

Service

Category Power Source/Network

	Supports
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Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021	RAV4 Prime, Sienna HV, Venza HV	

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.

Techstream (Ver 15.10	.025) - 12241	- 🗆 X
File Function Setup	TIS User Help	
System Select Store	d Data	
2021 Sienna HV A25A-FXS	Tire Pressure / Threshold Value [psi(gauge)]	
000075 mile	Sensor 1: 41.65 / 30.93 Sensor 2: 41.15 / 30.68 Sensor 3: 41.15 / 30.43 Sensor 4: 42.15 / 30.93 Sensor 5: N/A / N/A N/A 41.15 / 30.93	Campaign Status:
2021_Sienna HV File Notes	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.	ECU Security Key: Necessary

Warranty Information

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

Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVi*		TSADVUNIT	
Techstream 2.0		TS2UNIT	4
Techstream Lite	ADE	TSLITEPDLR01	
Techstream Lite (Green Cable)	ite (Green Cable)		

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 15.20.016 or later is required.
- Additional SSTs may be ordered by calling 1-800-933-8335.

Procedures

•	Confirm ECU Security Key Requirement	3
	Health Check	3
	<u>ECU Security Key Button</u>	4
•	ECU Security Key Writing Process	5

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.

Status Cont Failed 896630857001 N Radar Cruise2 -	000075 mile STDGRKEC 2021_Sienna HV File Notes Health Checl Data 1-4/1	Sensor 1: 41.65 / 30.93 Sen Sensor 3: 41.15 / 30.43 Sen Sensor 5: N/A / N/A Health Check Results - Health Check does not display live - Changes in vehicle condition will - To update Health Check, click the	sor 2: 41.15 / sor 4: 42.15 / data. not update automati	30.68 30.93							Campaig	un Statue:
Description Sensor 3: 41.15 / 30.43 Sensor 4: 42.15 / 30.93 Sensor 5: N/A / N/A STDGREEC Sensor 5: N/A / N/A N/A Campaign Stream 2021_Senan H File Notes 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. ECU Security Key: Necessary Entror Report Entror Report DTC Related Information ECU Security Key: Necessary Engine Inc DTC Cont Pend Hist Failed SB Radar Cruise2 - - - - - - Tite Pressure Monitor - - - - - - Main Body - -	STDGRKEC 2021_Sienna Hv File Notes ⊟ Health Checl Data 1-4/1	Sensor 3: 41.15 / 30.43 Sen Sensor 5: N/A / N/A Health Check Results - Health Check does not display live - Changes in vehicle condition will - To update Health Check, click the	sor 4: 42.15 /	30.93							Campaig	in Statue:
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2021_Sienna Hr File Notes - Health Check does not display live data. ECU Security Key: Necessary □ Health Check Data 1447 - To update Health Check, click the Refresh button on the bottom of the Health Check screen. ECU Security Key: Necessary • To update Health Check, click the Refresh button on the bottom of the Health Check screen. • To update Health Check, click the Refresh button on the bottom of the Health Check screen. • ECU Security Key: Necessary • Enror Report • To update Health Check, click the Refresh button on the bottom of the Health Check screen. • ECU Security Key: Necessary • Internet • Outpate • Outpate • Outpate • Enror Report • Outpate • Outpate • Outpate • Engine Monitor DTC Curr • Outpate • Radar Cruise2 • Inc • Outpate • Outpate • Outpate • Tire Pressure Monitor • Inc • Outpate • Outpate • Outpate • Smart Key • Outpate • Outpate • Outpate • Outpate • Ower Source Control • Outpate • Outpate • Outpate • Outpate • Bind Spot Monitor "A" • Outpate • Outpate • Outpate • Outpate • Outpate <th>File Notes Health Checl Data 1-4/1</th> <th>Health Check does not display live Changes in vehicle condition will To update Health Check, click the</th> <th>not update automati</th> <th>cally.</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>and the second se</th> <th>-</th>	File Notes Health Checl Data 1-4/1	Health Check does not display live Changes in vehicle condition will To update Health Check, click the	not update automati	cally.							and the second se	-
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SystemStatusDTCContPendHistFailedSBRoBCalibrationUpdEngineInc <th></th> <th></th> <th></th> <th>D</th> <th>TC Related</th> <th>Informa</th> <th>tion</th> <th></th> <th></th> <th></th> <th></th> <th></th>				D	TC Related	Informa	tion					
Radar Cruise2 - <		System		DTC		Pend	Hist	Test Failed	SB	RoB	Calibration	Update
Tire Pressure Monitor - Image: Second secon		Engine	Inc								896630857001	No
Front Radar Sensor - 0 8821F3301400 N Pre-Collision System -												
Pre-Collision System ·												No
Smart Key ·									_		8821F3301400	No
Main Body . 8922F0801000 N Power Source Control .			•									
Power Source Control Image: Source Control			•									
Blind Spot Monitor "B" - 8816F0802101 N Blind Spot Monitor "A" - 8816F0802102 N Headlight Control - 894F4503002 N Power Distribution Box - 89884450201A N Motor Generator 89884450201A N			•		_						8922F0801000	No
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		Motor Generator										No
												No
Hybrid Control	Sort	Hybrid Control	· -									No
Expand>> Radar Cruise1	Expand>>	Padar Cruizat									09900001000	NO
			· ·							· ·	8678030269	No
Rear Camera	TIS Search	Rear Camera								·		No
	no oblich										0010100001	

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.

Techstream (Ver 15.10.	.025) - 12241				- [X
File Function Setup	TIS User Help					
System Select Store	d Data					
System Select Store: 2021 Sienna HV A25A-FXS 000075 mile STDGRKECC Health Check Customize Setting ECU Reprogramming CAN Bus Check TIS Function Read Data Function ECU Security Key	System Selection N Select desired system and th	en press the arrow button ECU Security Key (5324-014 This function p the targeted EC When "Next" is vehicle will star ECU Security Key (5324-04 () ECU S Would thoug Ye	erforms ECU Se CU. s pressed, comm t.	curity Key writing of nunication with the lready registered. gister it, even	Help tor Generator dar Cruise2 e Pressure Monitor ne Control ar Camera e-Collision System Door/LH PSD Door Motor LDoor Motor ding Roof ad Up Display ror R in and/or Humidity Sensor in Recognition Camera (Front Lighting Contr vigation System nd Spot Monitor "A" wer Integration No.1	(n)
TIS Search Print Main Menu			Next	Cancel		, ,
S303-01	1				Default User I	DLC 3 🔶 🏾

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.

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	' S	-		

Techstream (Ver 15.20.01	6)	– 🗆 X
File Function Setup TIS	S User Help	
Connect to Vehicle Open Scan Data File Launch TIS	Vehicle Connection Wizard(S301-04) Confirm the Information and press Next	
	Required Information:	
New Users Demo Check for Scantool Updates Generic OBD II Software Registration User Selection Language Selection Advanced Function	Required information: Division: Division: Model: Sienna HV ModelYear: 2021 Engine: A25A-FXS Option:	
	Optional Information:	
	VIN: 5TDXRKEC4	
	Memo:	-
Log Out	Manual Help <back next=""> Cancel</back>	
Ver 15.20.016		
Subscription Expiration 269d 23h 59m		
S200-01	VIM - MongoosePro MFC2 MongoosePro MFC2 J2534 Library v1.7.2.0	Default User

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.

1 Sienna HV 5A-FXS	Tire Pressure / Threshold Value	ue [psi(gauge)]									
075 mile	Sensor 1: 41.65 / 30.93 Se Sensor 3: 41.15 / 30.43 Se Sensor 5: N/A / N/A		30.68 30.93								
GRKE										Campaig	
2021_Sienna HV File Notes Health Checl Data 1-4/1 Error Report	Health Check Results - Health Check does not display liv - Changes in vehicle condition will - To update Health Check, click the Enhanced Generic	not update automatic	ally. bottom of the l	lealth Che	ck scree	n.	[ECU	l Secu	PERMAN urity Key: Nece	
	Enhanced Generic		D	TC Related	Informa	tion					
	System	Monitor Status	DTC	Curr	Pend	Hist	Test Failed	SB	RoB	Calibration	Update
	Engine	Inc								896630857001	No
	Radar Cruise2										
	Tire Pressure Monitor									897BF0101000	No
	Front Radar Sensor									8821F3301400	No
	Pre-Collision System			_							
	Smart Key	-		_						-	
	Main Body			_						8922F0801000	No
	Power Source Control				-					-	
	Blind Spot Monitor "B"									8816F0802101	No
	Blind Spot Monitor "A" Headlight Control									8816F0802102 8994F4503002	No
	Power Distribution Box									8273F0801000	No
		-							-	89884450201A	No
	Motor Generator	· +		-					• • •	89884450100A	No
										899830801000	No
Sort	Hybrid Control	· · +								899850801000	No
Sort	Radar Cruise1	-							-	-	
Sort Expand>>	Radar Cruise I									867B03C269 867B13C007	No No
	Rear Camera	· · ·									

ECU Security Key Writing Process (continued)

3. Select Next.

Figure 6.

Techstream (Ver 15.10.0)	025) - 12241	– 🗆 ×
File Function Setup T	TIS User Help	
System Select Stored	I Data	
2021 Sienna HV A25A-FXS 000075 mile STDGRKEC Health Check Customize Setting ECU Reprogramming CAN Bus Check TIS Function Read Data Function ECU Security Key	Rear Motor Generator vehicle will start. a Prive Set Brake/EPB b Provide Set b Provide Set Circumference Monitoring C a C b Provide Set Air Conditioner b Provide Set b Provide Set Door Motor D Provide Set b Provide Set Digital Rear-View Mirror in an Headlight Control b ror f Smart Key Front Radar Sensor wigat	Generator ^ ^ Cruise2 essure Monitor
TIS Search	Next Cancel	
Print Main Menu		

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	
	Receive ECU Security Key
	User ID: Technician 1
	Password:
	Clear Login Switch User

ECU Security Key Writing Process (continued)

5. Select Send.

Figure 8.

ECU Security Key	
User ID:	Technician 1
Technician Name:	Technician 1
Distributor Code:	11111
Distributor Name:	TMNA
Dealer Code:	12345
Dealer Name:	Toyota
Vehicle VIN:	12345678912345678
Software ID:	123abc123abc123abc123abc123abc123abc123abc
<	Send

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.		
Techstream (Ver 15		- 🗆 X
File Function Setup		
System Select St	ored Data	
2021 Sienna HV A25A-FXS	System Selection Menu	
Second Second	Select desired system and then press the arrow button to access the ECU.	
000075 mile	System Yellow = ECU status unknown.	
	System White = ECU communication OK.	
5TDGRKEC	*System White w/Asterisk = ECU not supported or not responding.	
	*System Light Blue w/Asterisk = ECU communication OK in past times but not responding no	w
Health Check		
	All ECUs Powertrain ECU Security Key (\$324-10)	
Customize	Engine	lotor Generator
Setting	Base Mater Conceptor	adar Cruise2
ECU	Brake/EPB Writing Process 1/ 5	re Pressure Monitor
Reprogramming	EMPS	ane Control
	Circumference Monitoring Ca	ear Camera
CAN	Air Conditioner	re-Collision System
Bus Check	Main Body	L Door/LH PSD
	RR Door/RH PSD	-Door Motor
TIS Function	P-Door Motor	R-Door Motor
DUIDU	Driver Seat	liding Roof
Read Data Function	Tilt&Telescopic System 9/ 11	ead Up Display
Function	Road Sign Assist	lirror R
ECU	Digital Rear-View Mirror	ain and/or Humidity Sensor
Security Key	Headlight Control	ront Recognition Camera (Front Lighting Control)
· · · · · · · · · · · · · · · · · · ·	Smart Key	avigation System
	Front Radar Sensor	lind Spot Monitor "A"
	Vehicle Proximity Notificatio	ower Integration No.1
	Power Distribution Box	·
		^
TIS Search		×
Print		N
Main Menu		
S303-01		Default User DLC 3 🔶

ECU Security Key Writing Process (continued)

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

Figure 10.

ECU Security Key – Screen #
Checking the writing result. Please perform IG OFF first then IG ON, and press Next to proceed.
Next Cancel

8. Select Ok.

Figure 11.		
	ECU Security Key - Screen #	
	Writing ECU Security Key information is complete.	
	ОК	

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

Figure 12.

2021 Sienna HV A25A-FXS	Tire Press	ure / Thre	shold Value [p	si(gauge)]	0		
000076 mile	Sensor 1: Sensor 3:	39.16 / 40.15 /	27.68 Sensor 27.68 Sensor		27.68 27.68		
	Sensor 5:	N/A /	27.68				Campaign Status:
5TDERKEC	Health Ch	eck Resul	ts				PERMANENT: NO
2021_Sienna HV File Notes ⊡ Health Checl Data 1-5/1	- Health Chi - Changes i - To update	n vehicle co	ot display live dat ondition will not u ock, click the Refr	ECU Security Key: -			

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.