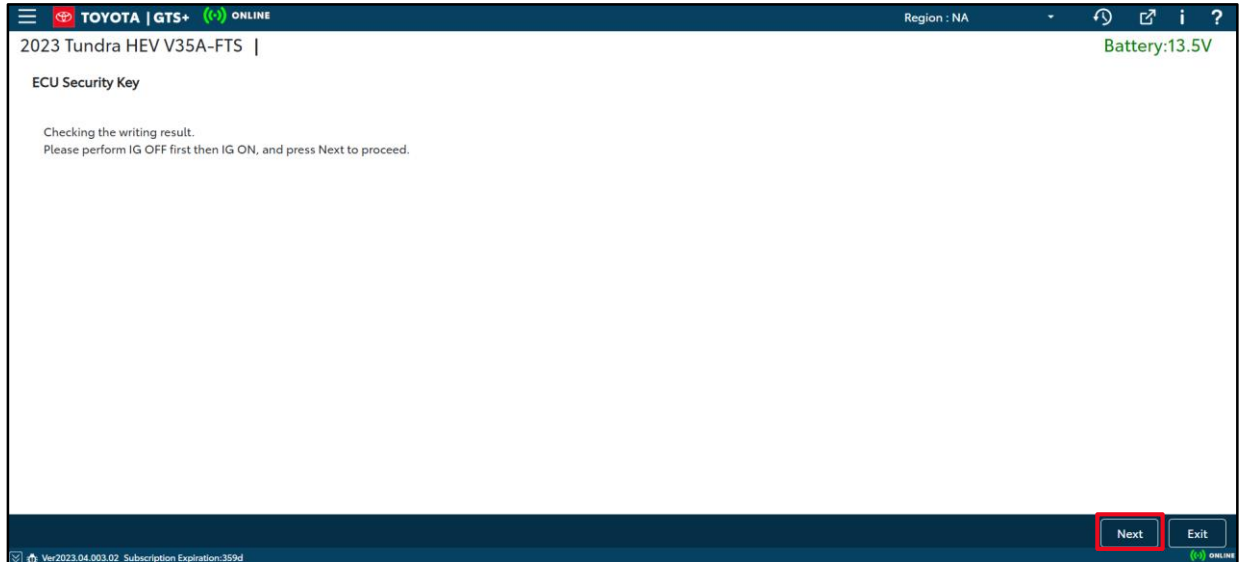
    Figure 11.

ECU Security Key Writing
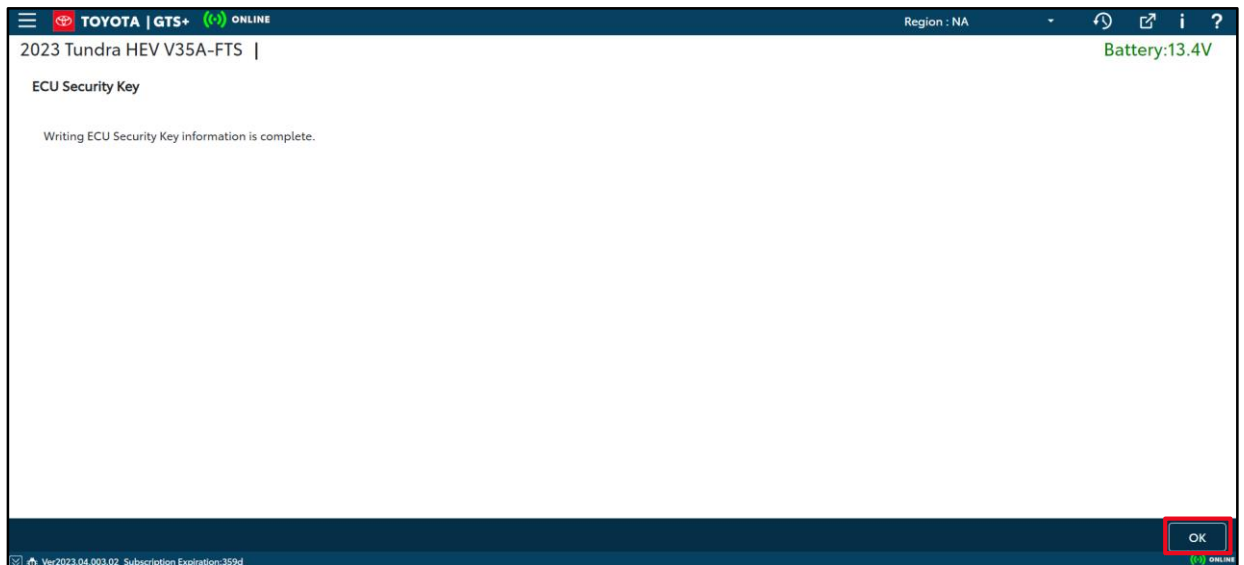
ECU Security Key Writing Process (continued)

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

   Figure 12.

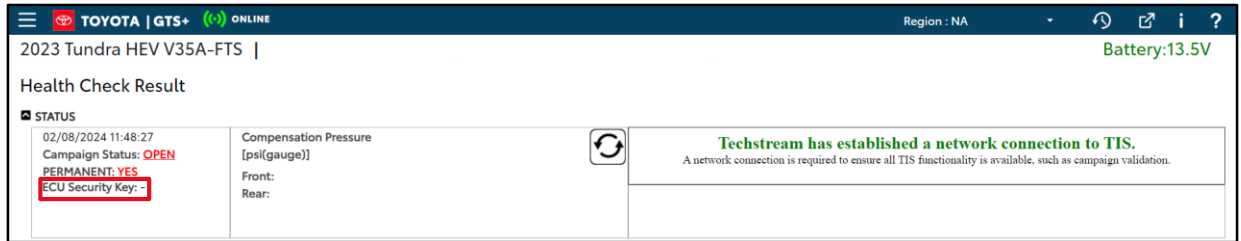8. Select OK.

   Figure 13.

ECU Security Key Writing

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.

> **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.