TOYOTA
Technical Service Bulletin

ECU Security Key Writing

Service Category Power Source/Network

Section Networking   **Market** USA

Toyota Supports
ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2022	86, Corolla Cross, Tundra HV	
2021 - 2022	Mirai, RAV4 Prime, Sienna HV, Tundra, Venza HV	
2023	bZ4X	

REVISION NOTICE

July 08, 2022 Rev1:

- **Applicability has been updated to include 2022 model year 86, Corolla Cross, Mirai, Tundra, and Tundra HV 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 Techstream 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.
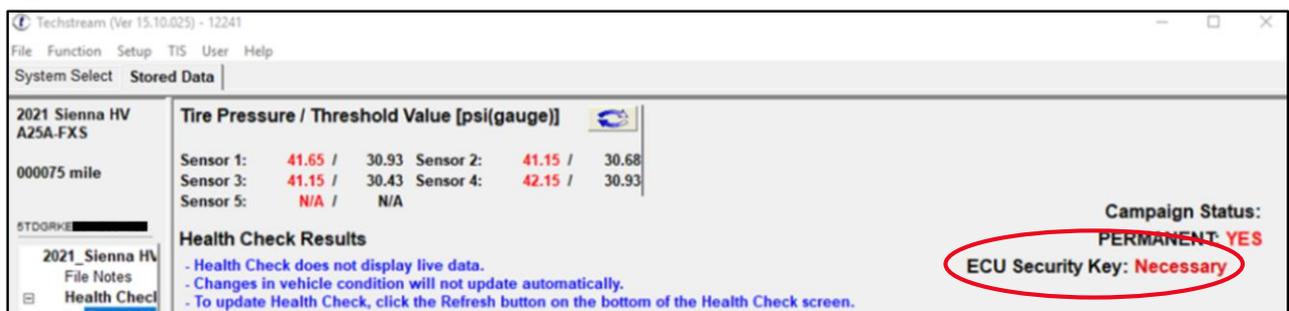
ECU Security Key Writing

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*	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 17.10.012 or later is required.
> - Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
> - Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

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.

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 Techstream 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 Techstream 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 System Select screen, the ECU Security Key button is located on the left-hand side of the function menu.

> **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 registered."

Figure 3.
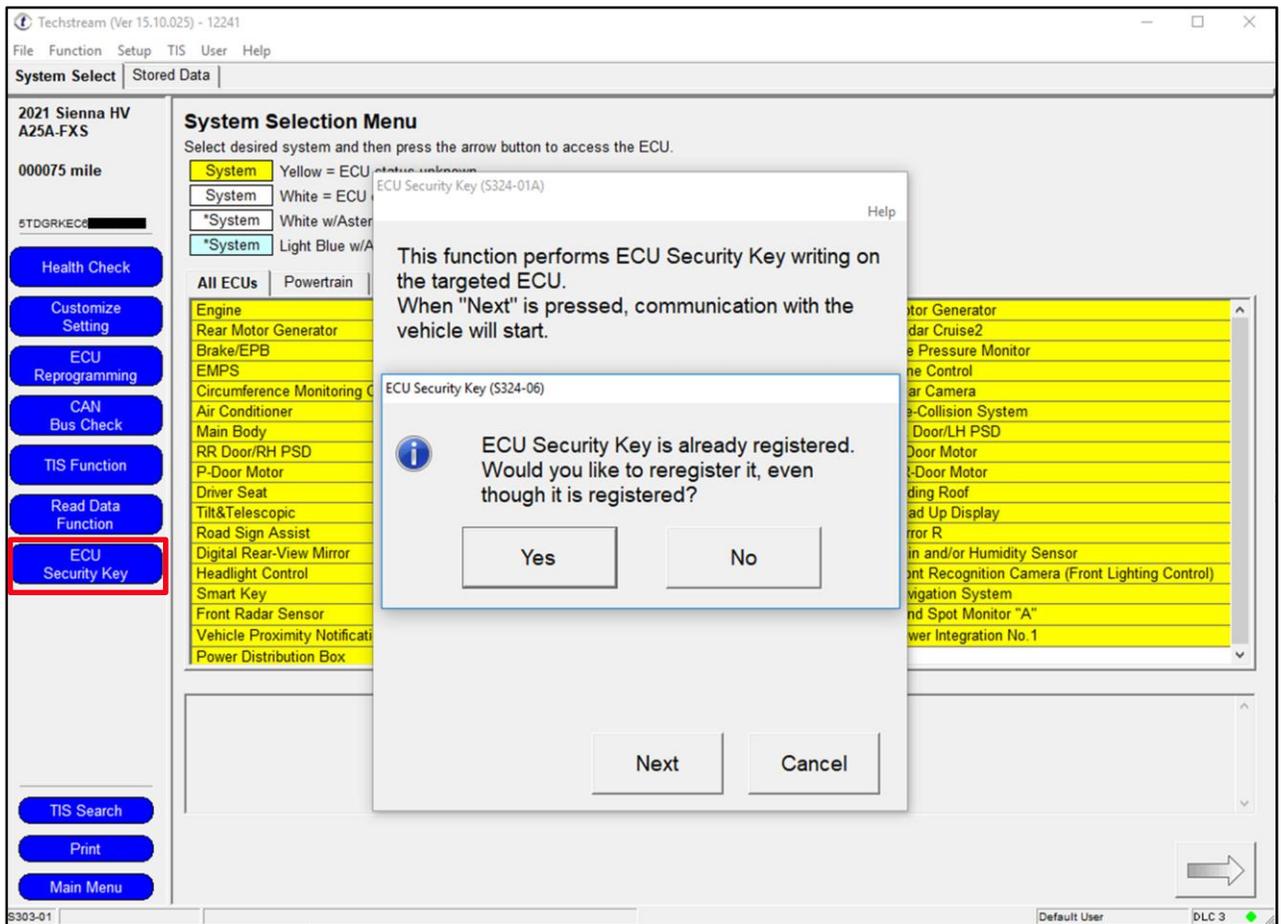
ECU Security Key Writing

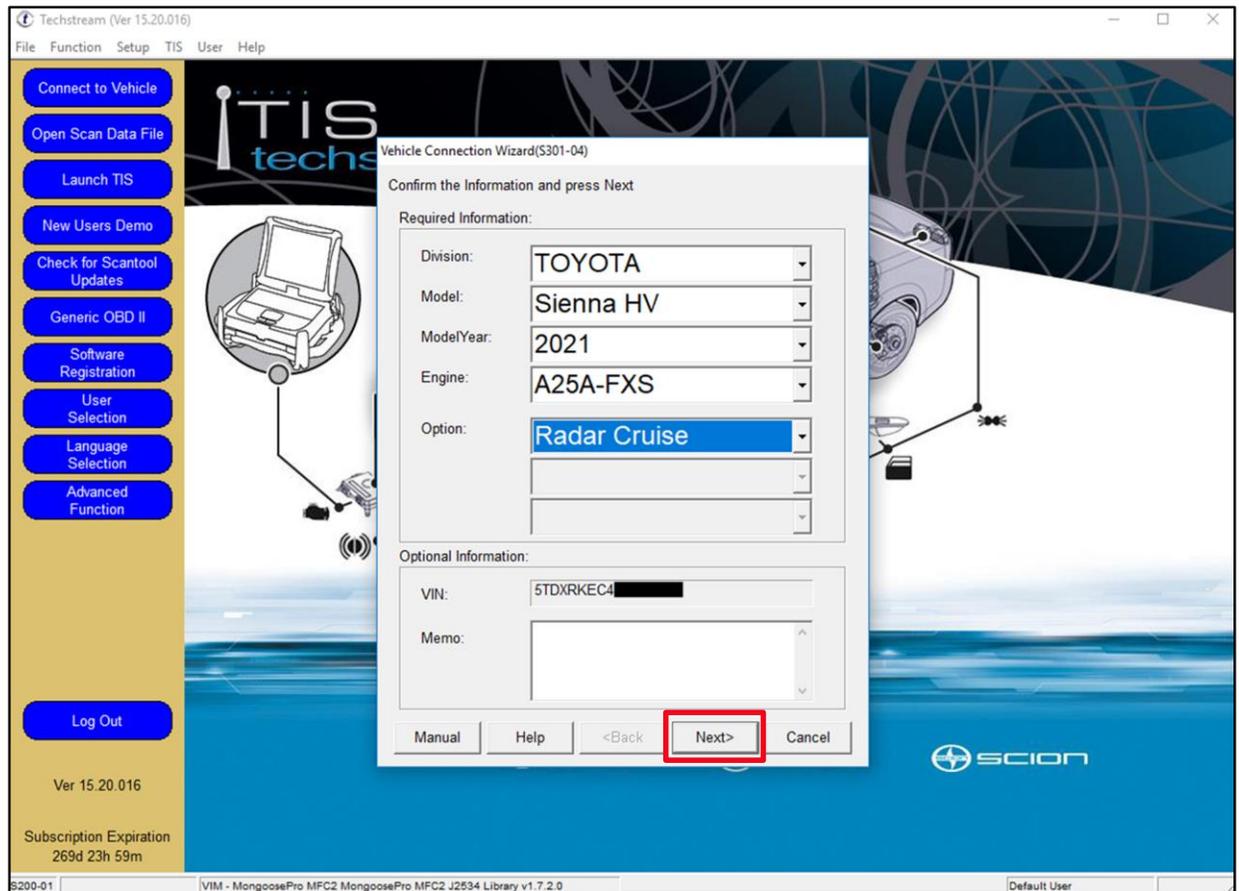**ECU Security Key Writing Process**

> **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 Techstream to the vehicle and press Next.

   > **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 4.

ECU Security Key Writing

ECU Security Key Writing Process (continued)

2. Perform a Health Check.

    If the ECU Security Key indicator in the upper right corner of the Health Check screen displays "Necessary," press the ECU key button located on the bottom of the screen.
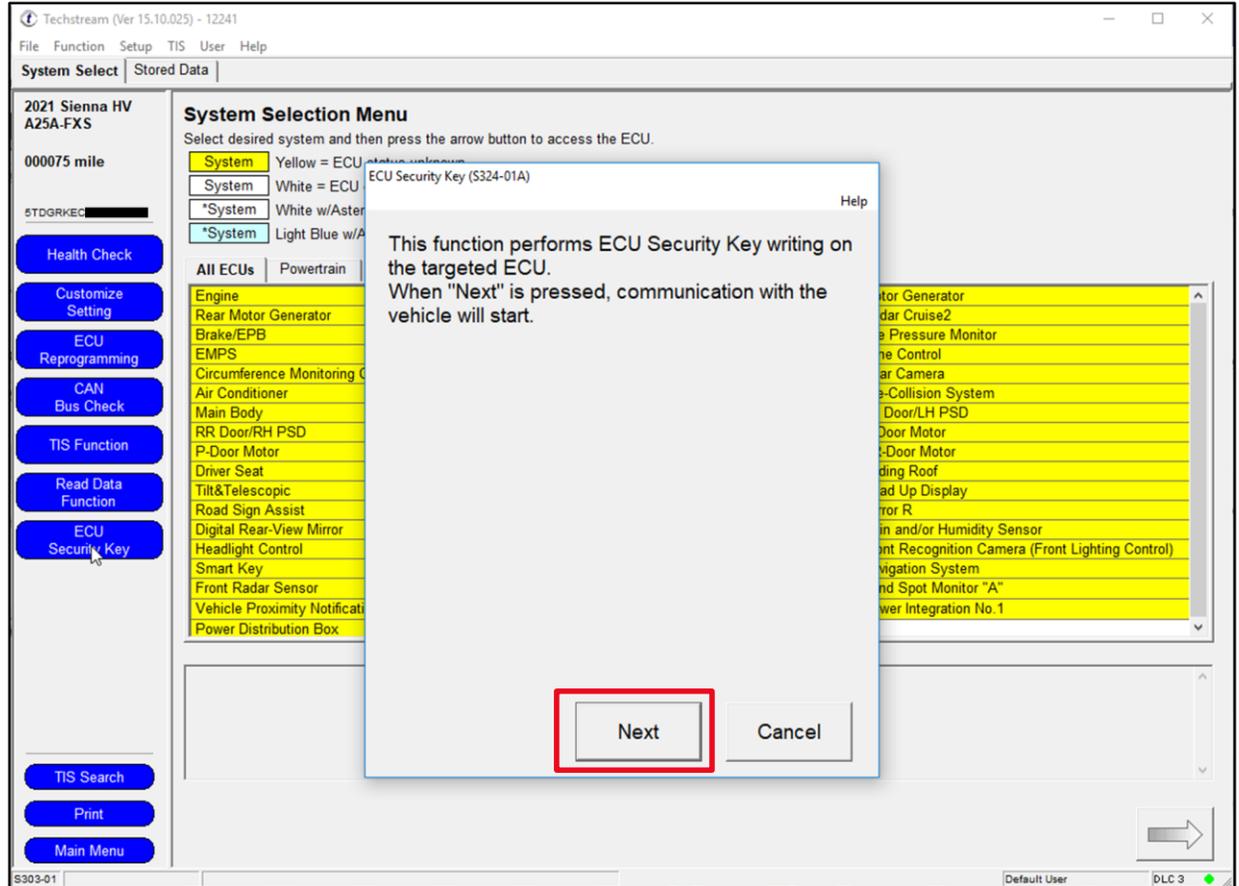
Figure 5.

ECU Security Key Writing

ECU Security Key Writing Process (continued)

3. Select Next.

4. Techstream will read the vehicle information and open TIS to download the ECU security key. Input your TIS login credentials and select Login.
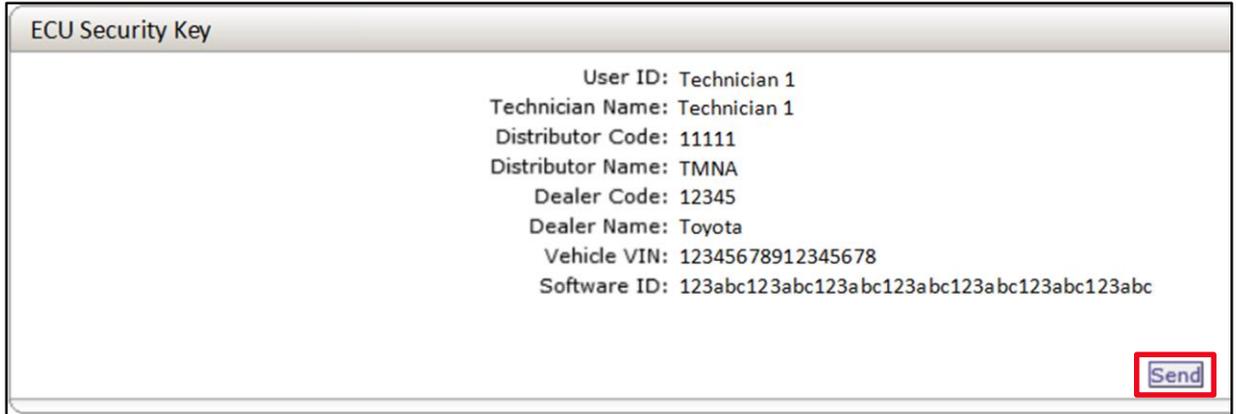
Figure 7.

ECU Security Key Writing

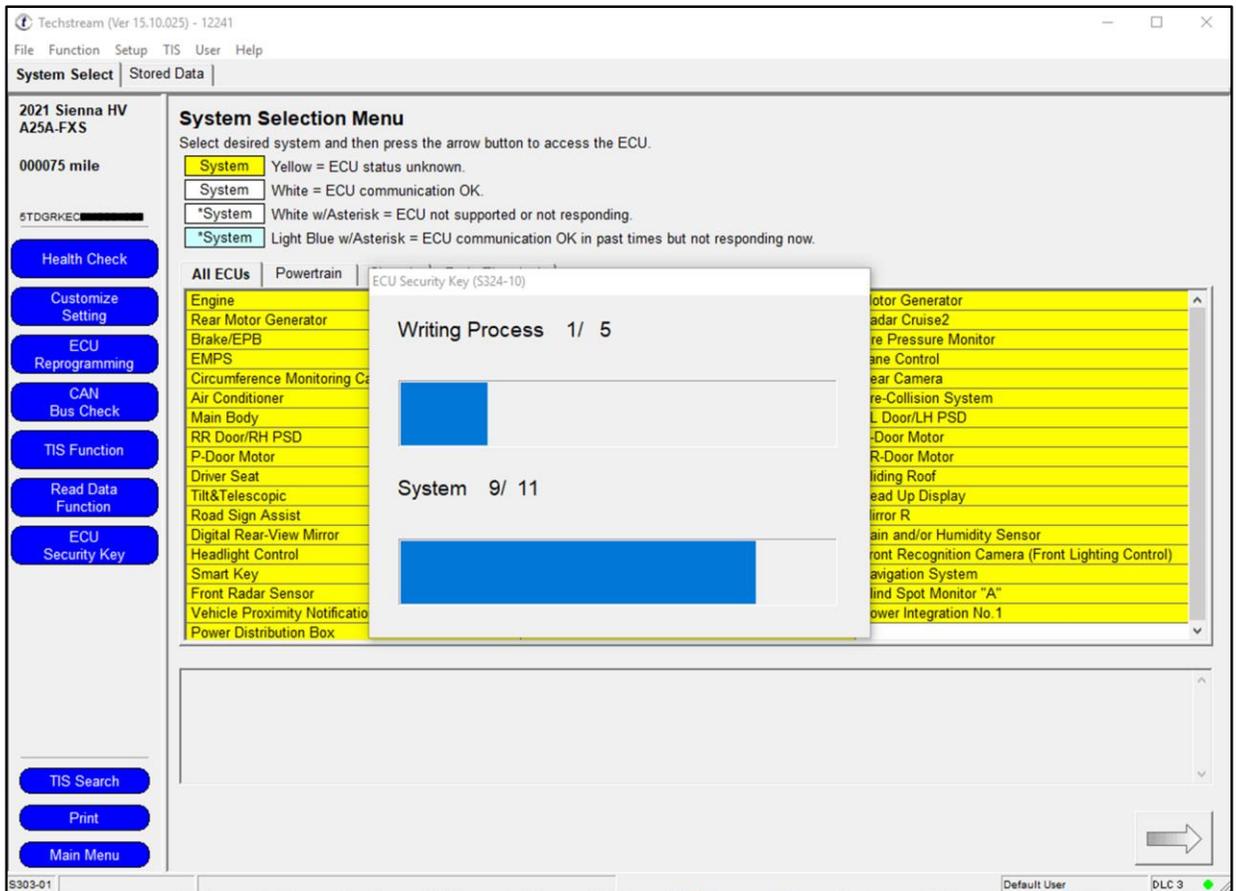**ECU Security Key Writing Process (continued)**

5. Select Send.

Figure 8.

6. After pressing Send, TIS will automatically send the ECU security key to Techstream. Return to Techstream and wait for the writing process to complete.
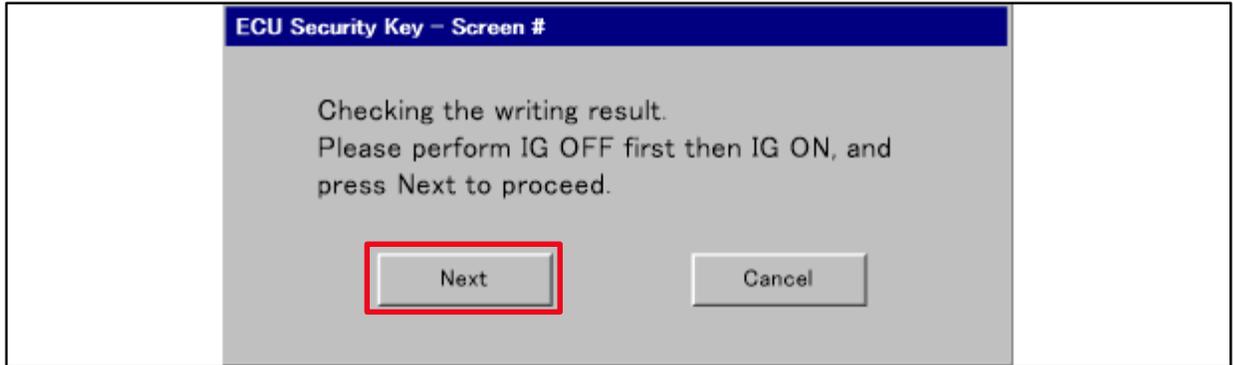
Figure 9.

ECU Security Key Writing

ECU Security Key Writing Process (continued)

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

    Figure 10.

8. Select OK.

    Figure 11.

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 12.

    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.