

TECHNICAL INSTRUCTIONS
FOR
LIMITED-SERVICE CAMPAIGN 24TD04

DATA COMMUNICATION MODULE (DCM) UPDATE

CERTAIN 2020 - 2023 SUPRA

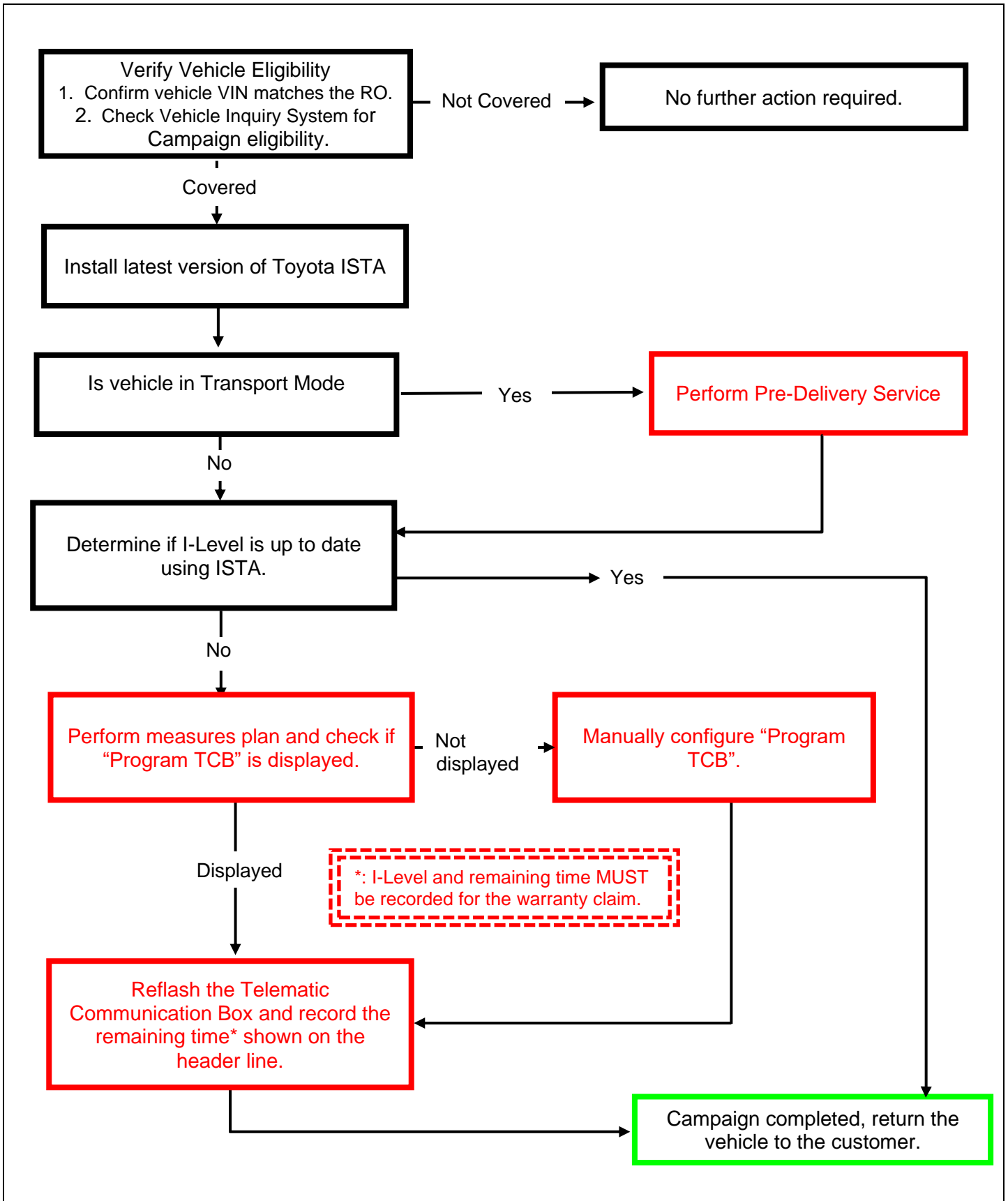
The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this recall are required to successfully complete the most current version of the E-Learning course “Safety Recall and Service Campaign Essentials”. To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to currently have completed all the following courses:

- TIC206A – Electrical repair 1
- TEN019A – Supra Diagnosis

It is the dealership’s responsibility to select technicians that have completed the above courses to perform this repair. Carefully review your resources, the technician’s skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to always perform this repair.

OPERATION FLOW CHART

The flow chart is for reference only. **DO NOT** use it in place of the full technical instructions. Follow **ALL** steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



I. IDENTIFICATION OF AFFECTED VEHICLES

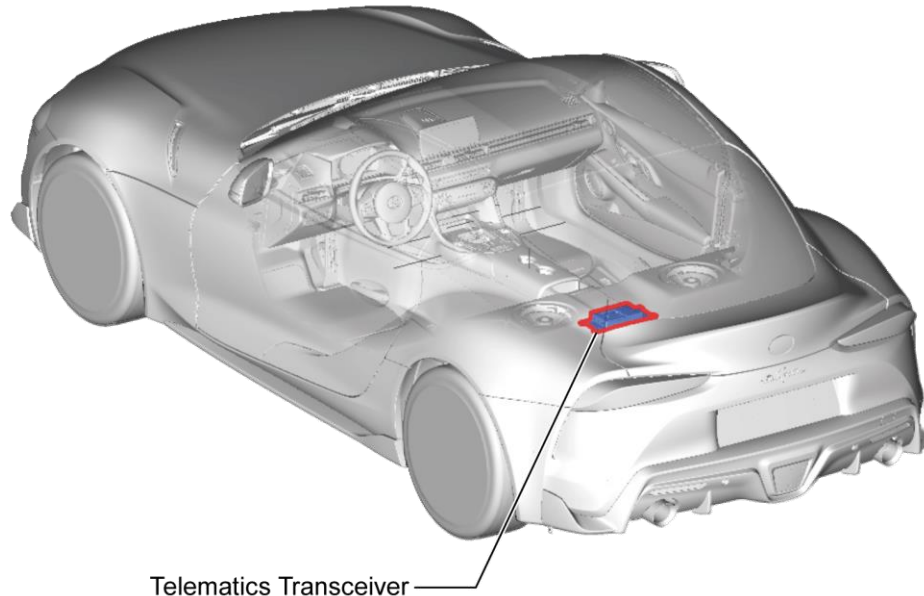
- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were completed by another dealer.

II. PREPARATION

A. TOOLS, SUPPLIES & EQUIPMENT

- Standard Hand Tools
- Toyota ISTA Diagnostic Cable
- Protective Tape
- T-SB-0083-19
- Techstream ADVi
- DCA-8000P Battery Diagnostic Tool
- T-SB-0151-19
- T-SB-0038-20

III. BACKGROUND



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IV. OVERVIEW OF REMEDY PROCEDURE (REPROGRAMMING USING ISTA)

Software inside the vehicle's computers are reprogrammed using Toyota ISTA. Reprogramming of ECUs via Toyota ISTA requires that the software version status of the ECUs on the vehicle is unified, so reprogramming is always carried out for all ECUs.

It is not possible to select a target ECU and then reprogram it individually. Always follow the directions of this document when carrying out reprogramming work in order to prevent any potential damage to the ECUs due to by communication errors, voltage drops, or other problems.

V. INSTALL THE LATEST VERSION OF TOYOTA ISTA

1. INSTALL TOYOTA ISTA

- a. It is **CRITICAL** to install the latest version of Toyota ISTA on the Techstream ADVi. Your current ISTA version may not be sufficient for this campaign.

Minimum* ISTA Version Required for this Campaign: 4.40.14

*Versions of ISTA higher than **4.40.14** are also acceptable. As a best practice you should always install the latest version of ISTA when performing this campaign.

VI. CHECK ISTA VERSION OF TECHSTREAM

1. CHECK TOYOTA ISTA VERSION

- a. It is **CRITICAL** to confirm that the ISTA version installed on your Techstream ADVi meets or exceeds version 4.40.14 before proceeding.

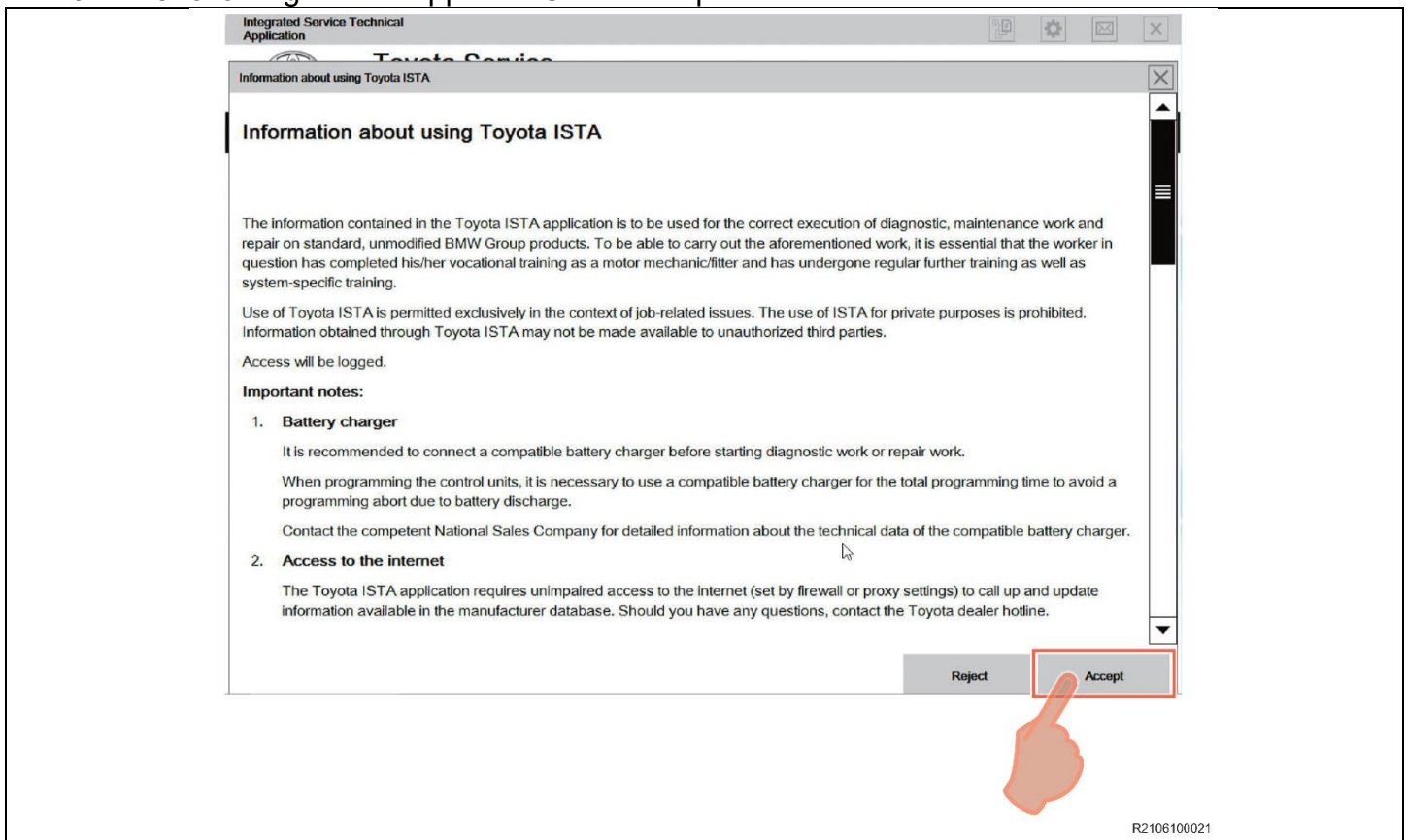


- b. Double-click the icon to start Toyota ISTA.

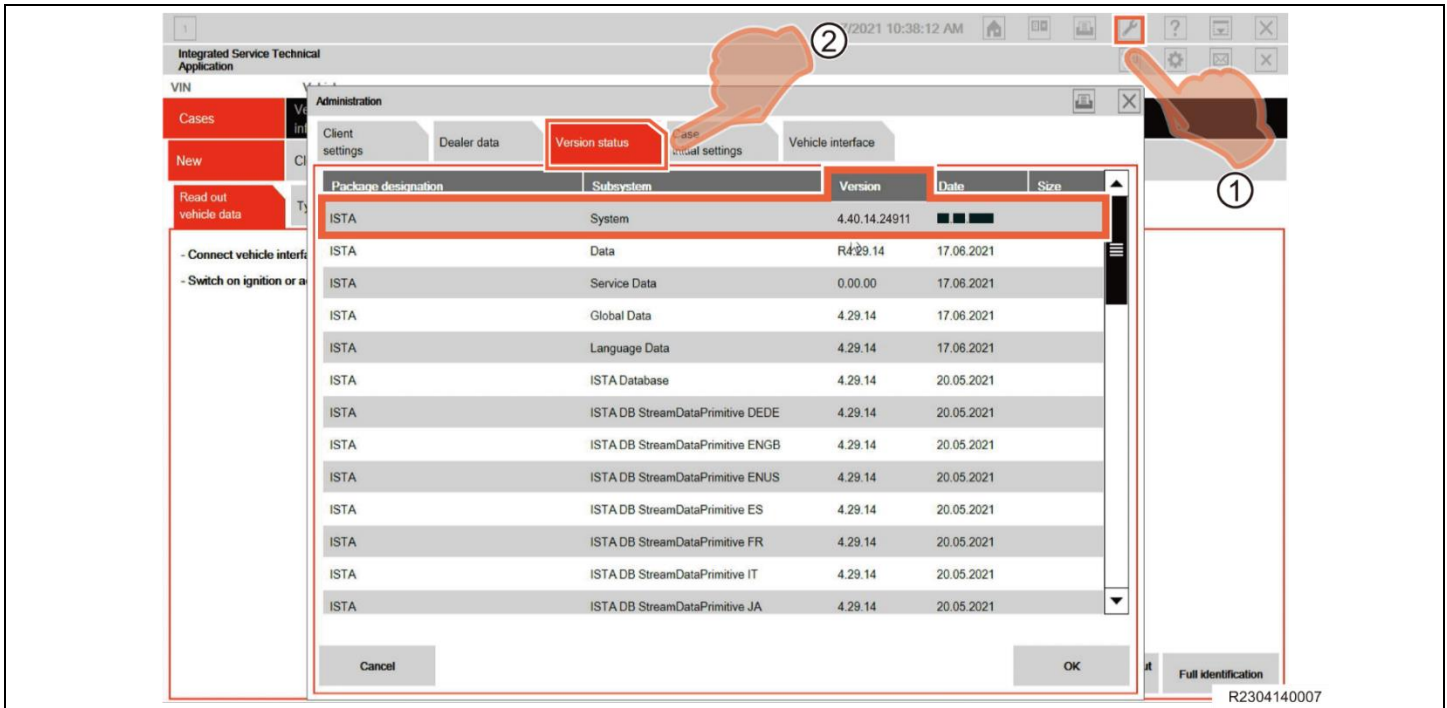
NOTICE:

After double-clicking, it takes about 15 seconds for Toyota ISTA to start. Please wait without double-clicking again.

- c. The following screen appears. Click "Accept".



- d. Click on the Configuration Button as indicated in the illustration.
- e. Click on the Version status tab as indicated in the illustration.
- f. Compare the installed version to the minimum required version: **4.40.14** If the version is less than version **4.40.14**, install the latest version.



VII. PREPARATION OF PC



1. PREPARATION OF PC

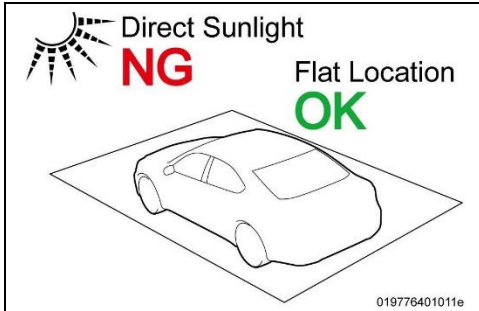
- a. Boot-up the Techstream ADVi.
- b. Complete all pending Windows updates.
- c. Disable any automatic Windows updates and configure antivirus software so that it doesn't automatically run.
- d. Disable all automatic screen savers.
- e. Disable "sleep mode" within windows power settings.
- f. Close all other applications.
- g. Attach the Techstream ADVi directly to an AC Power Supply.
- h. **DO NOT** perform any other functions while Toyota ISTA is reprogramming.

VIII. PREPARATION OF VEHICLE

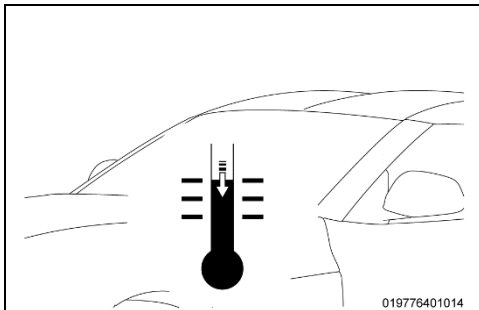
1. PREPARATION OF VEHICLE



During reprogramming, each system (lights, mirrors, seats, windows, etc.) will be operated automatically for initialization. If operation is obstructed, a fault code is recorded, and the initialization may not finish normally. To prevent this, follow each instruction displayed on the screen while carrying out work.



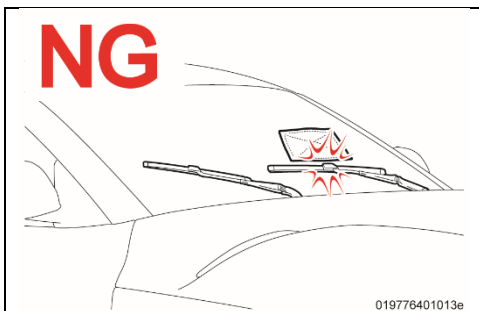
- a. Before starting to work, please make sure that the vehicle is parked in a flat location that is not subject to direct sunlight.



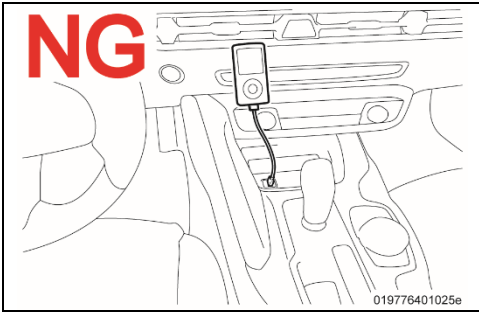
- b. Please remember that ambient temperature must be superior to 15 °C.
c. Allow the temperatures of the engine, transmission, and brake system to fall to the ambient temperature.



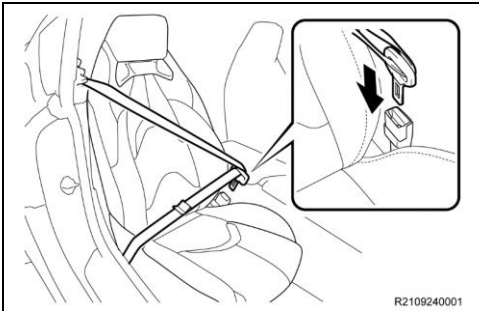
- d. Set the steering wheel and tires straight ahead position.



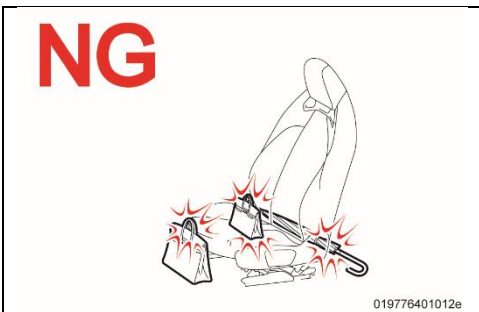
- e. **DO NOT** place anything on the windshield so that the wiper can work normally, because the wiper may move automatically during reprogramming for initialization.



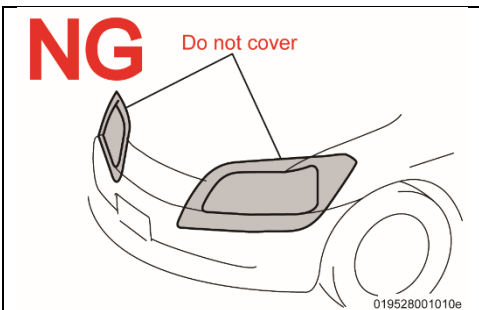
- f. Remove all the inserted and connected data carriers from the drives and disconnect the data connections (e.g. paired mobile phones), so they **DO NOT** interrupt programming by communication or connection.
- g. Remove all the third-party electrical devices that can be removed.



- h. Insert the driver seatbelt latch into the lock to prevent the PAD mode from being deactivated during the reprogramming.



- i. **DO NOT** place anything on, in front of, or behind the front seats because the front seats move automatically during reprogramming for initialization.



- j. **DO NOT** cover the headlights with protective covers, because temperatures may rise, and the headlights may be deformed or damaged.

- k. Set the shift lever to “P” (Automatic transmission) or “N” (Manual transmission), and then engage the parking brake.
- l. Turn off the engine, and then set all the switches of the electrical components to off.
- m. Close the driver-side and passenger-side door., the hood must remain open as the battery charger will need to be connected to the charging terminals during the reprogramming process.
- n. To make it easy to access the battery just in case the voltage drops and IG OFF, open the back door and operate the lock latch using a screwdriver to set the latch in the closed position.

IX. CONNECT A BATTERY CHARGER

1. CONNECT A BATTERY CHARGER

- Connect the specified battery charger to the locations in the illustration.

Required specification:

Charging current: 80A (80 A continuous charging, AGM battery compatible.)

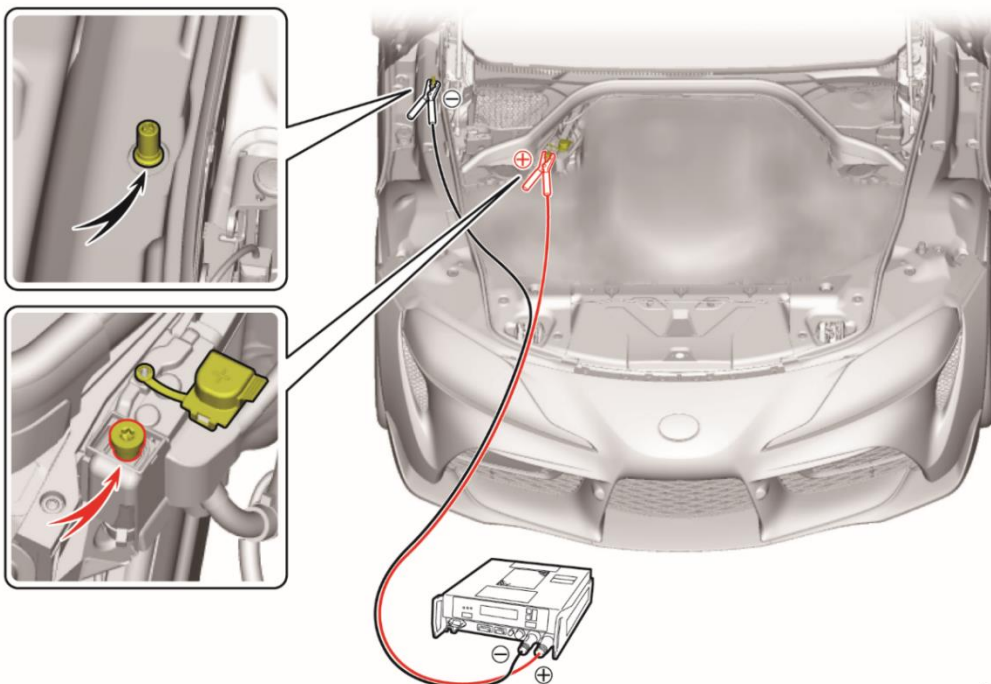


- Unlike other Toyota vehicles, the Toyota Supra is capable of drawing high amperage (a peak of 70 Amps flows at maximum) during diagnosis and repair. The Toyota Supra is equipped with an AGM type battery, discharges will affect the life span of the battery. AGM batteries must not have a charging voltage that exceeds 14.6 volts.
- Always connect the power supply of the battery charger to an outlet directly. If a power strip or other device is used, and multiple electrical components are connected, the battery charger may detect a power supply error due to insufficient current, and it may not be possible to charge the battery.
- Make sure that the battery charger is off before connecting it.
- Make sure you respect the correct polarity when connecting the battery charger cables like displayed in the illustration below.
- **DO NOT** disconnect the battery charger during reprogramming work.
- Observe the instructions of the battery charger manual, and check the dealership electrical system to ensure the circuit of the outlet to be used can operate the battery charger.

NOTICE:

During this reprogramming the headlights will turn on, and the seats and other electrical components will function. To prevent damage to the ECU's, due to flat battery or voltage drop, ALWAYS connect the specified battery charger.

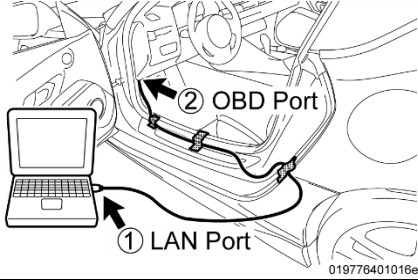
Connect Battery Charger



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X. CONNECT THE TOYOTA ISTA

Connect in order from PC side to Vehicle side



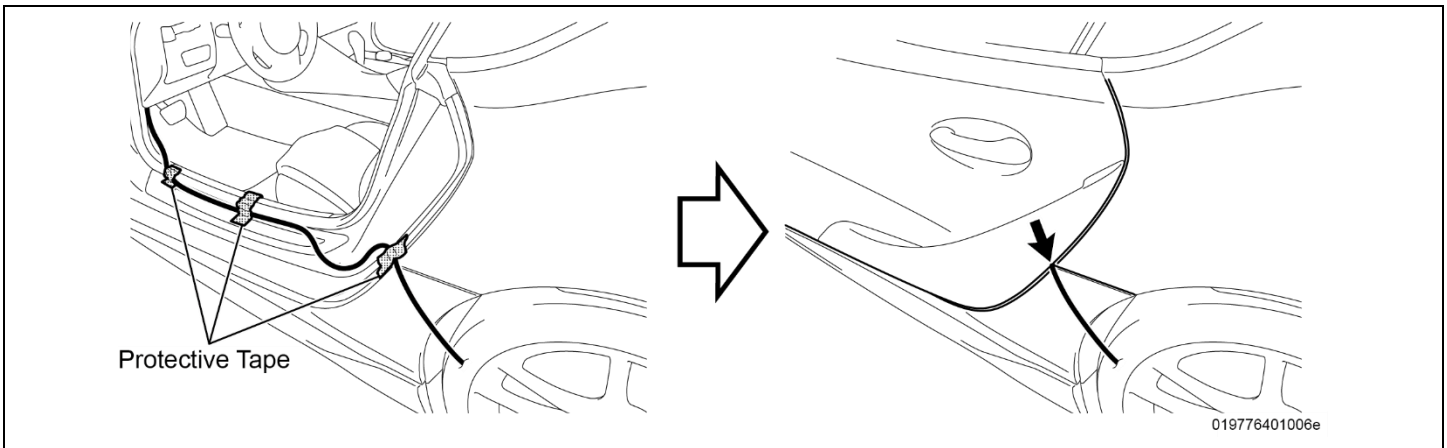
1. CAUTION ON THE CONNECTION ORDER OF THE ISTA DIAGNOSTIC CABLE

- Always connect the ISTA diagnostic cable first to your PC LAN port "1" and only after that to the OBD port of the vehicle "2". If this order of operations is not respected possible vehicle communication issues may occur when using Toyota ISTA software.

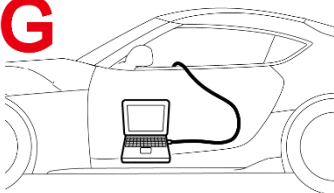
- The ISTA diagnostic cable always passes through the position shown in the illustration. If it passes through a place other than the instruction, there is a possibility that the sheet is automatically operated and the ISTA diagnostic cable is pinched and broken by the initializing operation during reprogramming.
- Using the gap between the rear fender and the side garnish, pull out the ISTA diagnostic cable to the outside of the vehicle. Please use protective tape for holding and protection of the ISTA diagnostic cable.



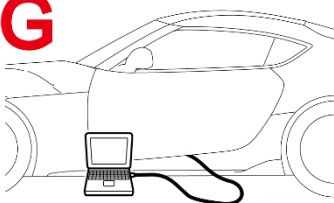
If the ISTA diagnostic cable is not passed through the indicated location, the ISTA diagnostic cable may be pinched, communication may be disconnected, and the ECUs may be damaged after the seat moves automatically due to initialization during reprogramming.



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NOTICE:

- DO NOT** attempt to pass the ISTA diagnostic cable through the window opening. The window glass may move during reprogramming or initialization.
- Ensure the cable is out of the path of the front Driver's seat. During initialization the driver's seat moves and could damage cable or disconnect the OBDII connector during movement.
- Additionally, **DO NOT** attempt to pass the ISTA diagnostic cable through any other position of the door opening as it may cause damage to the cable.

XI. DETERMINE NECESSARY ACTION ACCORDING TO VIN LIST

1. CHECK NECESSARY ACTION ACCORDING TO ISTA

- a. Determine if Vehicle is in Transport Mode or I-level is up to date using ISTA:

Group determination	Required Action
Vehicles in Transport Mode	Confirm if vehicle is in transport mode ("Transport Mode Indicator" is displayed on the combination meter. Proceed to Section XII.
Vehicles Requiring Update	Check if Program TCB (Telematic Communication Box) is displayed. Proceed to Section XIV.

XII. CHECK IF PROGRAM TCB (TELEMATIC COMMUNICATION BOX) IS DISPLAYED

1. ENSURE VEHICLE COMPLETED PRE-DELIVERY SERVICE

- a. Make sure that Pre-delivery Service has been completed before this reprogramming. If Pre-delivery service has not been completed before this reprogramming, the reprogramming may not be completed correctly. Refer to [T-SB-0083-19](#) or [T-SB-0038-20](#) for Pre-delivery technical instructions.



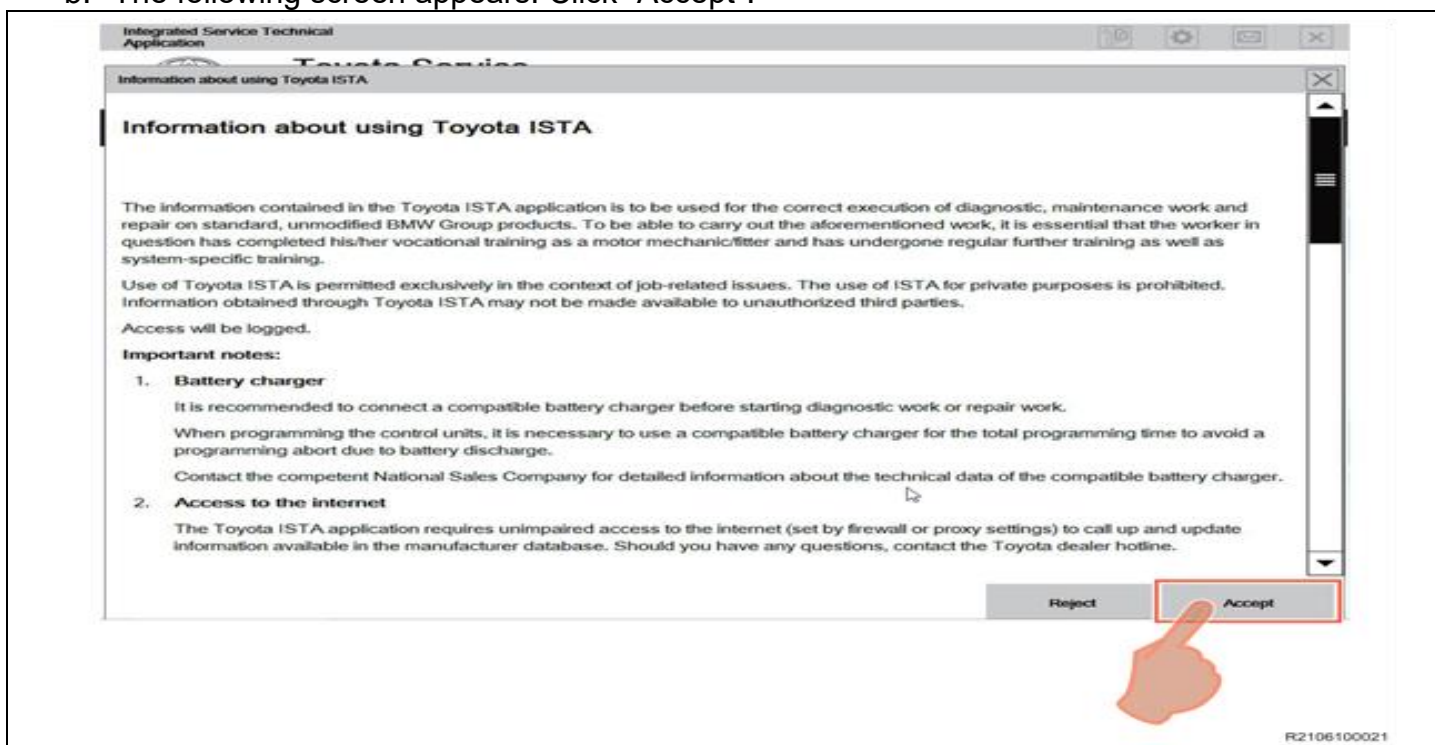
2. START THE Toyota ISTA

- a. Double-click the icon to start Toyota ISTA.

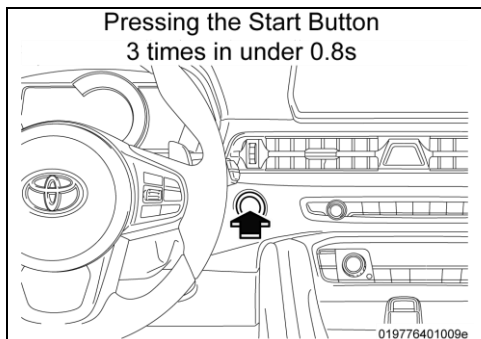
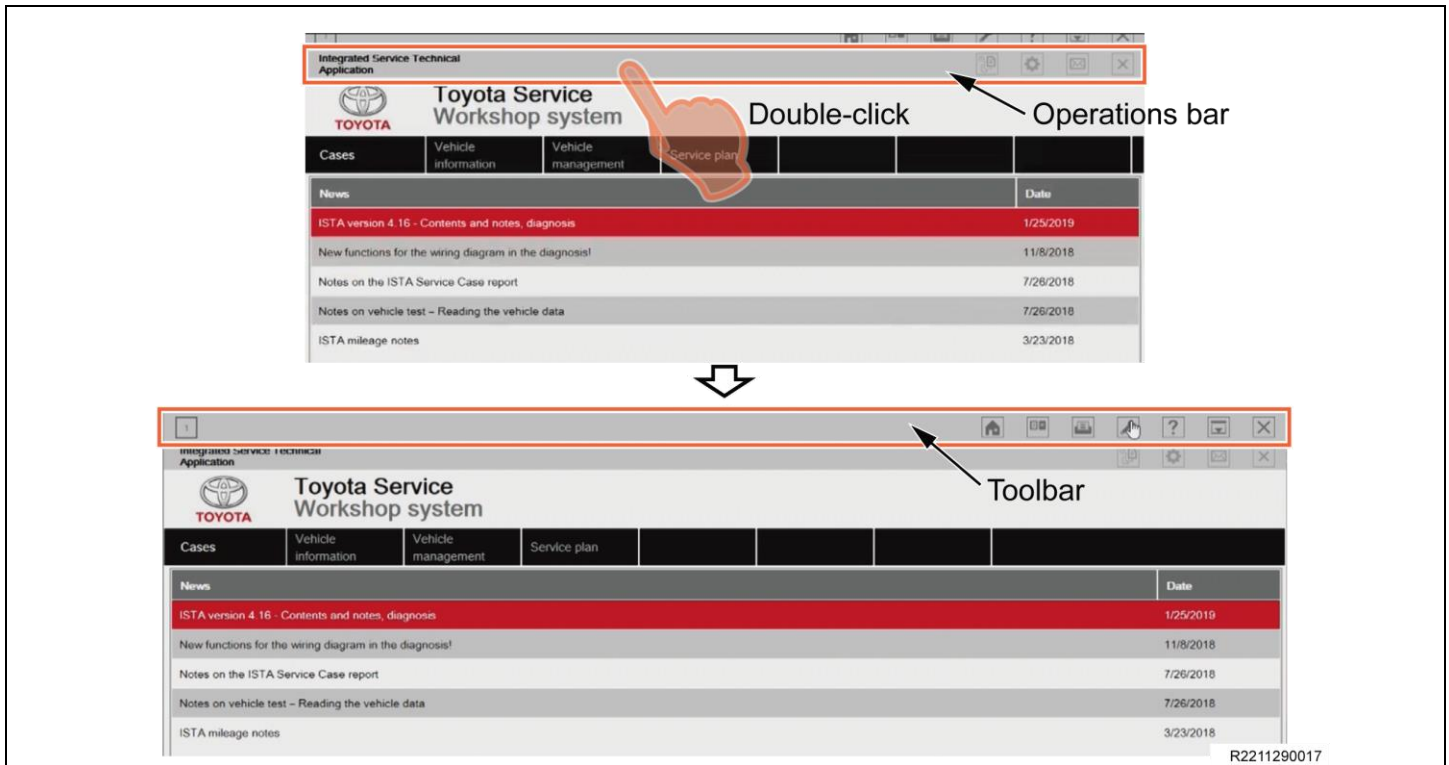
NOTICE:

After double-clicking, it takes about 15 seconds for Toyota ISTA to start. Please wait without double-clicking again.

- b. The following screen appears. Click "Accept".



c. Double-click the operations bar to maximize screen and make the toolbar visible.



3. ACTIVATE TO PAD MODE

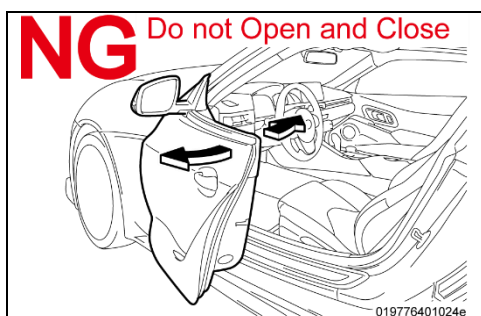
- a. PAD mode can be activated by pressing the start button 3 times in under 0.8 seconds (very fast) or by directly connecting the Toyota ISTA software and initiating the vehicle connection.



While the vehicle is in PAD mode all energy monitoring logic will be disabled. The technician must utilize a battery charger to maintain sufficient current during all diagnosis and programming activities. If the battery charger is not connected battery life will be affected and ECU damage could occur.

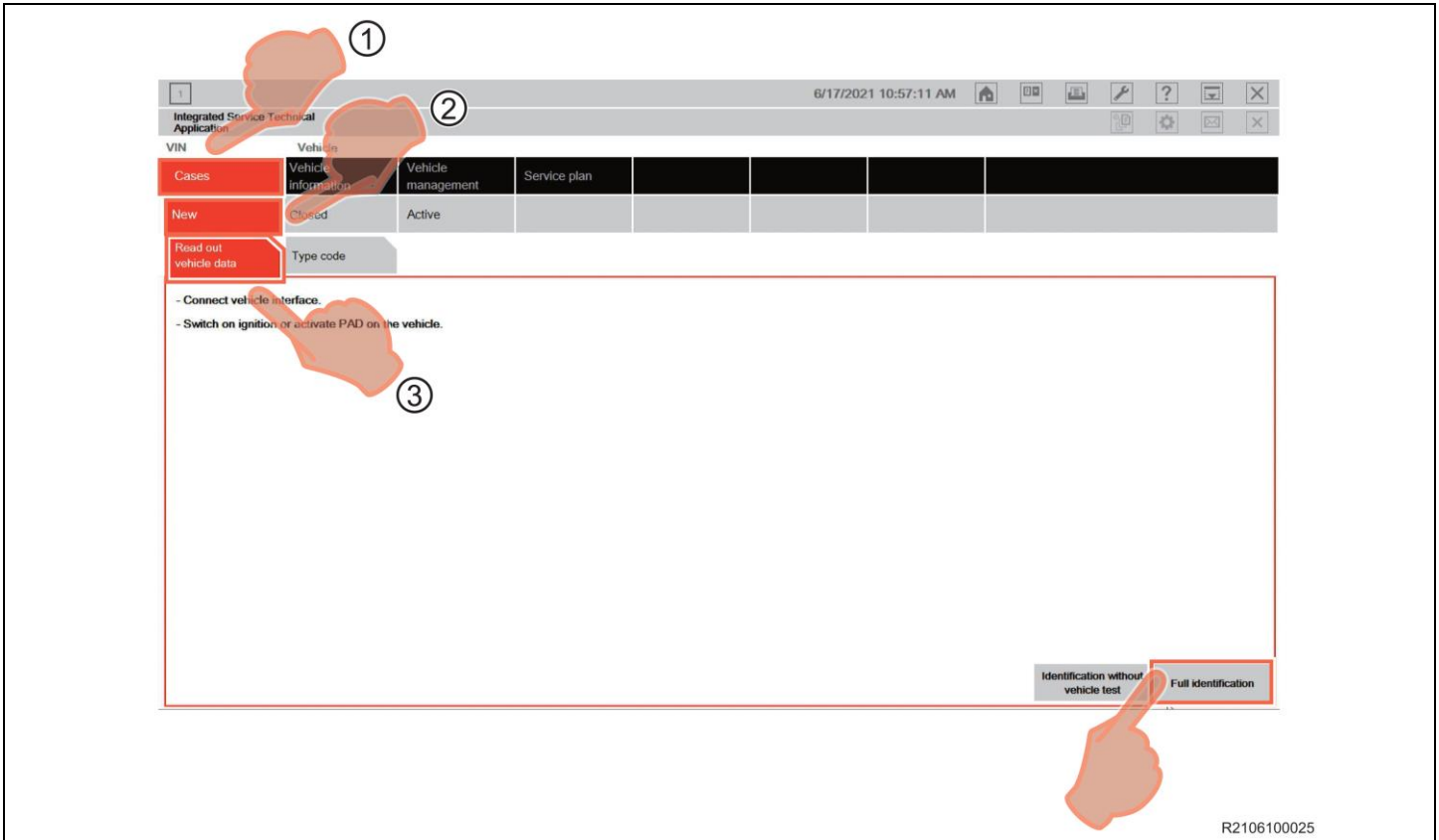
NOTICE:

Ensure the pre-delivery service has already been completed on the vehicle. Part of pre-delivery service involves switching of "transportation mode", which is required before proceeding with this remedy procedure.

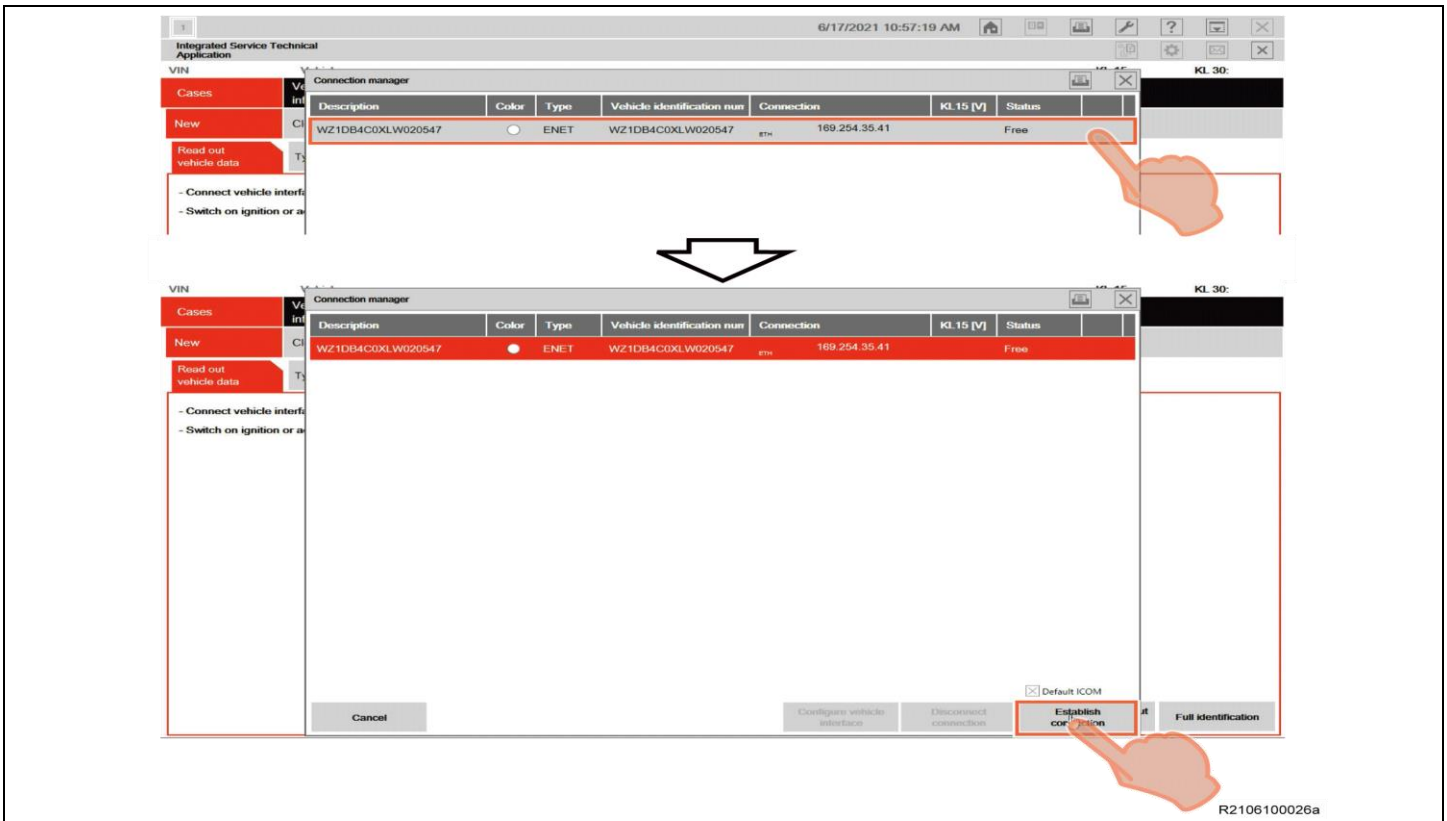


DO NOT open or close the driver's door during the programming routine. Perform only the vehicle operations indicated on the Toyota ISTA screen.

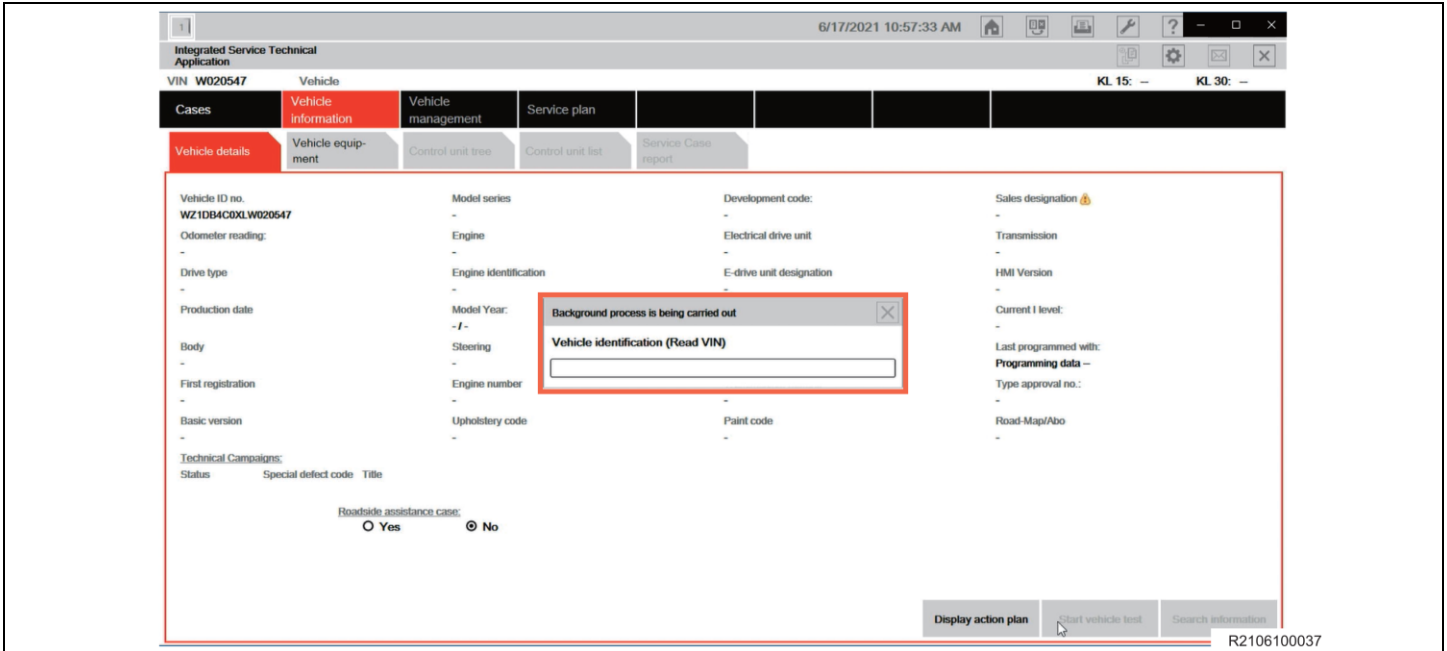
- b. From Toyota ISTA home screen, click “Cases” -> “New” -> “Read out vehicle data”.
- c. At the bottom right of the screen, click “Full identification”.



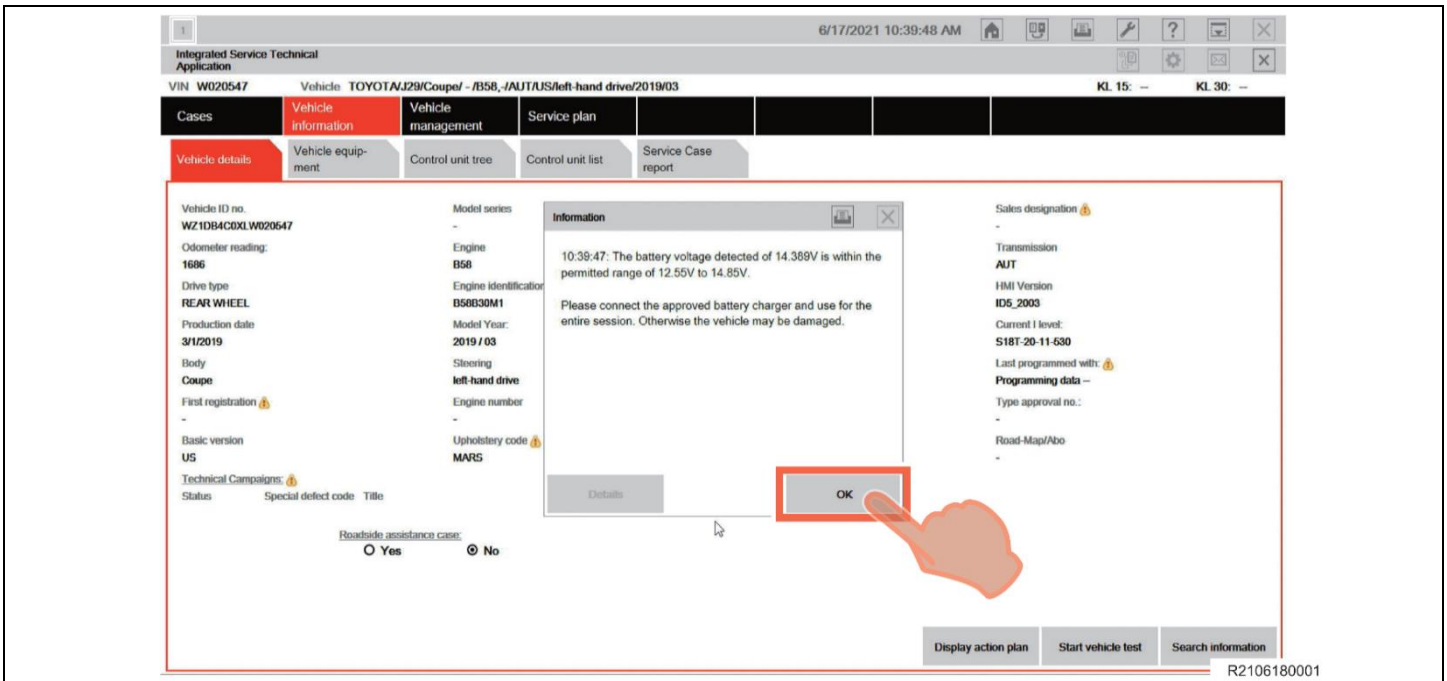
- d. At the “Connection manager” screen, select the vehicle identification number, and then click “Establish connection”.



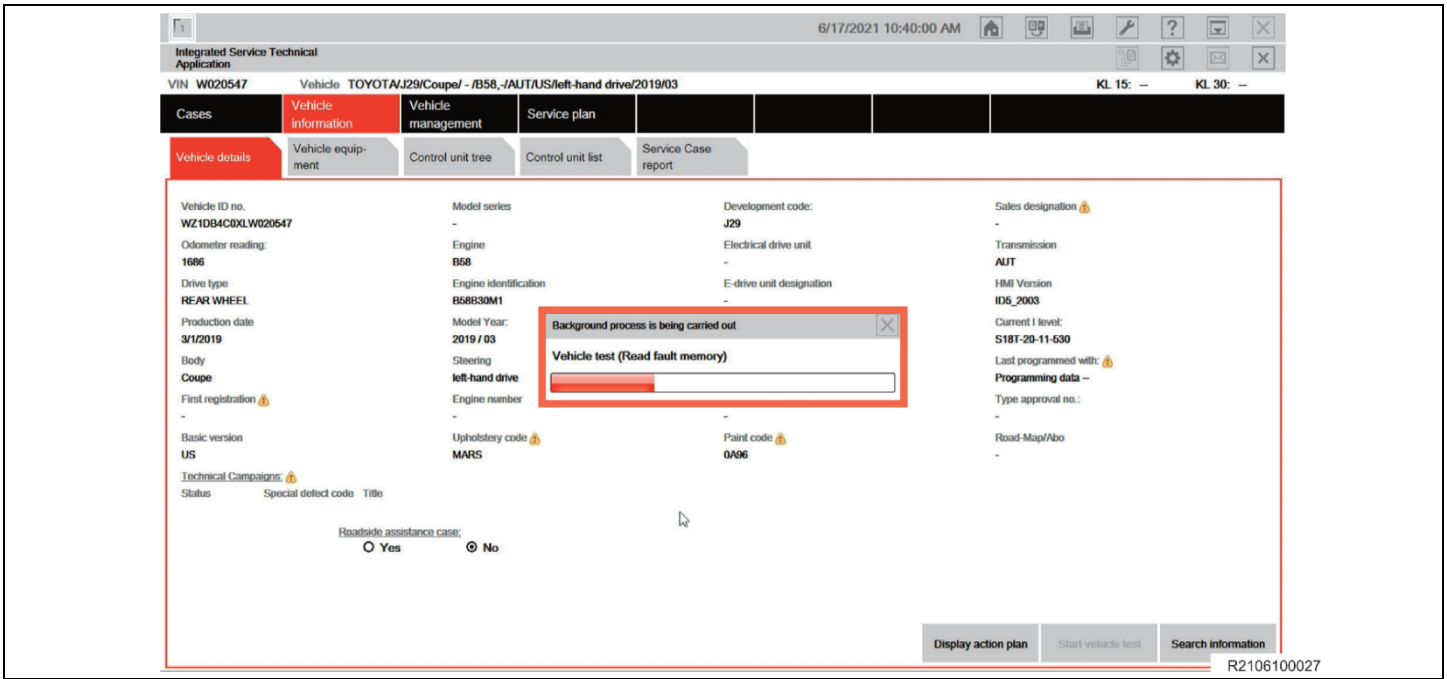
e. "Background process is being carried out" is started automatically.



NOTICE:
If the following "Information" dialog box is displayed, click "OK" to continue.



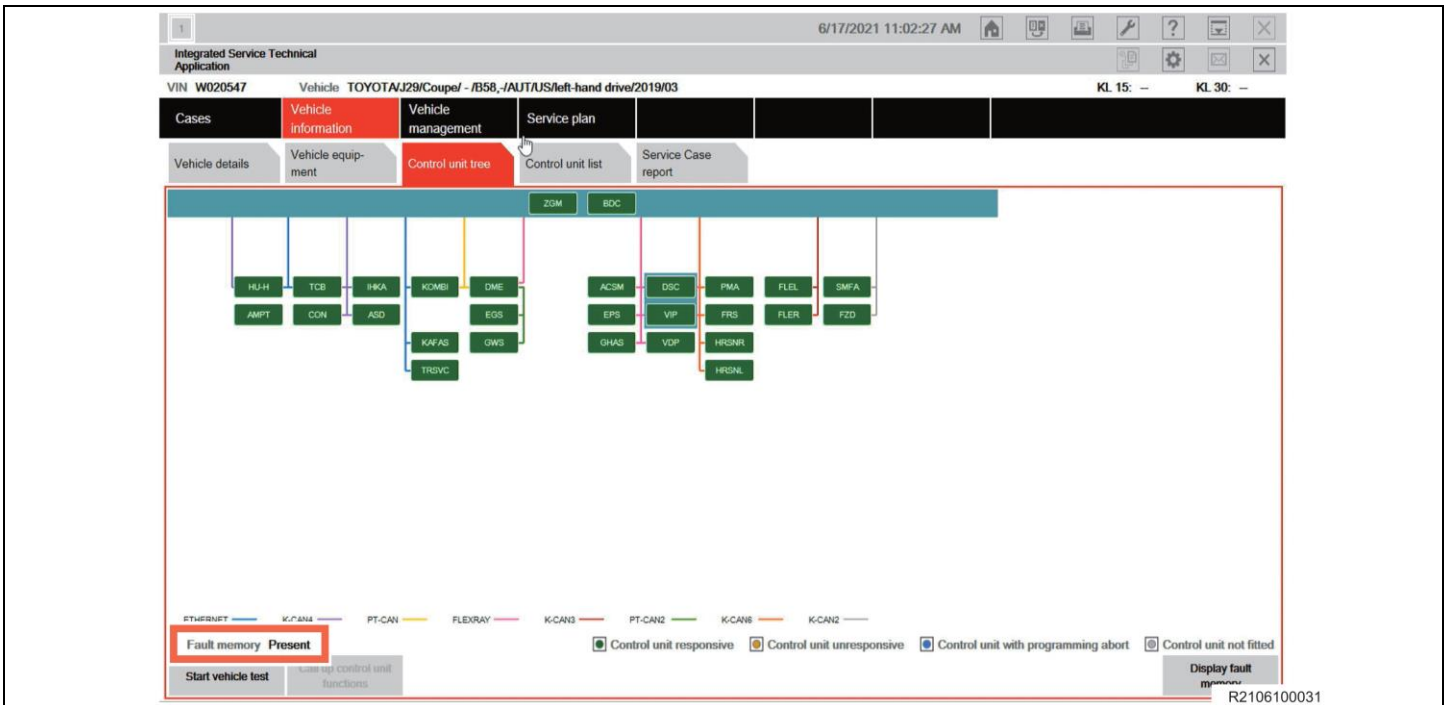
f. After clicking “OK”, “Background process is being carried out” continues.



g. After “Background process is being carried out” has ended, the “Control unit tree” screen appears.

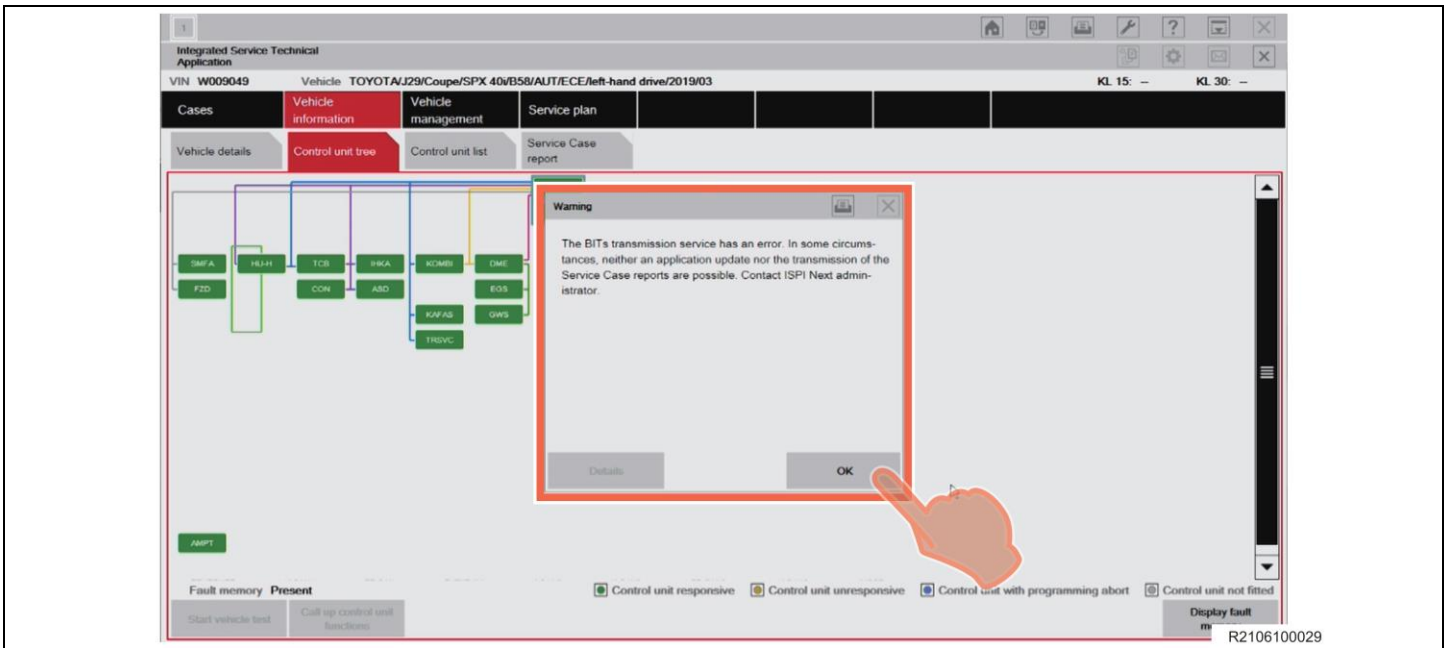
NOTICE:

When Fault memory “Present” or “Existing” is displayed at the bottom left of the screen, check for DTCs. Note that this campaign does not cover the diagnostic fees and/or repairs for any DTC’s.



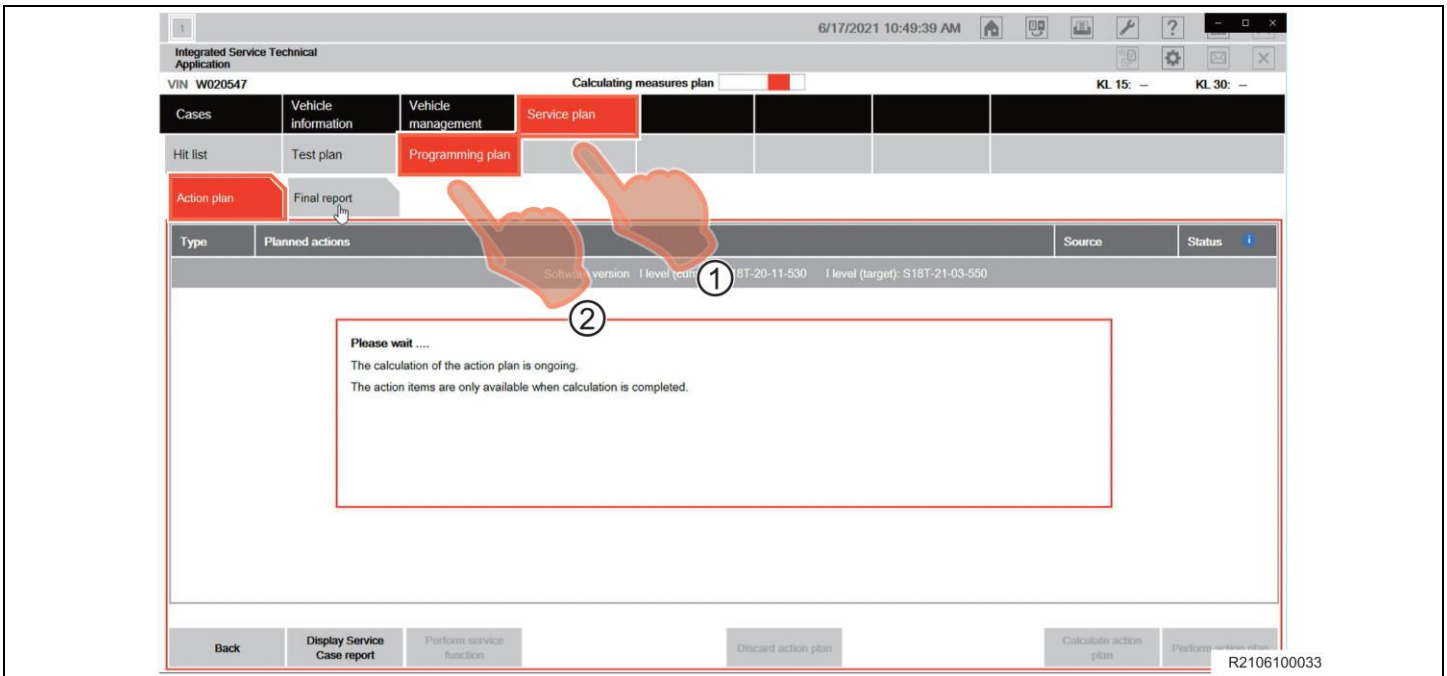
NOTICE:

If the dialog box in the image appears when the screen changes to “Control unit tree” screen, click “OK” to close the dialog box, and then continue work. Toyota ISTA will attempt to establish a data exchange with the central server. In the absence of an available connection route (because of no Internet connection is available or the PC connection isn’t setup), Please verify your connection and click “OK”.

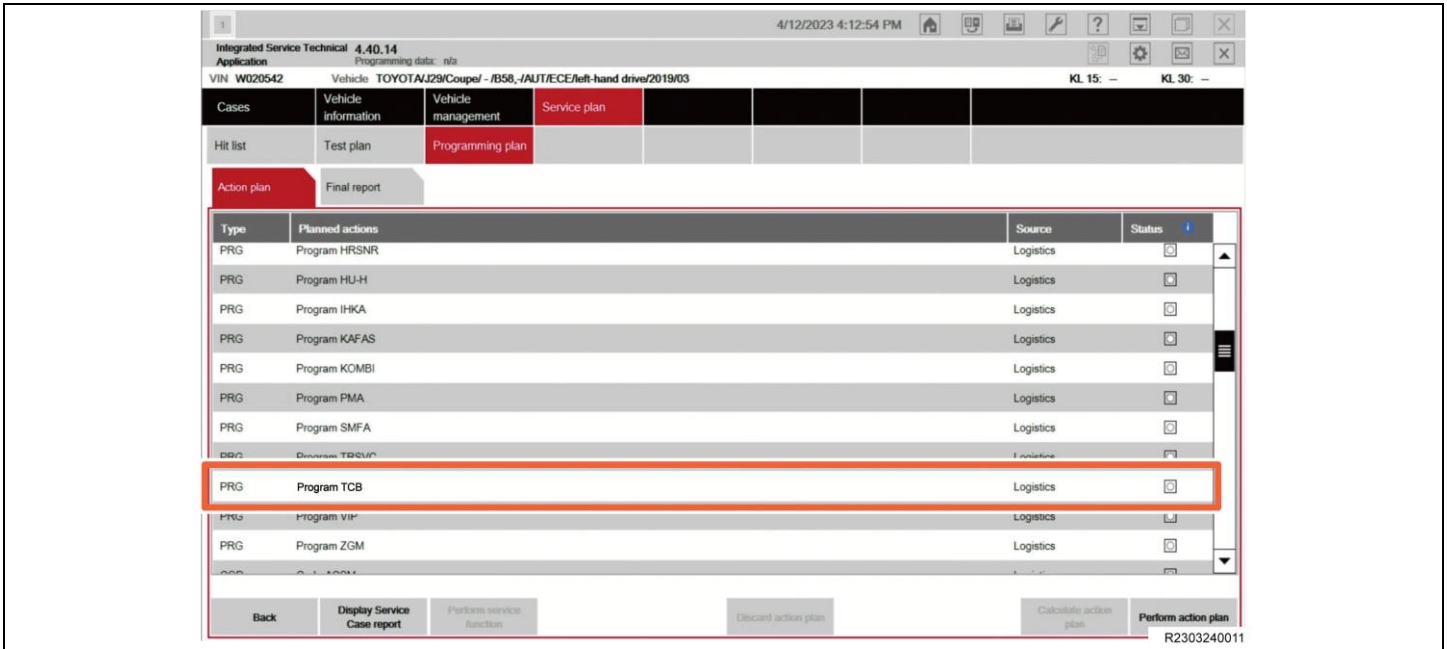


4. CHECK IF PROGRAM TCB (TELEMATIC COMMUNICATION BOX) IS DISPLAYED


- a. Select “Service plan” -> “Programming plan”.
- b. The screen changes to the “Action plan” screen and "Please wait" message appears.



c. After the "please wait" message closes and the screen changes, check if "Program TCB" is displayed on "Planned actions" column.



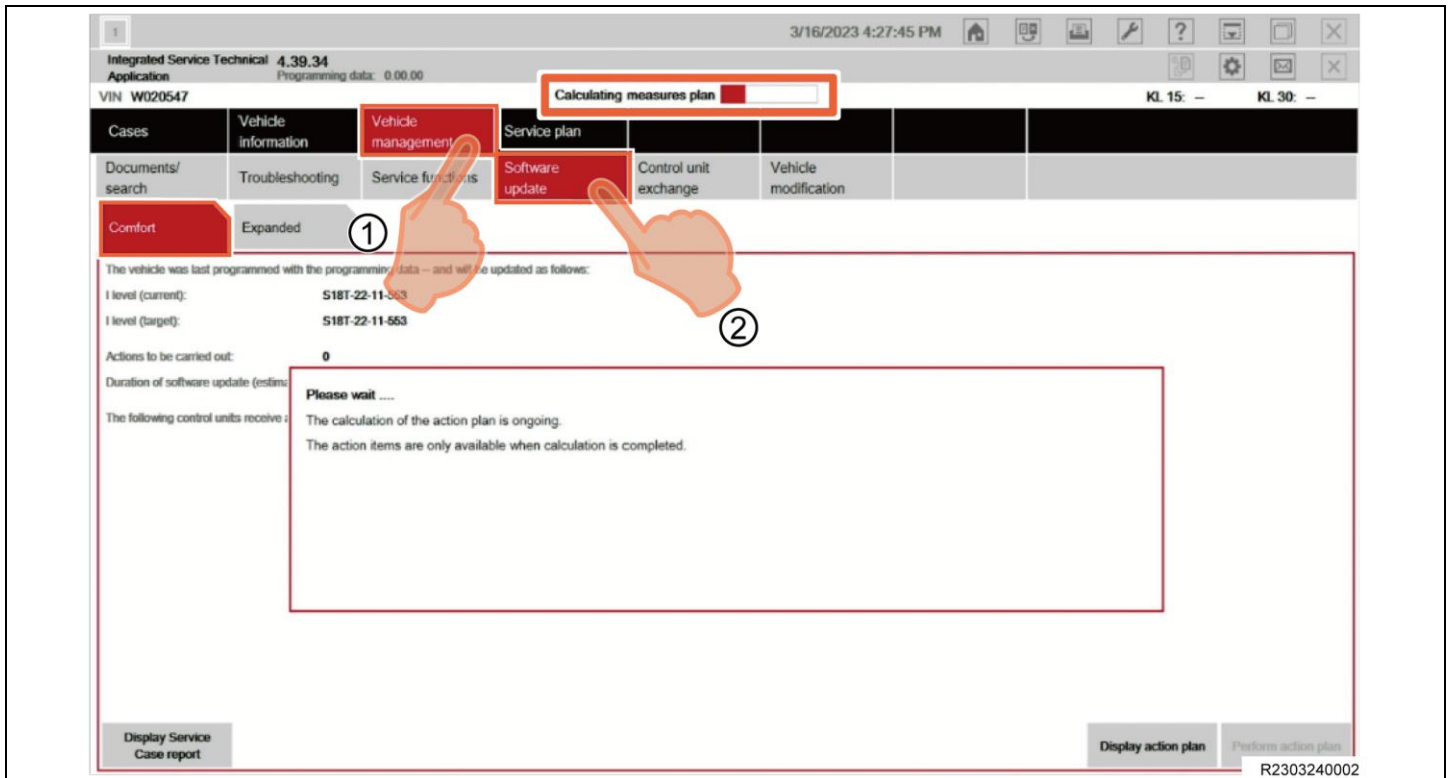
Display on "Planned actions" Column	Required Action
"Program TCB" is shown	Proceed to section XIV
"Program TCB" is NOT shown	Manually configure "Program TCB". Proceed to next section.



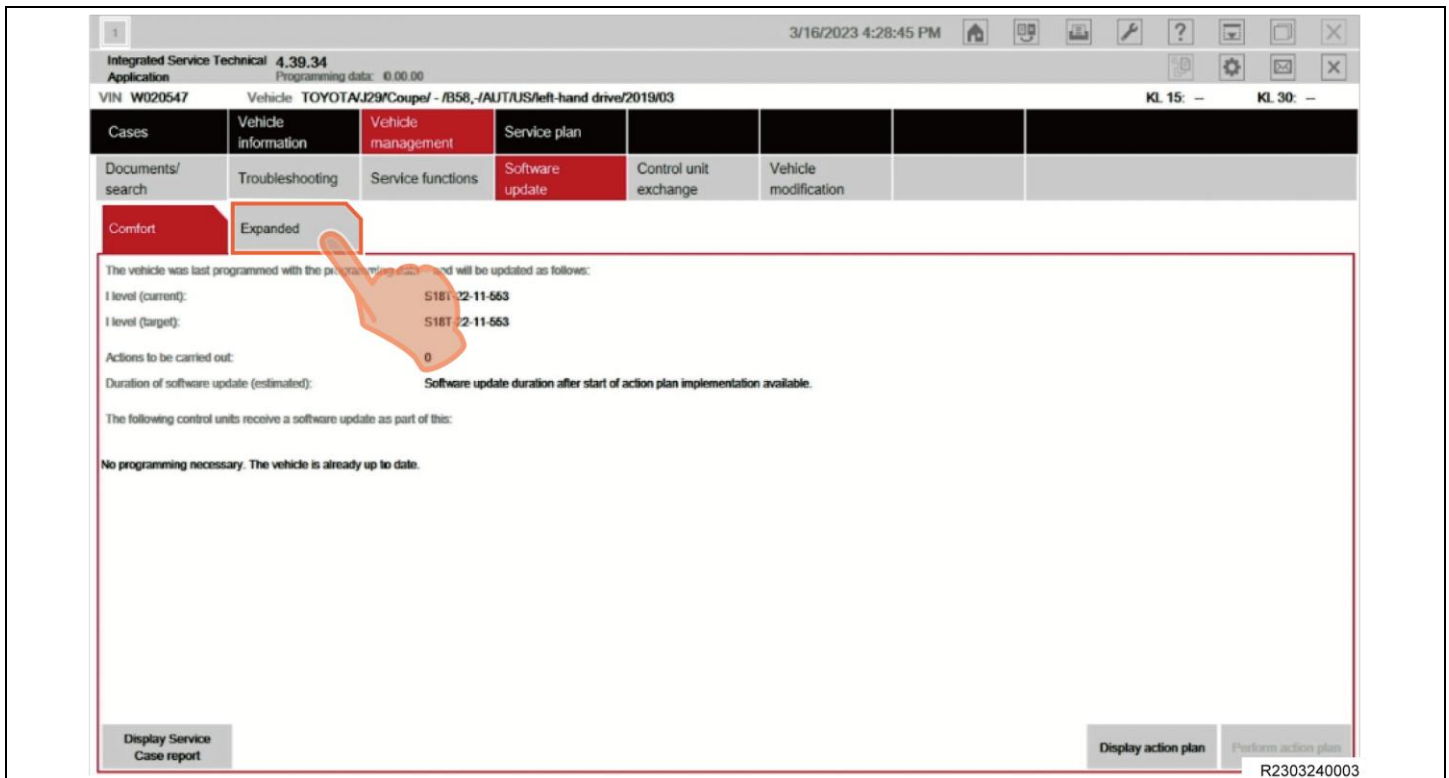
- The vehicle I-Level before reprogramming is necessary for the warranty claim since the reprogramming time differs depending on it. Make sure to check and record the vehicle I-Level before reprogramming and also remaining time which is just after starting to reprogram.

XIII. MANUALLY CONFIGURE PROGRAM TCB BY SOFTWARE UPDATE

- a. Select "Vehicle management" -> "Software update".
- b. The screen changes to the "Comfort" screen and "Please wait" message appears.



- c. When the display changes, select "Expanded".



- d. When the display changes, check if the “Telematic Communication Box” is displayed on the “Control unit name” column.

Integrated Service Technical 4.39.34
Application Programming data: 0.00.00
VIN W020547 Vehicle TOYOTA/J29/Coupe/ - /B58, - /AUT/US/left-hand drive/2019/03 KL 15: - KL 30: -

Abbreviation	Control unit name	Programming	Coding
HU-H	Headunit High	<input type="checkbox"/>	<input type="checkbox"/>
IHKA	Integrated automatic heating / air conditioning system	<input type="checkbox"/>	<input type="checkbox"/>
KAFAS	Camera-based driver assist system	<input type="checkbox"/>	<input type="checkbox"/>
KOMBI	Instrument panel	<input type="checkbox"/>	<input type="checkbox"/>
PMA	Parking maneuvering assistant	<input type="checkbox"/>	<input type="checkbox"/>
SMFA	Seat module, driver	<input type="checkbox"/>	<input type="checkbox"/>
TCB	Telematic Communication Box	<input type="checkbox"/>	<input type="checkbox"/>

Code all control units Display action plan

- e. Click the box on “Programming” column of “Telematic Communication Box” to cross out.

HINT:

“Coding” column will be crossed out automatically.

Integrated Service Technical 4.39.34
Application Programming data: 0.00.00
VIN W020547 Vehicle TOYOTA/J29/Coupe/ - /B58, - /AUT/US/left-hand drive/2019/03 KL 15: - KL 30: -

Abbreviation	Control unit name	Programming	Coding
HU-H	Headunit High	<input type="checkbox"/>	<input type="checkbox"/>
IHKA	Integrated automatic heating / air conditioning system	<input type="checkbox"/>	<input type="checkbox"/>
KAFAS	Camera-based driver assist system	<input type="checkbox"/>	<input type="checkbox"/>
KOMBI	Instrument panel	<input type="checkbox"/>	<input type="checkbox"/>
PMA	Parking maneuvering assistant	<input type="checkbox"/>	<input type="checkbox"/>
SMFA	Seat module, driver	<input type="checkbox"/>	<input type="checkbox"/>
TCB	Telematic Communication Box	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TRSV	All-round vision camera	<input type="checkbox"/>	<input type="checkbox"/>
VDP	Vertical dynamics platform	<input type="checkbox"/>	<input type="checkbox"/>
VIP	Virtual integration system	<input type="checkbox"/>	<input type="checkbox"/>
ZGM	Central gateway module	<input type="checkbox"/>	<input type="checkbox"/>

Code all control units Display action plan

f. Click “Display action plan”.

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Integrated Service Technical 4.39.34
Application Programming data: 0.00.00

VIN W020547 Vehicle TOYOTA/J29/Coupe/ - /B58,-/AUT/US/left-hand drive/2019/03 KL 15: - KL 30: -

Cases	Vehicle information	Vehicle management	Service plan			
Documents/search	Troubleshooting	Service functions	Software update	Control unit exchange	Vehicle modification	

Comfort Expanded

Abbreviation	Control unit name	Programming	Coding
HU-H	Headunit High	<input type="checkbox"/>	<input type="checkbox"/>
IHKA	Integrated automatic heating / air conditioning system	<input type="checkbox"/>	<input type="checkbox"/>
KAFAS	Camera-based driver assist system	<input type="checkbox"/>	<input type="checkbox"/>
KOMBI	Instrument panel	<input type="checkbox"/>	<input type="checkbox"/>
PMA	Parking maneuvering assistant	<input type="checkbox"/>	<input type="checkbox"/>
SMFA	Seat module, driver	<input type="checkbox"/>	<input type="checkbox"/>
TCB	Telematic Communication Box	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TRSVK	All-round vision camera	<input type="checkbox"/>	<input type="checkbox"/>
VDP	Vertical dynamics platform	<input type="checkbox"/>	<input type="checkbox"/>
VIP	Virtual integration system	<input type="checkbox"/>	<input type="checkbox"/>
ZGM	Central gateway module	<input type="checkbox"/>	<input type="checkbox"/>

Code all control units Display action plan

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g. The screen changes to the “Action plan” screen, confirm” Program TCB” is shown and press the, “Calculate action plan”.

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Integrated Service Technical 4.39.34
Application Programming data: 0.00.00

VIN W020547 Vehicle TOYOTA/J29/Coupe/ - /B58,-/AUT/US/left-hand drive/2019/03 KL 15: - KL 30: -

Cases	Vehicle information	Vehicle management	Service plan			
Hit list	Test plan	Programming plan				

Action plan Final report

Type	Planned actions	Source	Status
Software version I level (current): S18T-22-11-553 I level (target): S18T-22-11-553			
Software actions			
PRG	Program TCB	Manual	<input type="checkbox"/>
COD	Code TCB	Manual	<input type="checkbox"/>

Back Display Service Case report Perform service function Discard action plan Calculate action plan Perform action plan

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XIV. REPROGRAMMING TELEMATIC COMMUNICATION BOX



- The vehicle I-Level before reprogramming is necessary for the warranty claim since the reprogramming time differs depending on it. Make sure to check and record the vehicle I-Level before reprogramming and also remaining time which is just after starting to reprogram.

a. Click “Perform action plan”.

NOTICE:

After clicking “Perform action plan”, carry out the on-screen instructions of Toyota ISTA reliably.

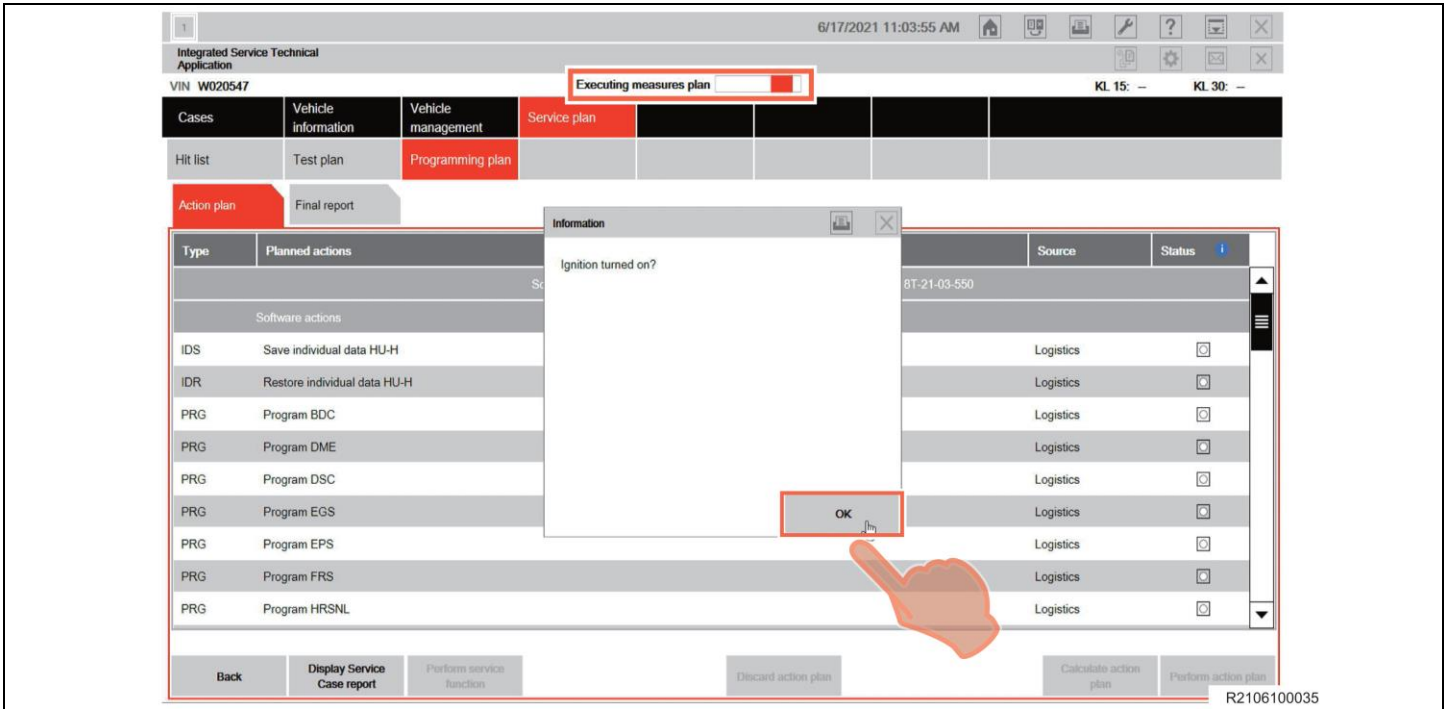
The screenshot shows the ISTA interface for a Toyota vehicle. The top navigation bar includes 'Cases', 'Vehicle Information', 'Vehicle management', and 'Service plan'. The 'Service plan' tab is active, showing a 'Hit list' with 'Test plan' and 'Programming plan'. Below this, the 'Action plan' section is visible, with a 'Final report' button. The main area displays a table of planned actions:

Type	Planned actions	Source	Status
Software version I level (current): S18T-20-11-530 I level (target): S18T-21-03-550			
Software actions			
IDS	Save individual data HU-H	Logistics	<input type="checkbox"/>
IDR	Restore individual data HU-H	Logistics	<input type="checkbox"/>
PRG	Program BDC	Logistics	<input type="checkbox"/>
PRG	Program DME	Logistics	<input type="checkbox"/>
PRG	Program DSC	Logistics	<input type="checkbox"/>
PRG	Program EGS	Logistics	<input type="checkbox"/>
PRG	Program EPS	Logistics	<input type="checkbox"/>
PRG	Program FRS	Logistics	<input type="checkbox"/>
PRG	Program HRSNL	Logistics	<input type="checkbox"/>

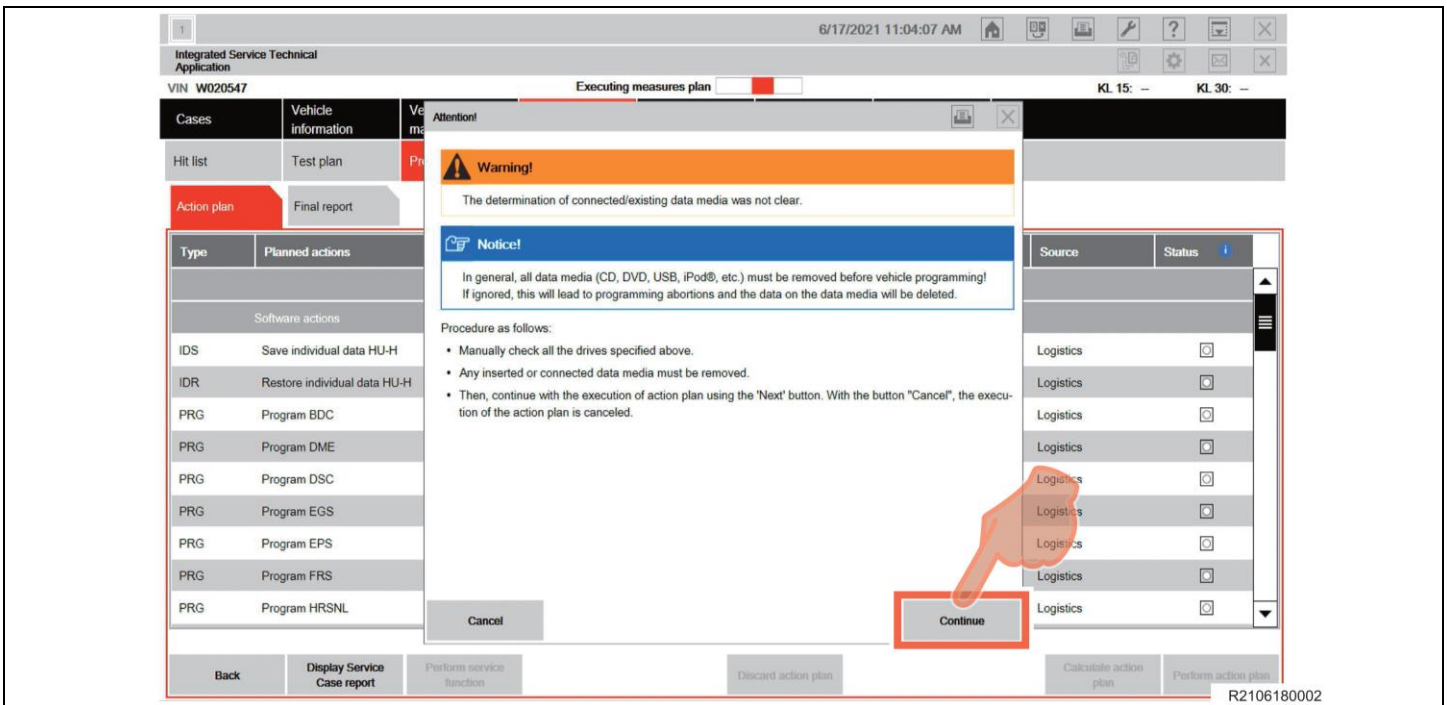
At the bottom of the screen, there are several buttons: 'Back', 'Display Service Case report', 'Perform service function', 'Discard action plan', 'Calculate action plan', and 'Perform action plan'. The 'Perform action plan' button is highlighted with a red box and a hand cursor.

R2106100034

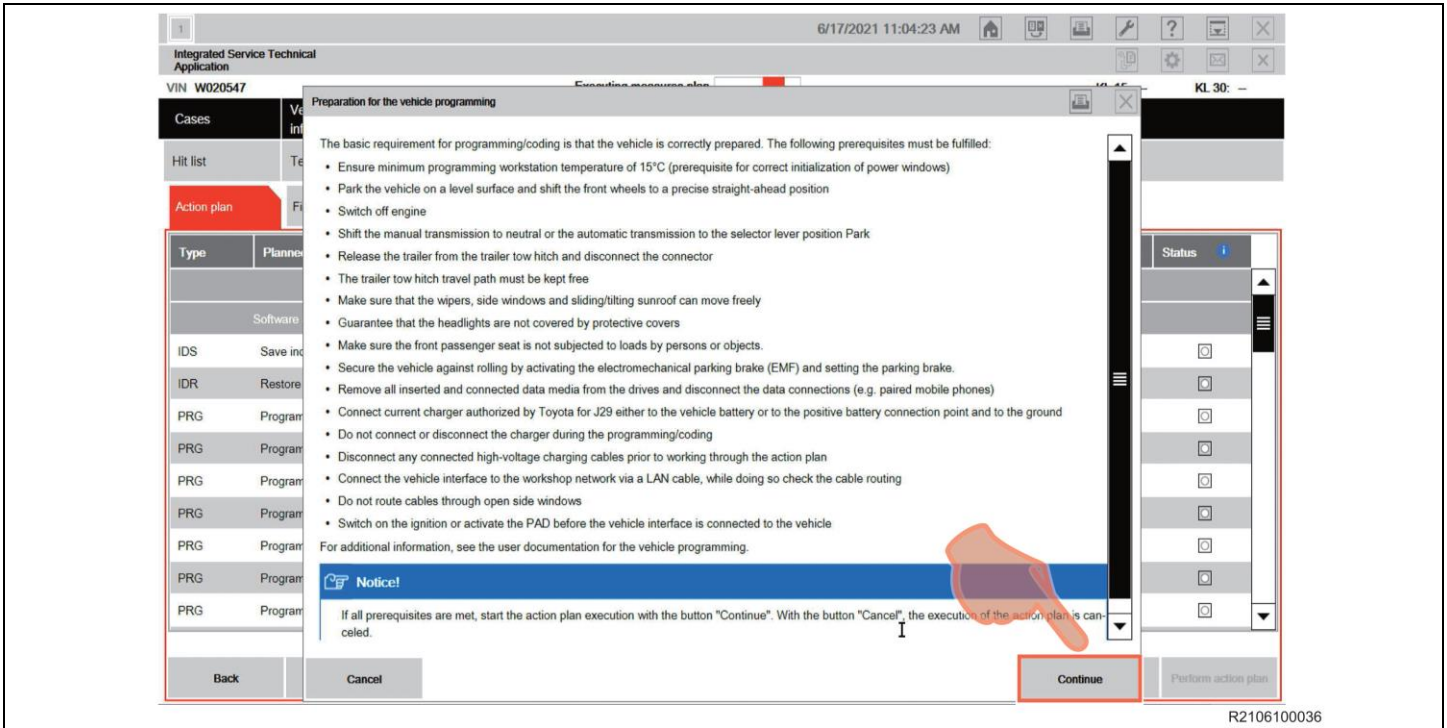
- b. “Executing measures plan” appears the top middle of the screen (header line). Check the content that is displayed in the “Information” dialog box, and then click “OK”.



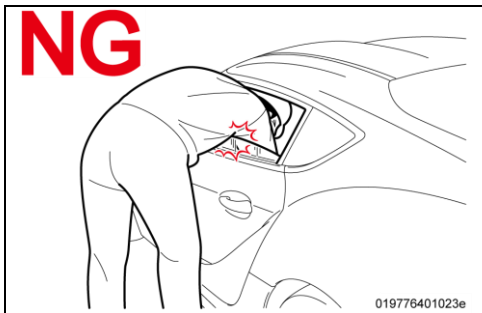
- c. “Warning!” and “Notice!” will be displayed in the “Attention!” dialog box. Check the content in the dialog box, and then click “Continue” to continue the “Action plan”.



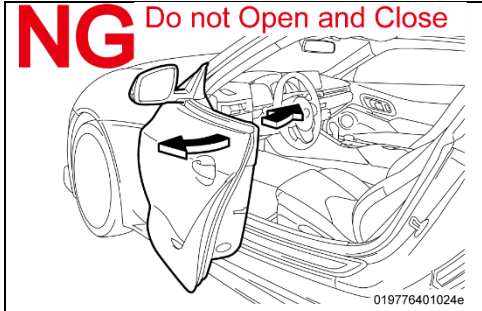
d. Please check carefully the content displayed in the “Preparation for the vehicle programming” dialog box, and then click “Continue”.



R2106100036



DO NOT put your head or hand in the window of the vehicle you are reprogramming. Since the window may close automatically at the time of initialization, there is the risk of being pinched and injured.

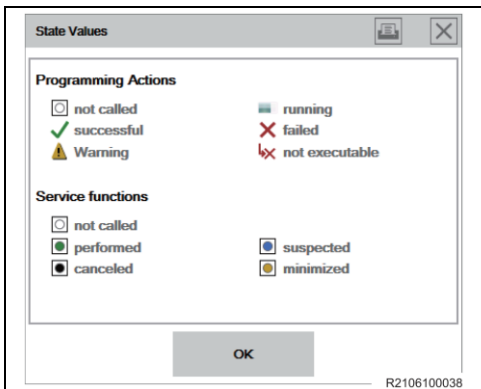
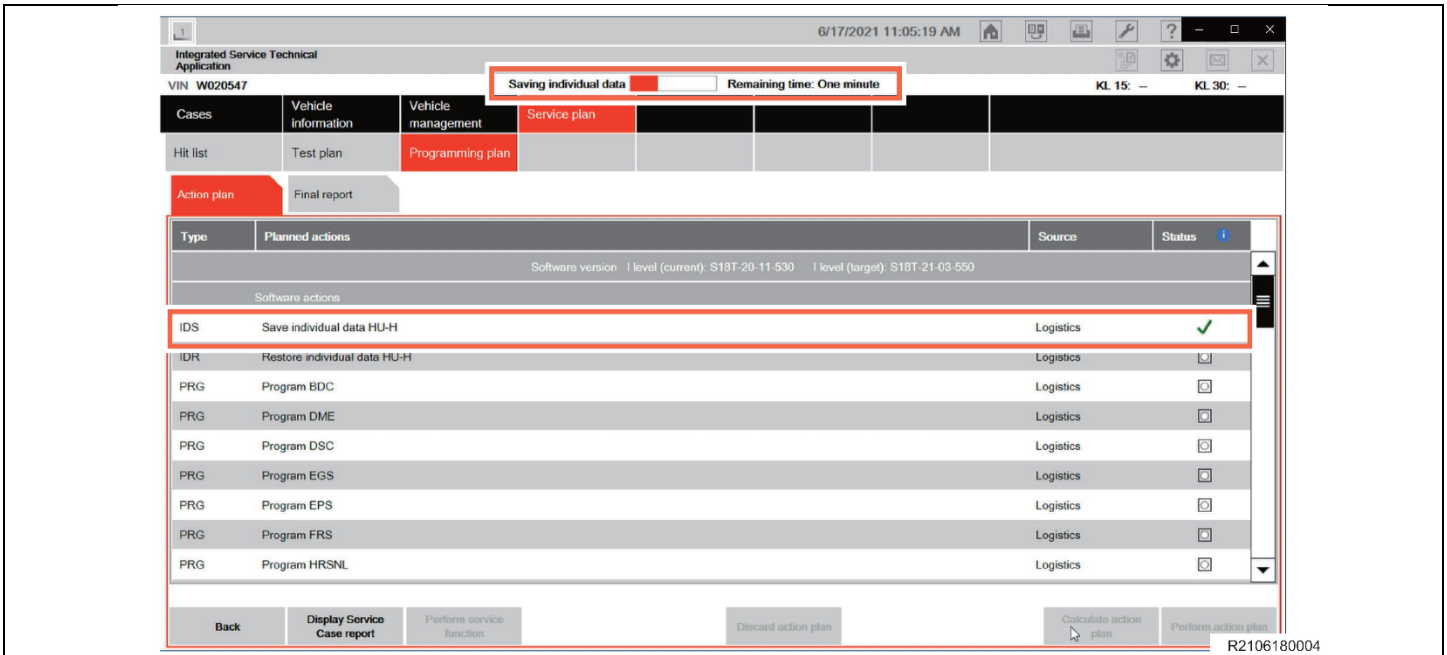


DO NOT open or close the driver's door during the programming routine.



The Programming could take 50 minutes to 3 hours, ensure that the vehicle is not accidentally disturbed by other team members during the reprogramming.

- e. The top middle of the screen (header line) switches to “Saving individual data”. “Save individual data HU-H” is executed first. If it completes normally, a checkmark (✓) is displayed in the “Status” column.



HINT:
The icons in the diagram indicate the state values.

NOTICE:
If the reprogramming of HU-H is aborted and screen of the navigation displays a blue screen, follow the steps shown in XVIII. HU-H WITH ABORTED REPROGRAMMING-HOW TO RECOVER AND FINALIZE THE REPROGRAMMING.

- f. The top middle of the screen (header line) switches to “Executing Software actions”. When “Warning” dialog box appears, click “OK”.

The screenshot shows a software application interface for vehicle service. At the top, the header displays the date and time (6/17/2021 11:05:41 AM) and the status "Executing software actions" with a remaining time of 46 minutes. Below the header, there are navigation tabs for "Cases", "Vehicle information", "Vehicle management", "Service plan", "Hit list", "Test plan", and "Programming plan". The "Service plan" and "Programming plan" tabs are highlighted in red. A "Warning" dialog box is open in the center, with the text: "Be aware: A case with programming is active! Check LAN cable and voltage supply and secure if necessary! If the instruction is not followed, a programming abort will result." The "OK" button in the dialog box is highlighted with a red box and a hand icon pointing to it. Below the dialog box, there is a table of planned actions:

Type	Planned actions	Source	Status
IDS	Save individual data HU-H	Logistics	✓
IDR	Restore individual data HU-H	Logistics	⊗
PRG	Program BDC	Logistics	⊗
PRG	Program DME	Logistics	⊗
PRG	Program DSC	Logistics	⊗
PRG	Program EGS	Logistics	⊗
PRG	Program EPS	Logistics	⊗
PRG	Program FRS	Logistics	⊗
PRG	Program HRSNL	Logistics	⊗

At the bottom of the screen, there are several buttons: "Back", "Display Service Case report", "Perform service function", "Discard action plan", "Calculate action plan", and "Perform action plan". The "Calculate action plan" button is highlighted with a mouse cursor. The bottom right corner of the screen displays the identifier "R210618003".

g. The reprogramming progress status of each ECU is displayed in the “Status” column. The overall progress status of reprogramming is indicated by “Executing software actions” at the top center of the screen (header line), which shows the reprogramming progress status and approximate “Remaining time”.



- Please take a screenshot of a current I-level and remaining time of Techstream screen as the evidence, and please keep it in each dealership, refer to below sample. The vehicle I-Level before reprogramming and an actual operation time are necessary for the warranty system. The actual operation time is: Total of remaining time plus 0.1 hours for administration cost for the dealership.

Integrated Service Technical Application

6/17/2021 11:07:04 AM

VIN W020547

Executing software actions Remaining time: 47 minutes

KL 15: -- KL 30: --

Type	Planned actions	Source	Status
Software actions			
IDS	Save individual data HU-H	Logistics	✓
IDR	Restore individual data HU-H	Logistics	☑
PRG	Program BDC	Logistics	☑
PRG	Program DME	Logistics	☑
PRG	Program DSC	Logistics	☑
PRG	Program EGS	Logistics	☑
PRG	Program EPS	Logistics	☑
PRG	Program FRS	Logistics	☑
PRG	Program HRSNL	Logistics	☑

Back Display Service Case report Perform service function Discard action plan Calculate action plan Perform action plan

R2303090002



- Even when the “Status” column is filled with checkmarks (✓), always check the display at the top center of the screen (header line) for the progress status, because initialization and other work is being carried out in addition to reprogramming.
- Wait until the reprogramming is finished before manipulating the ISTA software to avoid interfering with the reprogramming.

The screenshot shows the ISTA software interface with the status 'Executing software actions' and a remaining time of 30 minutes. The 'Service plan' tab is active, and the 'Planned actions' table lists various programs with green checkmarks in the 'Status' column.

Type	Planned actions	Source	Status
PRG	Program EPS	Logistics	✓
PRG	Program FRS	Logistics	✓
PRG	Program HRSNL	Logistics	✓
PRG	Program HRSNR	Logistics	✓
PRG	Program HU-H	Logistics	✓
PRG	Program IHKA	Logistics	✓
PRG	Program KAFAS	Logistics	✓
PRG	Program KOMBI	Logistics	✓
PRG	Program VDP	Logistics	✓
PRG	Program VIP	Logistics	✓
PRG	Program ZGM	Logistics	✓

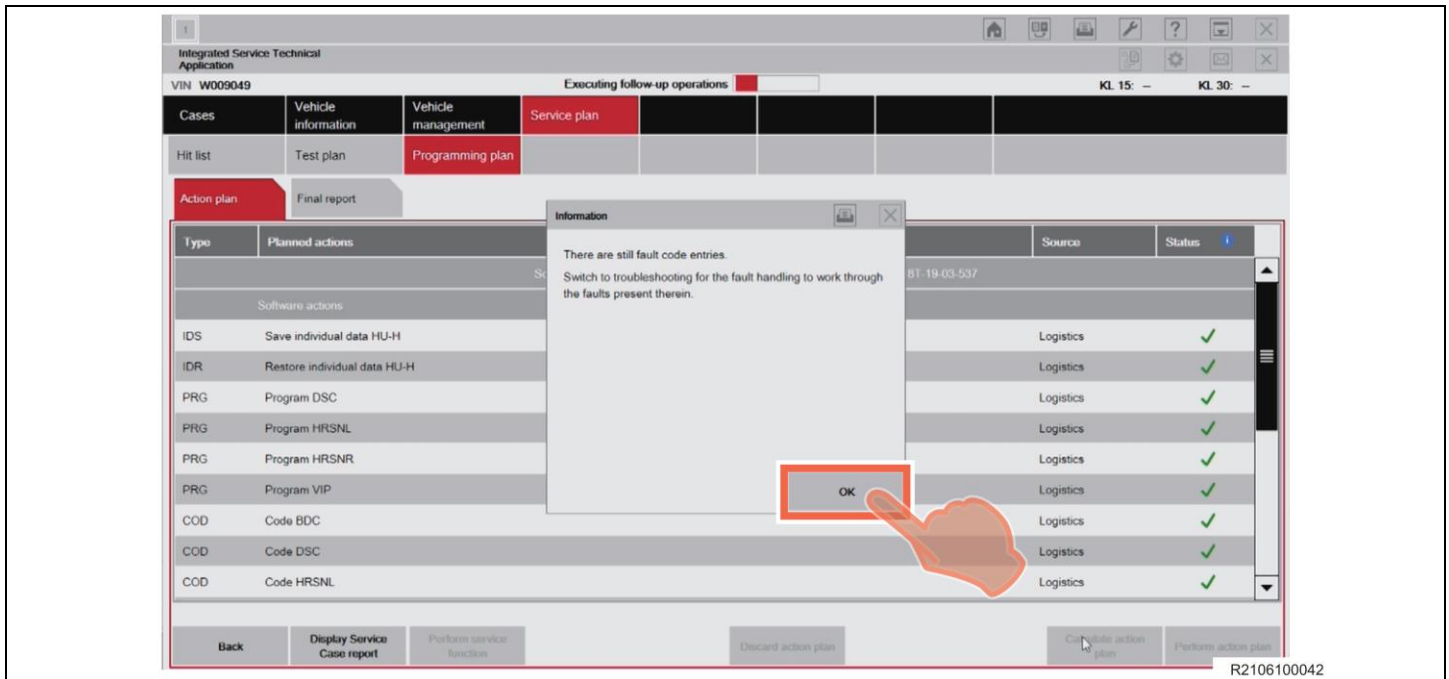
h. “Executing follow-up operations” is displayed in the center of the screen (header line).

The screenshot shows the ISTA software interface with the status 'Executing follow-up operations'. The 'Service plan' tab is active, and the 'Planned actions' table lists various operations with checkboxes in the 'Status' column.

Type	Planned actions	Source	Status
Preparation/follow-up operations			
ABL	CBS Service Inclusive selection	System	<input type="checkbox"/>
ABL	CBS data recovery follow-up operation	System	<input type="checkbox"/>
ABL	CBS data recovery preparer	System	✓
ABL	Check EPS initialization	System	<input type="checkbox"/>
ABL	Control units reset DSC	System	<input type="checkbox"/>
ABL	Delete fault memory	System	<input type="checkbox"/>
ABL	FAS control unit reset	System	<input type="checkbox"/>
ABL	Heating and air conditioning functions: Calibration run for flap motors	System	<input type="checkbox"/>
ABL	Lock airbag	System	<input type="checkbox"/>
ABL	MOST: Storing the desired configuration	System	<input type="checkbox"/>

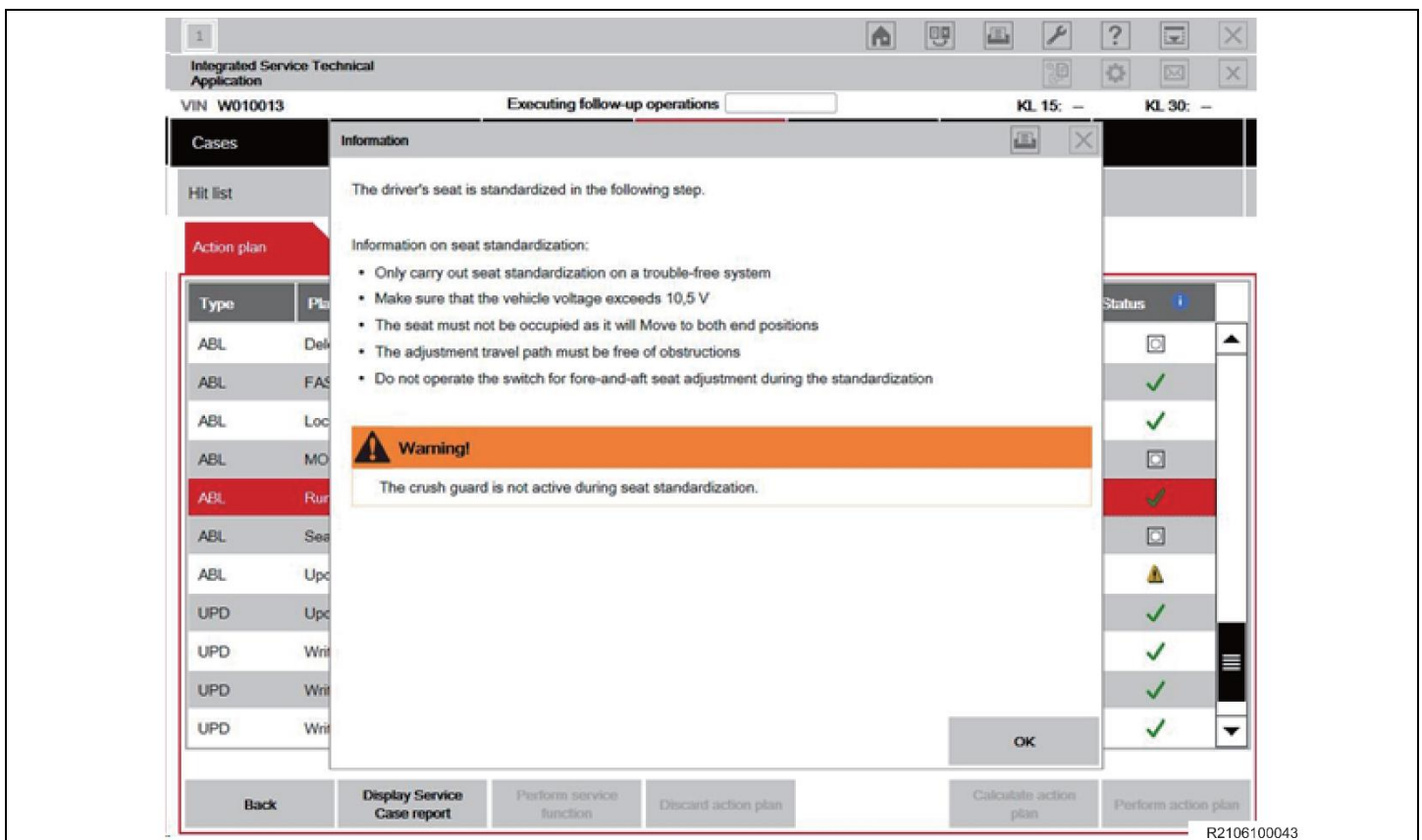
NOTICE:

If the following "Information" dialog box is displayed during "Executing follow-up operation", click "OK" to continue the follow-up operation. After reprogramming is complete, follow the on-screen instructions and carry out initialization and other work.

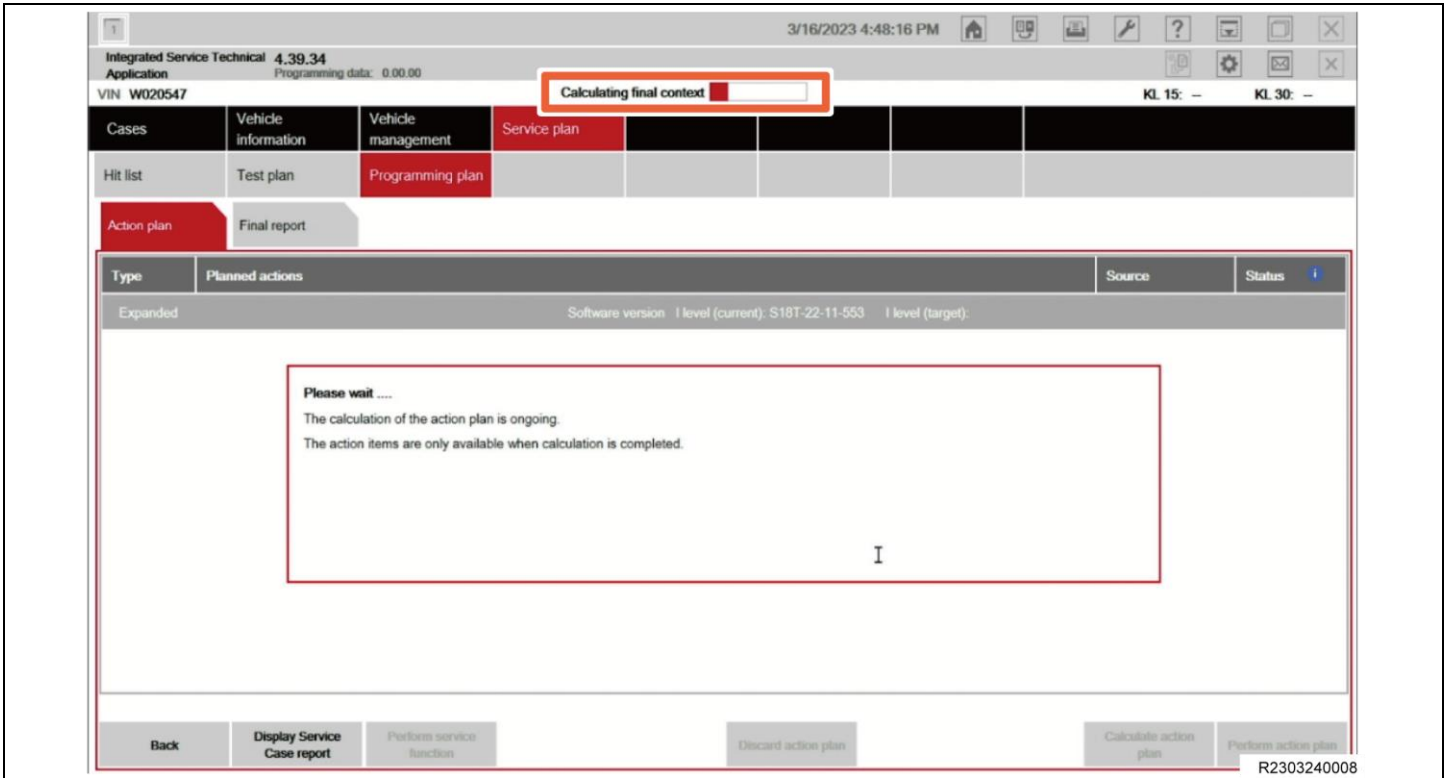


HINT:

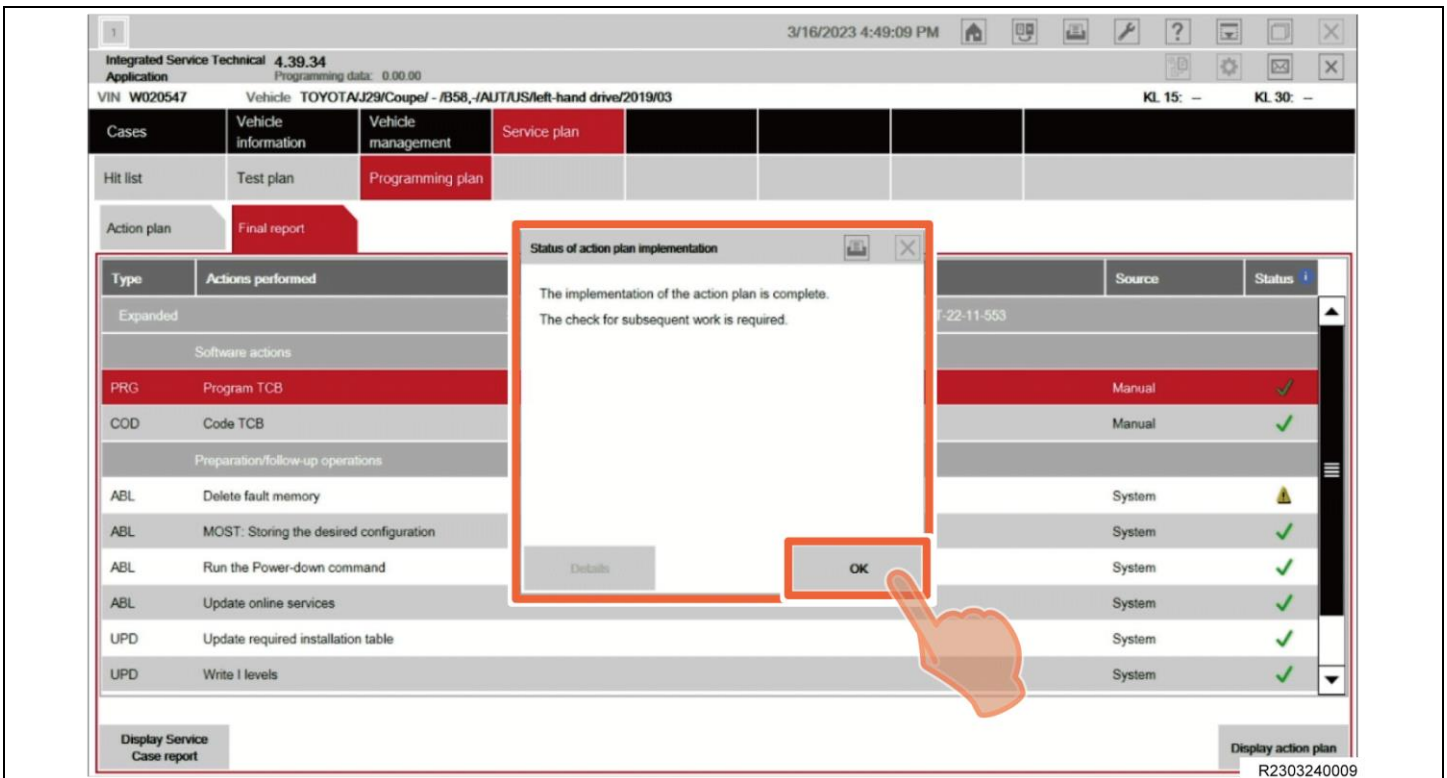
If the following dialog box appears, click "OK".



- i. “Calculating final context” appears at the center of the screen (header line). At the same time, a “Please wait....” message appears to allow for the completion of the action plan.



- j. After the “Status of action plan implementation” dialog box appears, click “OK”.



- k. On “Final report” screen, confirm “Program TCB” and “Code TCB” are shown on the “Actions performed” column, and the boxes on “Status” column are checked.

NOTICE:

On “Final report” screen, if “Program TCB” and “Code TCB” are not displayed on the “Actions performed” column, perform the procedure once again from XV. MANUALLY CONFIGURE PROGRAM TCB BY SOFTWARE UPDATE.

The screenshot shows the 'Final report' screen in the Integrated Service Technical application. The header displays the VIN W020547 and vehicle information: TOYOTA/J29/Coupe/ - /B58, /AUT/US/left-hand drive/2019/03. The navigation menu includes 'Cases', 'Vehicle information', 'Vehicle management', 'Service plan', 'Hit list', 'Test plan', 'Programming plan', 'Action plan', and 'Final report'. The main table lists actions performed, with 'Program TCB' and 'Code TCB' highlighted in red and their status boxes checked.

Type	Actions performed	Source	Status
Expanded Software version: I level (current): S18T-22-11-553 I level (target): S18T-22-11-553			
Software actions			
PRG	Program TCB	Manual	✓
COD	Code TCB	Manual	✓
Preparation/follow-up operations			
ABL	Delete fault memory	System	⚠
ABL	MCST: Storing the desired configuration	System	✓
ABL	Run the Power-down command	System	✓
ABL	Update online services	System	✓
UPD	Update required installation table	System	✓
UPD	Write I levels	System	✓

Buttons at the bottom: Display Service Case report, Display action plan. Reference number: R2303240010.

XV. DISCONNECT TOYOTA ISTA

1. CLOSING OUT OF TOYOTA ISTA

- Select "Cases" -> "Active" to display the "Case list".
- Confirm the vehicle information is correct, and then click "Close case".

The screenshot shows the Toyota ISTA interface. At the top, the date and time are 6/17/2021 11:46:11 AM. The application is 'Integrated Service Technical Application'. The vehicle information is 'VIN W020547' and 'Vehicle TOYOTA/J29/Coupe/ - /B58,-/AUT/US/left-hand drive/2019/03'. The 'Cases' menu is open, and the 'Active' tab is selected. The 'Case list' table has one entry:

No.	Color	Basic features	VIN	Description
1		TOYOTA/J29/Coupe/ - /B58,-/AUT/US/left-hand drive/2019/03	WZ1DB4C0XLW020547	WZ1DB4C0XLW020547

A hand icon points to the 'Close case' button at the bottom right of the case list. The ID R2106100047 is visible at the bottom right.

- When the "Open actions in action plan" dialog box appears, click "Yes".

The screenshot shows the Toyota ISTA interface with the 'Open actions in action plan' dialog box open. The dialog box contains the following text:

Open actions in the action plan




There are still open actions present in the action plan.
These actions must be completed before closing the case.

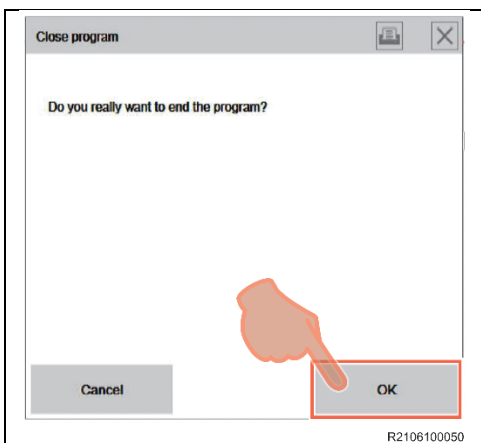
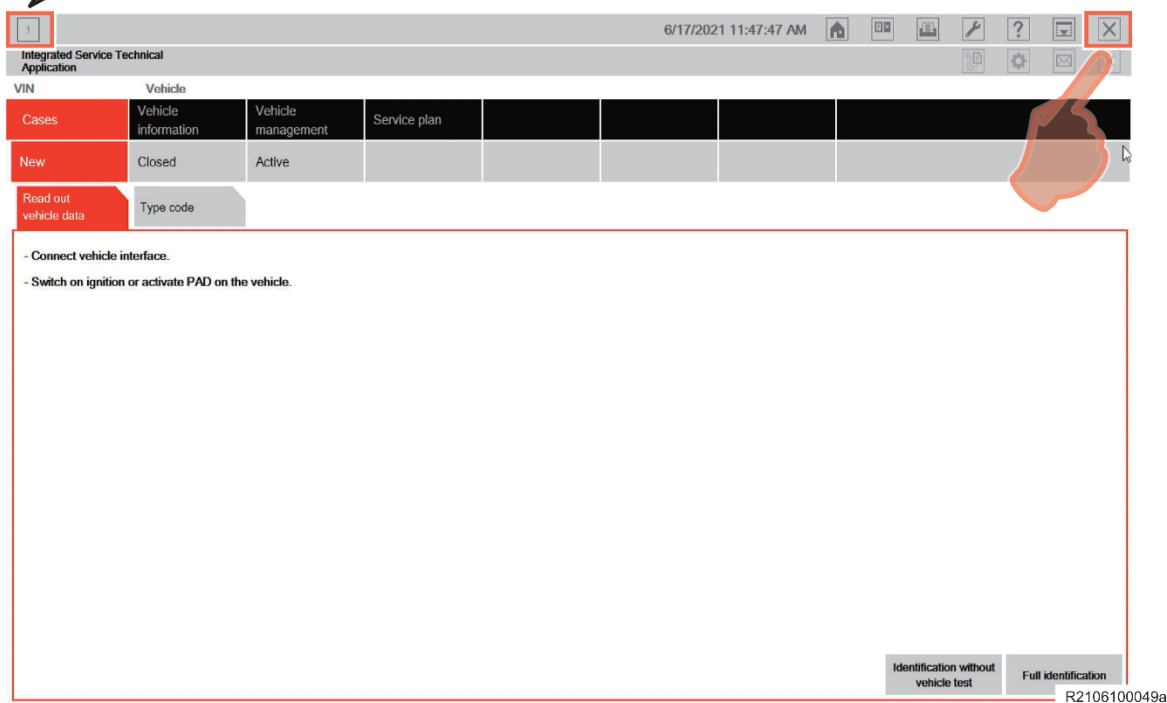
Do you want to close the case anyway?

Buttons: No, Yes

A hand icon points to the 'Yes' button. The ID R2106100048 is visible at the bottom right.

- d. Make sure that the frame of the icon at the left end of the toolbar at the top left of the screen has turned gray, and then click “x”.

Icon	Color and Status	Meaning
	Gray	Job Completed; Click ☒ at the Right on the Toolbar.
	Rotating Animation	Work in Progress; Wait Until Color is Grey.
	Flashing Animation	There is a warning message; a response is required. Click the icon, and then follow the on-screen instructions to carry out the work.



- e. Click “OK” when the “Close program” dialog box appears.

f. Open the driver-side door, press the Start/Stop button once, and then close the door.

NOTICE:

PAD mode is turned off, and the headlights are turned off by opening the driver-side door, pressing the Start/Stop button once, and then closing the door.

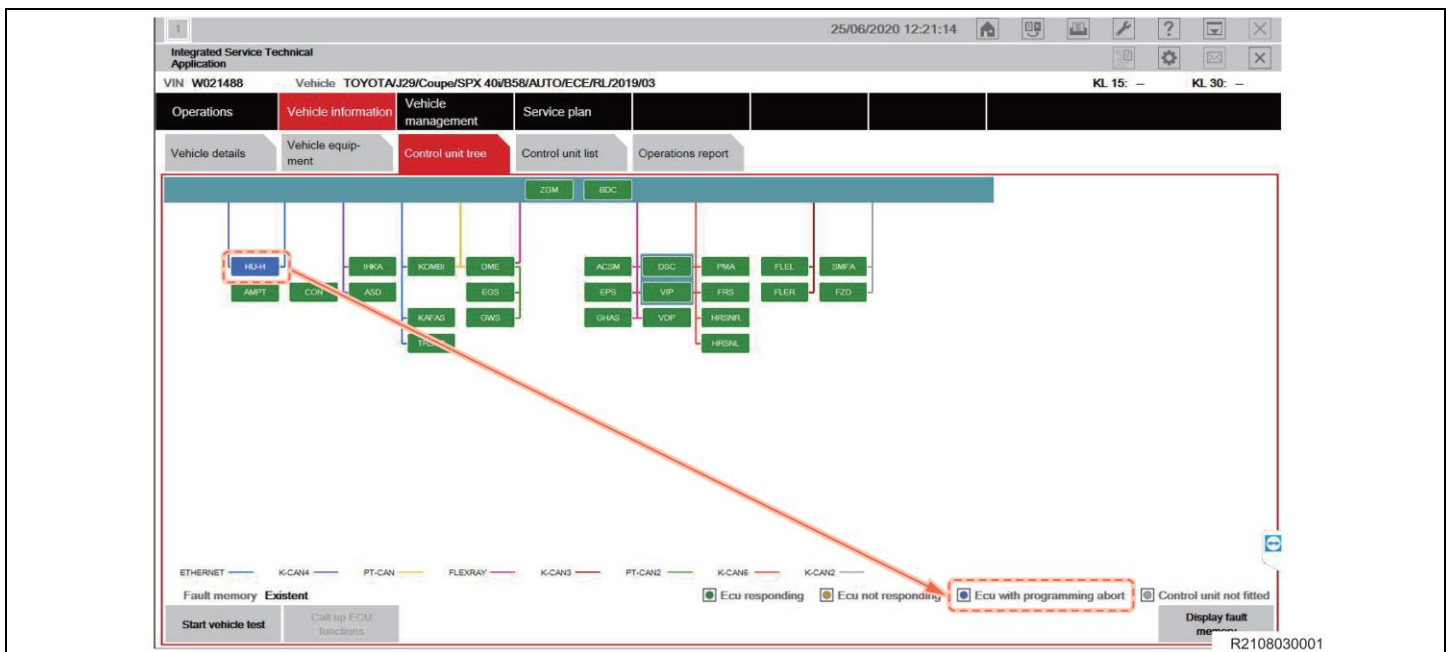
g. Disconnect the ISTA diagnostic cable and battery charger.

XVI. HU-H WITH ABORTED REPROGRAMMING-HOW TO RECOVER AND FINALIZE THE REPROGRAMMING

1. SITUATION AT BEGINNING



- In this print screen the HU-H is colored in Blue. This corresponds to the state of an ECU with programming abort.
- On the vehicle itself this can be recognized by the fact the screen of the navigation will display a Blue screen.



2. ABL FOR RECOVERING HU-H WITH ABORTED REPROGRAMMING



The new function becomes active only after a failed reprogramming.
(failed reprogramming > go to the indicated location during the same session and launch this function).
If the failed reprogramming session was closed, perform the reprogramming once again to make ISTA recognize the “HU-H reprogramming abort” and then go to the indicated location below.

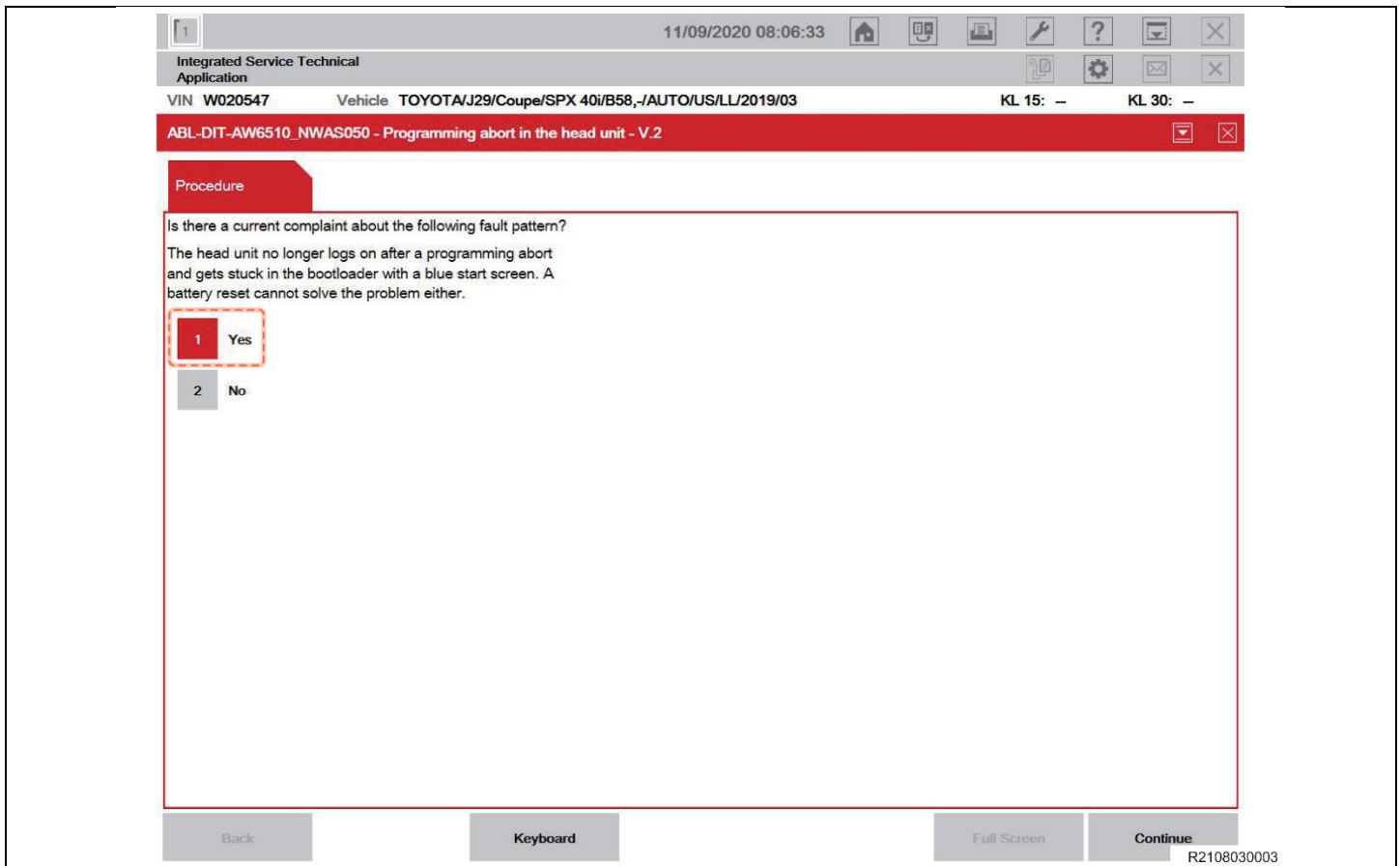
- a. The function can be found in Vehicle Management-> Troubleshooting-> Function Structure-> Body-> Audio mode -> (!) Current fault patterns-> Head unit fault patterns.

The screenshot shows the ISTA application interface. At the top, the date and time are 11/09/2020 08:05:58. The application title is 'Integrated Service Technical Application'. The vehicle information is 'VIN W020547 Vehicle TOYOTA/J29/Coupe/SPX 40i/B58,-/AUTO/US/LL/2019/03'. The navigation menu is visible, with 'Function Structure' selected. The 'Body / Audio mode, video mode, navigation, telephone (MOST)' section is expanded, and 'Headunit fault patterns' is highlighted in red. The right pane shows a list of ABLs:

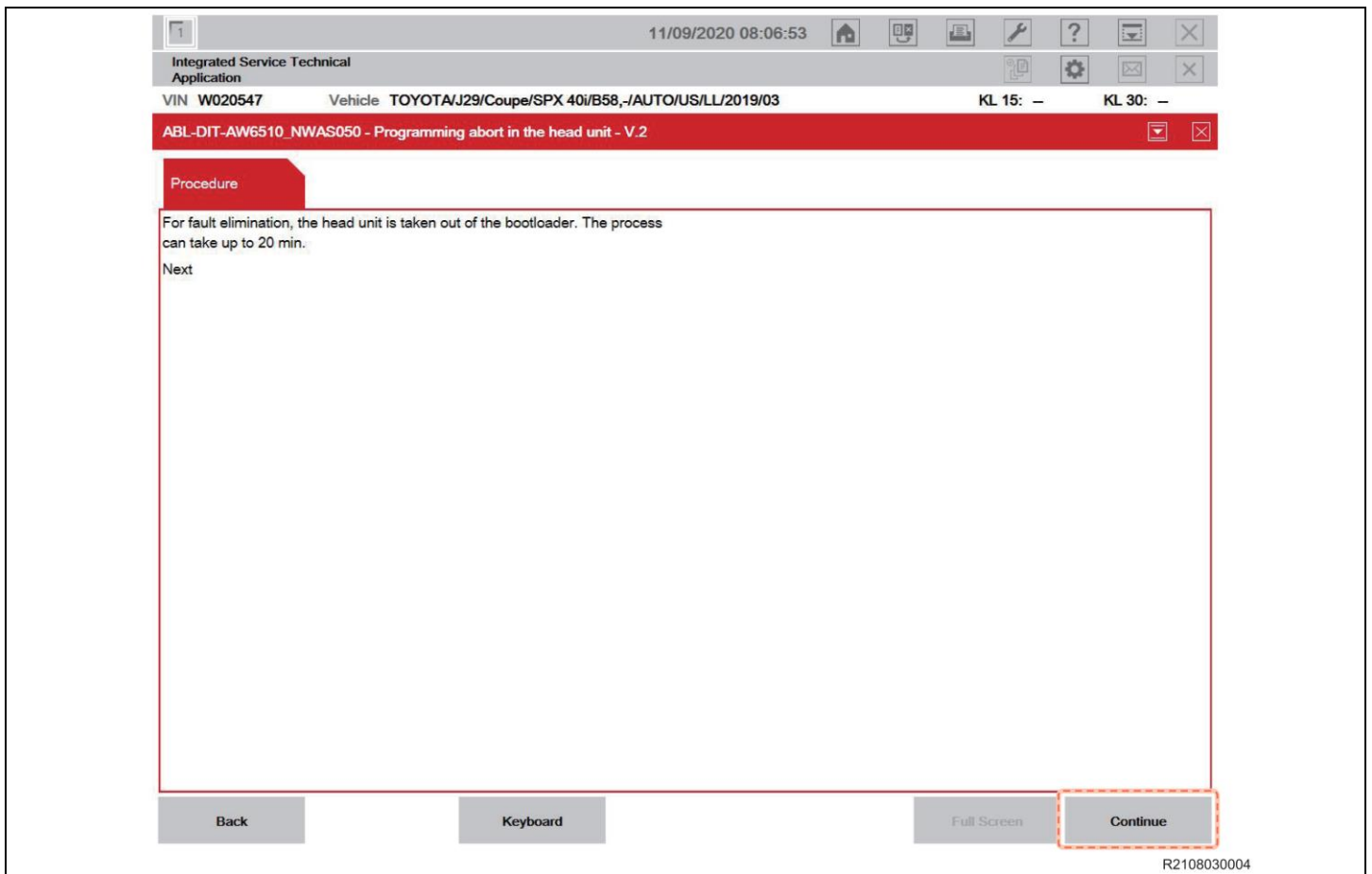
Type	Title
ABL	Programming abort in the head unit
ABL	Reset of head unit, e.g. display is black along with a resta

At the bottom, there are filters and buttons: 'Filters', 'Add to test plan', and 'Display'. The status bar at the bottom right shows 'R2108030002'.

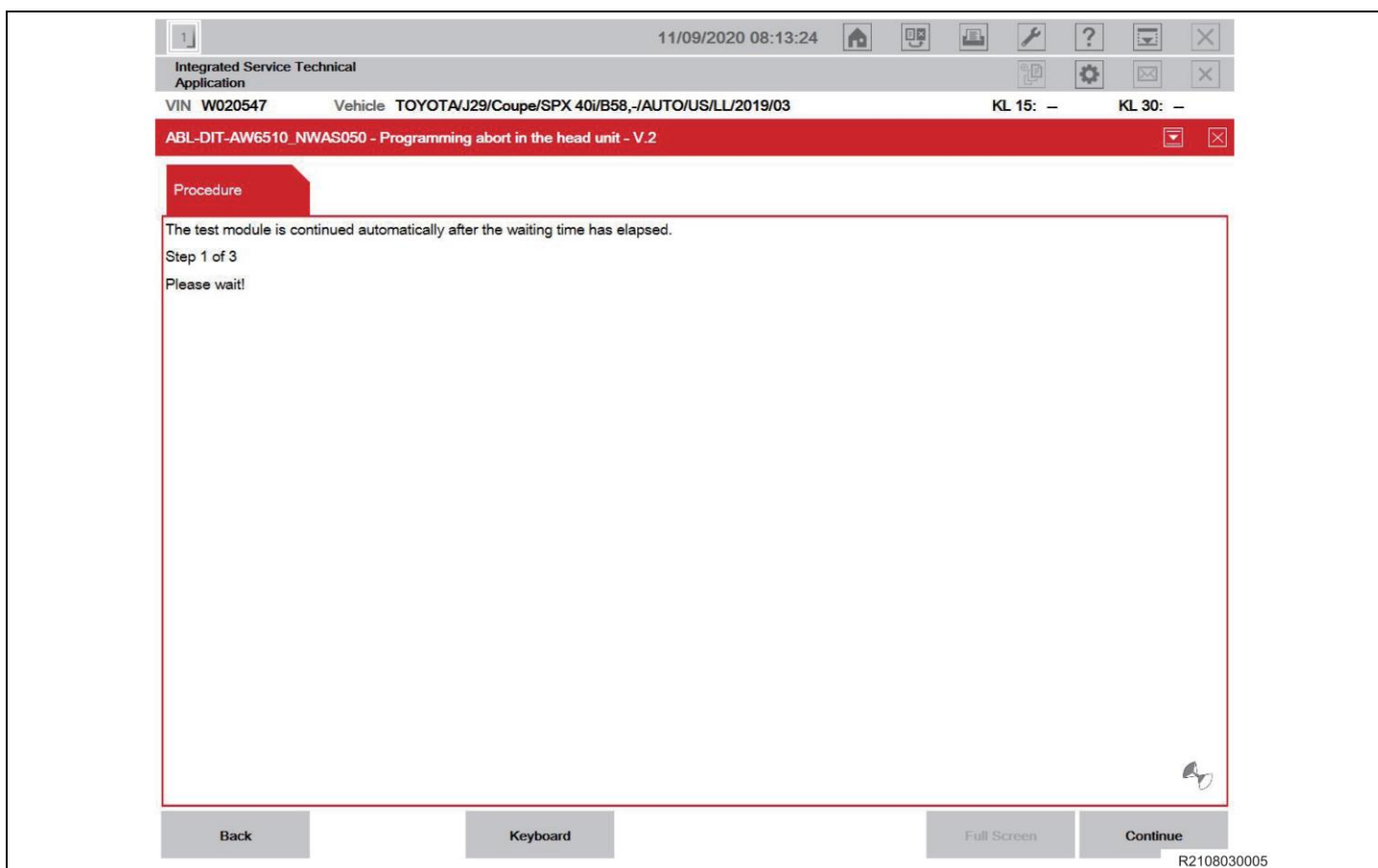
- b. The role of this ABL is to recover the damaged bootloader segment of a HU-H after an aborted reprogramming. At this step if the vehicle corresponds to the description, select “Yes”.



c. Select "Continue".



d. The procedure is composed of 3 phases that ISTA will conduct in an automated fashion.



e. The procedure is finalized now, and the head unit is now ready to be reprogrammed.

The screenshot displays a software interface for an Integrated Service Technical Application. At the top, the date and time are 11/09/2020 08:26:04. The application title is "Integrated Service Technical Application". Below this, the VIN is W020547 and the vehicle is identified as TOYOTA/J29/Coupe/SPX 40i/B58,-/AUTO/US/LL/2019/03. A red banner at the top of the main content area reads "ABL-DIT-AW6510_NWAS050 - Programming abort in the head unit - V.2".

The main content area is titled "Procedure" and contains the following text: "The head unit is again in a stable state. Program the vehicle to the current integration level." Below this text, a red square with the number "1" is followed by the code "D6510_HU000000_90_210".

At the bottom of the interface, there are four buttons: "Back", "Keyboard", "Full Screen", and "Continue". The ID number "R2108030006" is located in the bottom right corner.

◀ VERIFY REPAIR QUALITY ▶

- Confirm the ISTA system calibration has been updated successfully.
- Confirm there are no DTCs after the calibration update.

XVII. APPENDIX

A. PARTS DISPOSAL

In accordance with Federal law, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***

Campaign Designation / Phase Decoder

