

UST V3.2



TOYOTA/LEXUS UNLOCK & EMERGENCY ENGINE START TOOL

FOR ALL MODELS 2021 - 2025



➤ FEATURES OF UST 3.2

- Disabling the factory alarm of the car.
- Opening doors (vehicle central locking) after connecting to the car headlight (Headlight ECU) or to the tailgate control module (Multiplex Network Door ECU) or to the Smart ECU via special adapter.
- The device emulates a car key. UST 3 allows you to save data for 40 vehicles in the internal memory.
- Programming additional keys.
- Diagnostics of the car and security systems.
- Changing the car identification.
- After using UST 3 **the car keys remain functional** (**NO NEED TO RESTORE !!!**) and all systems operates in standard way! **NO NEED** to carry out diagnostics, programming or registering (binding) procedures!!!

Attention!!! *The device is intended for legal use to demonstrate the anti-theft protection of cars, the necessary legal evacuation of cars from unauthorized parking areas by employees of car service centers and towing services. Any use of the device for illegal purposes is punishable by law!*

➤ SUPPORTED MODELS

TOYOTA / LEXUS: models from **2021** to **2025** (europe, usa, asia/japan - see model list).

➤ SUPPORTED KEY TYPE – BA, B9.

➤ THE KIT

- UST v3.2 device;
- The cable with the needles (for connection to CAN);
- OBD cable (for connection to OBD);
- The cable with insulation piercing test clips;
- The adapter (for connection to Smart ECU).

➤ DEVICE CONNECTION OPTIONS

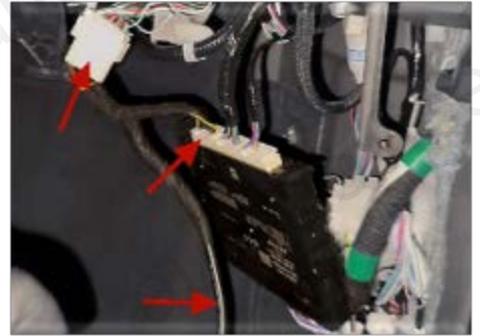
- Headlight ECU** - use the cable with needles (Lexus NX before 02/2023 and etc.);
- MND ECU** (*Multiplex Network Door ECU*) - use the cable with needles (all models);
- Smart ECU** (use the adapter)
- OBD** (the mode will be added in future updates).



Connecting with needles to
Headlight ECU



Connecting with needles to MND ECU
in the trunk (tailgate)



Connecting to Smart ECU
via the adapter

➤ DEVICE OPERATION

The device operates in the modes:

1. The mode of disarming and unblocking car doors;
2. Key transponder emulation mode.
3. Programming new key;
4. Resetting errors and changing car identification.

- ✚ When the device is turned on, the data of the last used memory cell is loaded by default into the transponder memory. To emulate previously saved transponders, you need to select the corresponding cell.

➤ OPERATING PROCEDURE

After turning on the device, the diagnostic symbol appears on the screen. The device is in PIN code entry mode. After entering the PIN code, the working screen lights up with the following lines:

1. **Used Slot** (Selected cell);
2. **Toyota Read** (Read data and unlock car doors);
3. **Select Slot** (Selecting the active cell);
4. **Pin Mode On/Off** (Selecting active Pin-code state).

➤ OPERATION SEQUENCE (Step-by-step instruction)

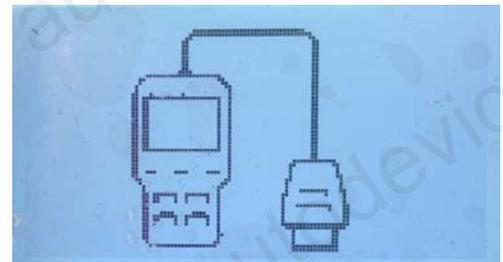
1. Depending on the selected device connection option, **connect**:
 - **cable with needles to CAN MND ECU,**
 - **cable with needles to Headlight ECU.**

*** For connection points, see the section "Device Connection Points".**

2. **Turning on the device.**

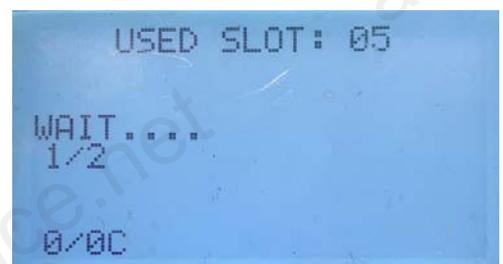
Connect the device and cable with needles, the device will turn on. (*Don't disconnect the cable with needles or the OBD cable from the device during operation of the device!!!*).

When the device is turned on, a diagnostic symbol is displayed on the screen. The device is in Pin-code input mode.



3. **After entering the PIN code, the working screen lights up with the following lines:**

- **Used Slot** (Selected cell);
- **Toyota/Read** (Reading data and unlocking car doors);
- **Select Slot** (Selecting the active cell);
- **Pin Mode On/Off** (Pin-code status).



4. Select the menu item «**Toyota/Read**», the car data will be recorded to the first free memory cell (by default, the device is in key transponder emulation mode).

During this process, the car's **security system is disarmed**, and the **doors are unlocked**. The reading process is displayed on the screen and lasts for several seconds.



Upon completion, the following info is displayed:

- Number of the active cell with data about the car;
- The number of keys recorded in the car and the type of key;
- SMART ECU software number.

The device is ready to start the car engine.

The cable can be disconnected from the car (Headlight or MND ECU).

(Don't disconnect the cable with needles or the OBD cable from the device during operation of the device!!!)

5. To select the active cell, click «**Select Slot**». The emulator's memory will be loaded with the data of the previously read car. To clear the cell, you need to select it using the menu keys and press the **EXIT** key while holding it until its status changes to **EMPTY**.



(Don't disconnect the cable with needles or the OBD cable from the device during operation of the device!!!)

6. To start the engine, you need to activate the key emulator mode:
 - select **Toyota/Read** mode and immediately use it to start the car,
 - or select the required cell via the «**Select Slot**».

The device functions as a transponder (the Lock/Unlock button mode doesn't work), so when you press the "**START**" button, you must bring the device to the "**START**" button to allow start the car. После запуска автомобиля можно начинать движение.

(Don't disconnect the cable with needles or the OBD cable from the device during operation of the device!!!)

➤ Pin Code Device Lock

This mode is necessary to hide access to information in the device and prohibit the use of the device by unauthorized people.

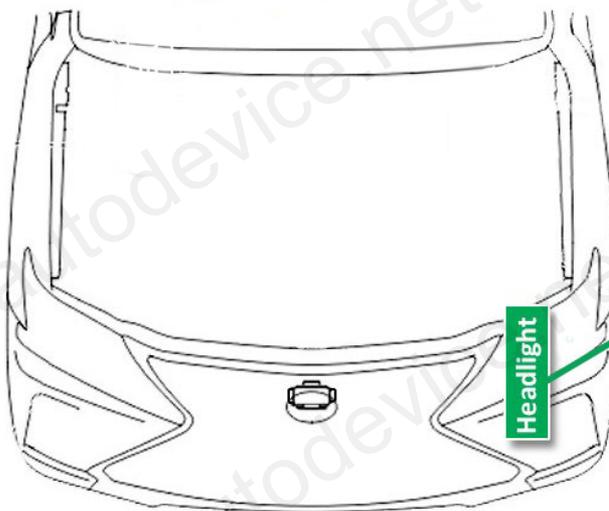
PIN-code – mode is enabled or disabled. To change the mode, select the menu item **PIN MODE ON (OFF)**.



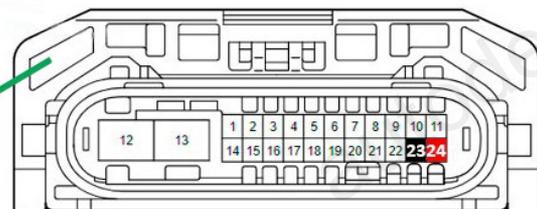
➤ DEVICE CONNECTION POINTS

In the case when the car is armed and all doors are closed, access to the CAN bus is possible **only**:

- 1) By connection via the connector of the left headlight control unit. (Lexus NX before 02/2023 and etc.)



■ CAN - HIGH
■ CAN - LOW

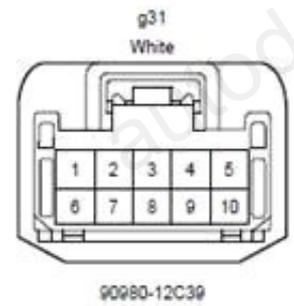
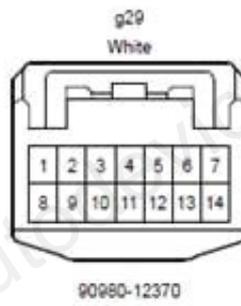
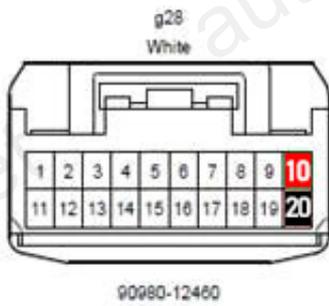


- 2) By connecting via the MND ECU (Multiplex Network Door ECU) tailgate control module connector.

From 02/2023, access to the headlight control unit is impossible because the manufacturer has made changes to the vehicle's electrical circuit.

Therefore, it is necessary to make a hole opposite the MND ECU connector and connect the needles to connector **g28**, pin **10 (CAN HI)** and pin **20 (CAN LOW)**.

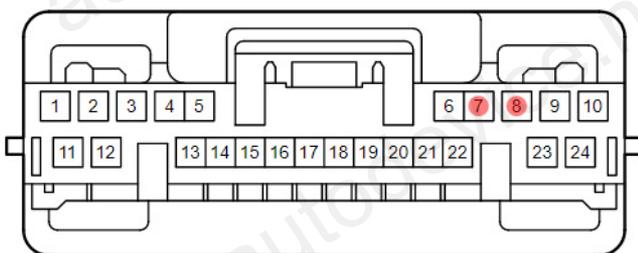




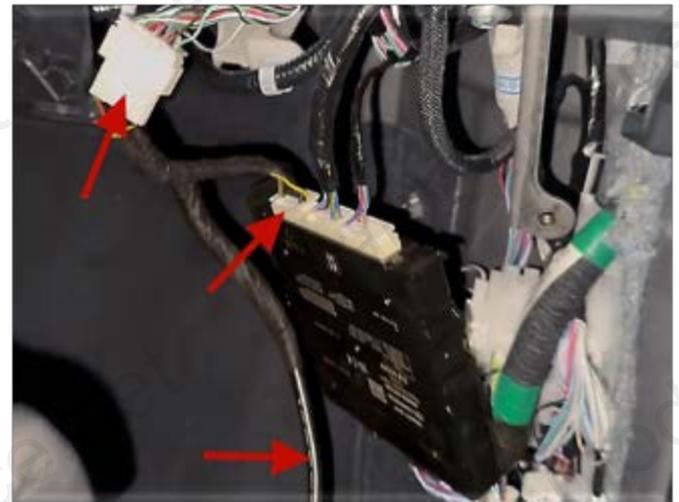
Module connectors of *Multiplex Network Door ECU* (tailgate control module).

- ☑ If the trunk door isn't automatic and the MND ECU block is missing, other connection points inside the vehicle are required for access. This situation is possible in simple Toyota models, in Lexus cars the MMD ECU unit is usually installed.
- ☑ Depending on the vehicle configuration, other connection points are possible (in doors, Body ECU, Smart ECU, etc.). In such cases, it is necessary to study the car's electrical circuits, and the locations of its electronic blocks, wiring, and connection sockets.

3) By connection via special adapter to Smart ECU.



Smart ECU module connectors



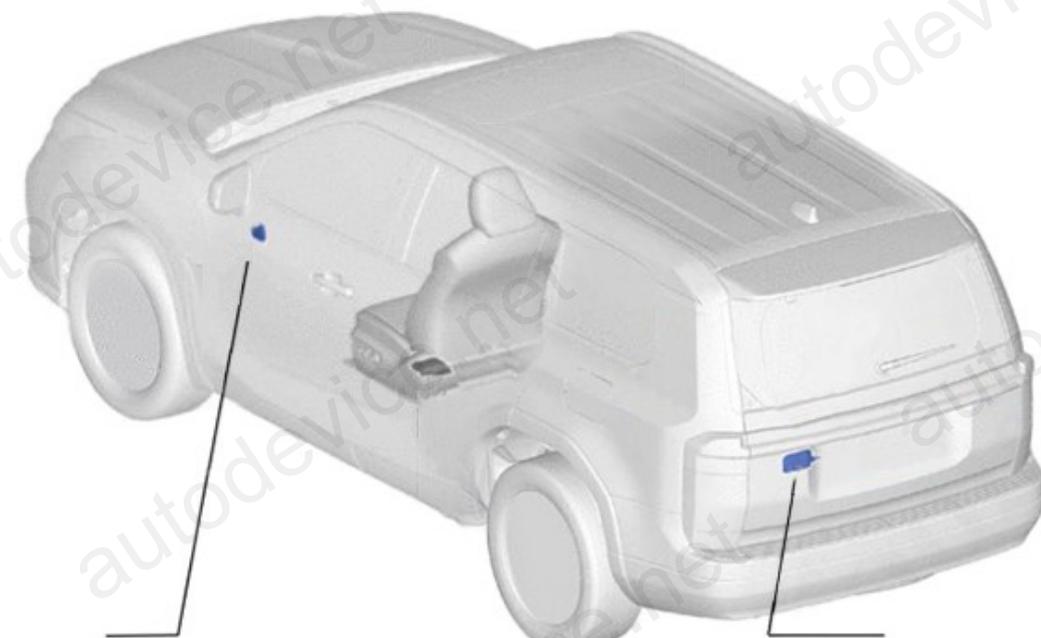
➤ **APPENDIX**

➤ **CONNECTION POINTS**

A3) Connection points for Lexus NX



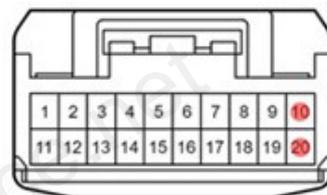
A4) Connection points for Lexus GX



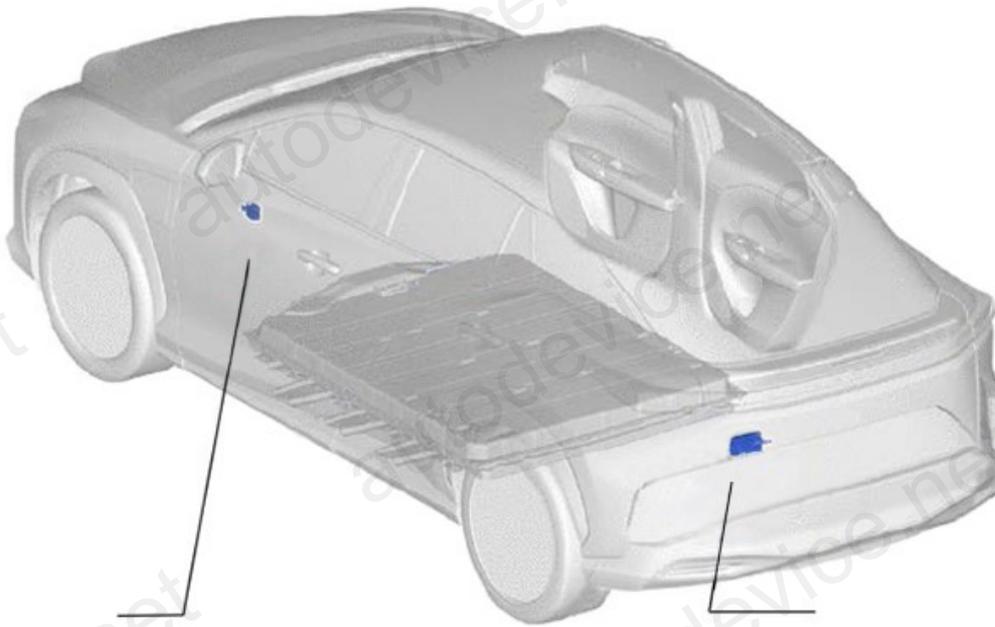
OUTER MIRROR CONTROL ECU



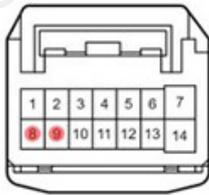
MULTIPLEX NETWORK DOOR ECU



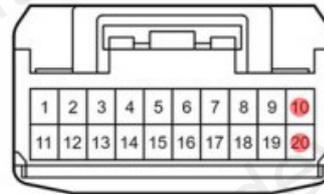
A5) Connection points for Lexus RZ



OUTER MIRROR CONTROL ECU



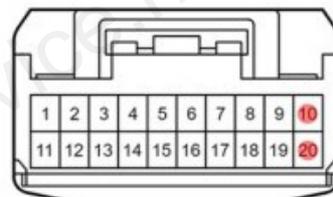
MULTIPLEX NETWORK DOOR ECU



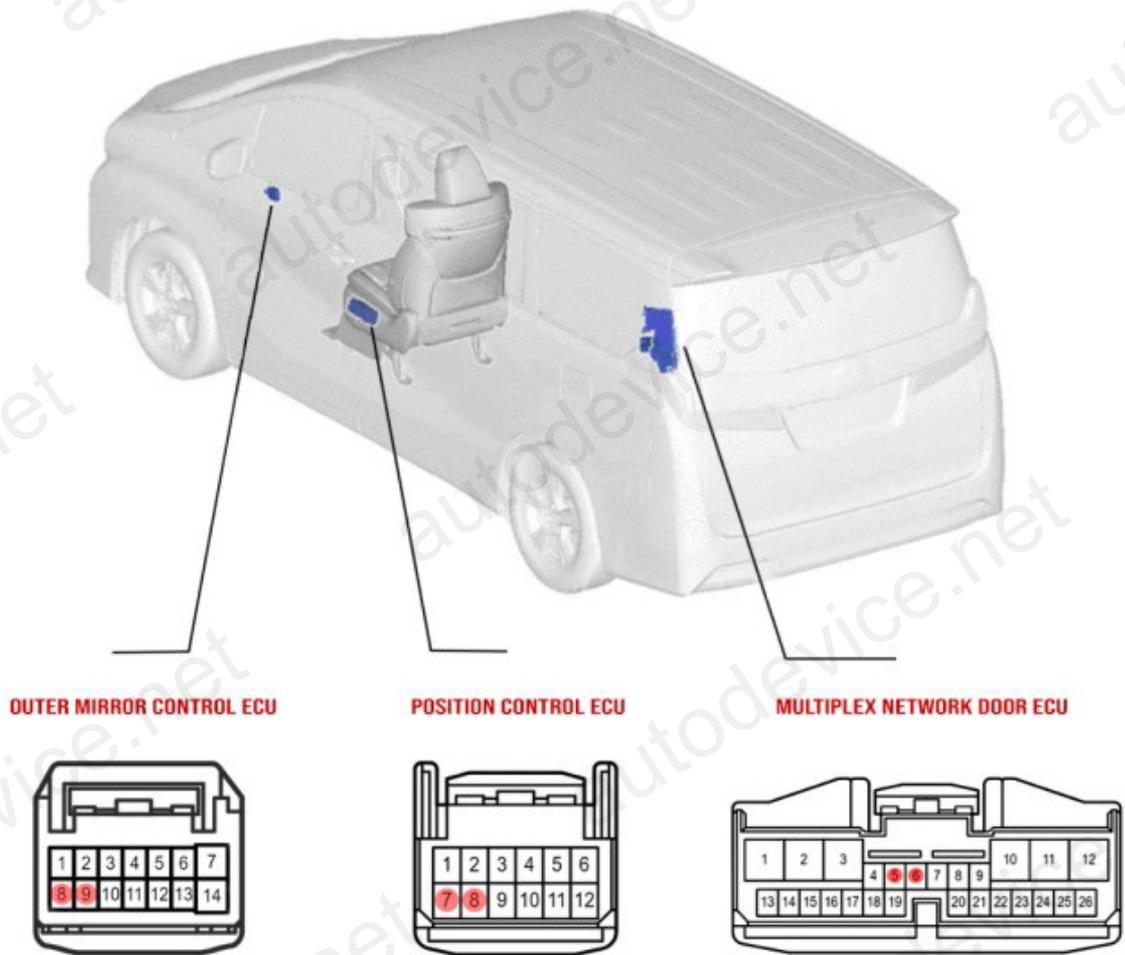
A6) Connection points for Lexus LBX



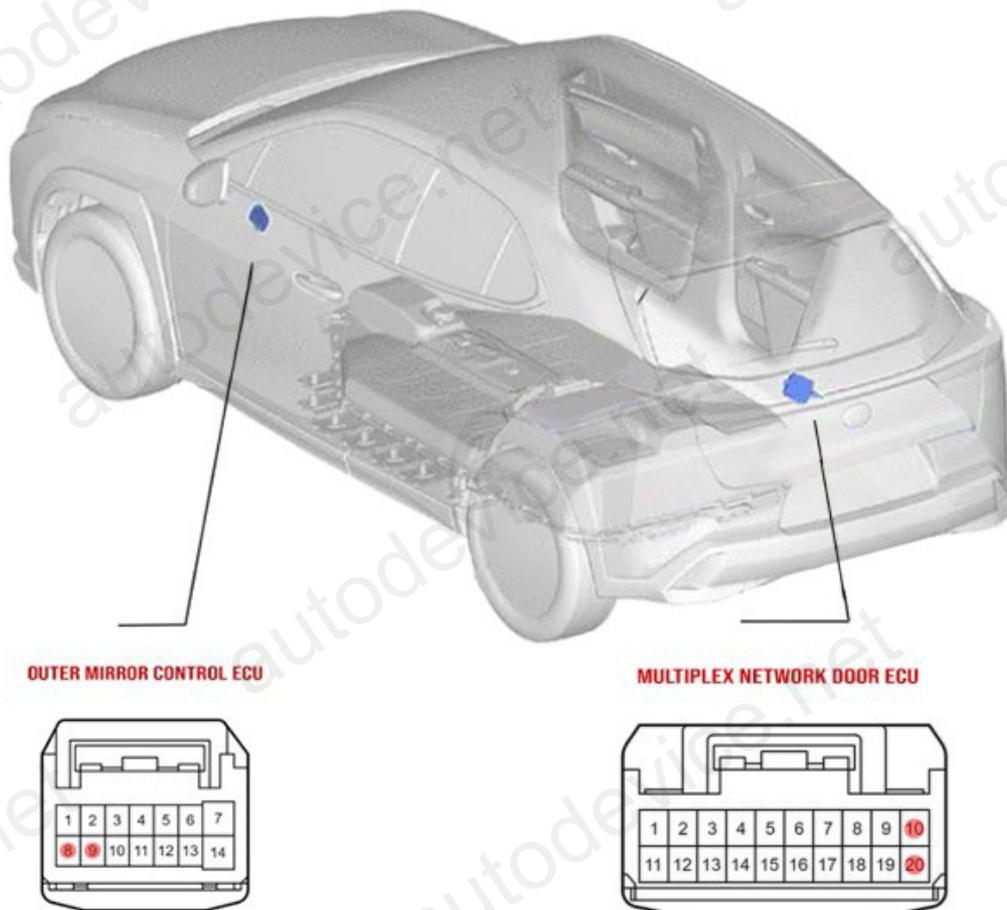
MULTIPLEX NETWORK DOOR ECU



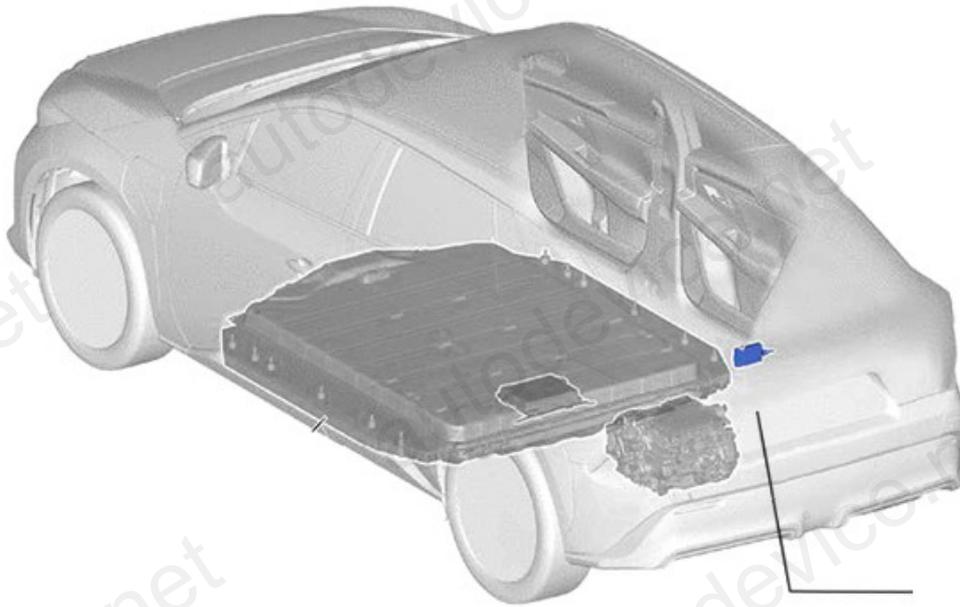
A7) Connection points for Lexus LM / Toyota Alphard



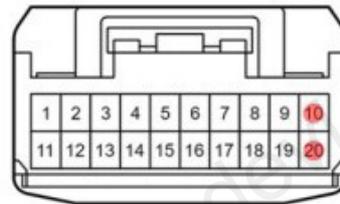
A8) Connection points for Lexus UX



A9) Connection points for Toyota BZ4X



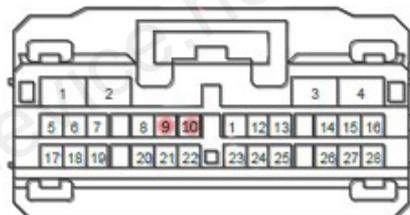
MULTIPLEX NETWORK DOOR ECU



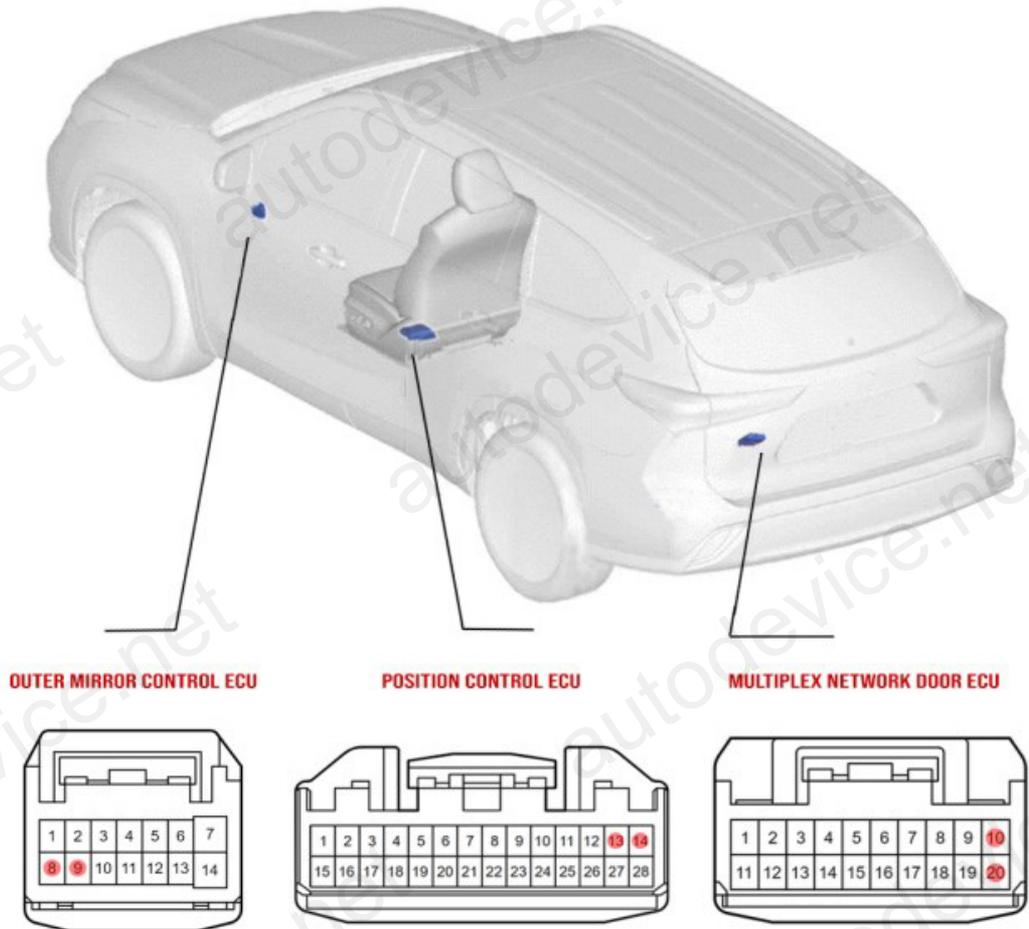
A10) Connection points for C-HR 2023



MULTIPLEX NETWORK DOOR ECU



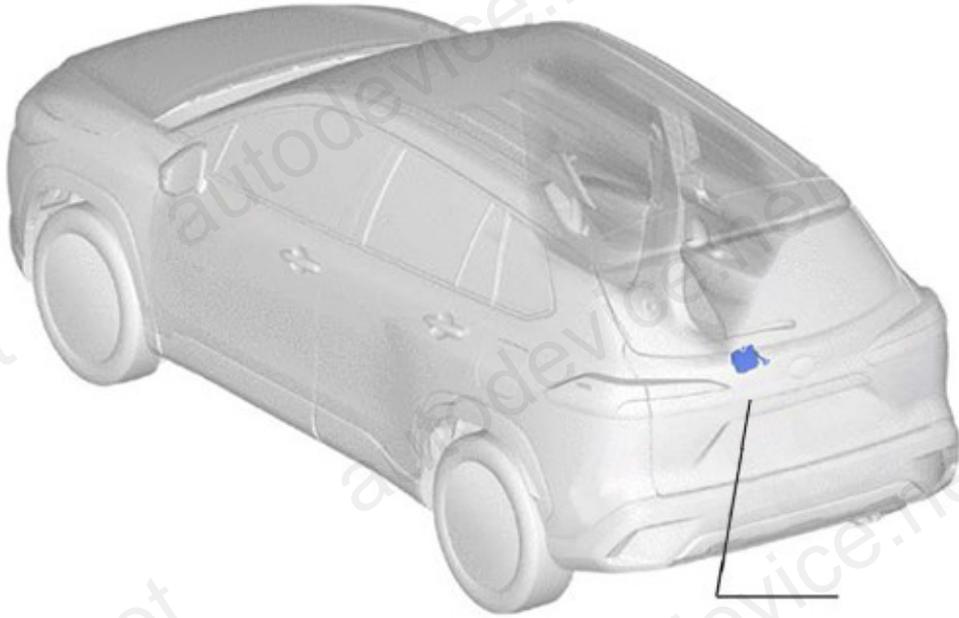
A11) Connection points for Highlander



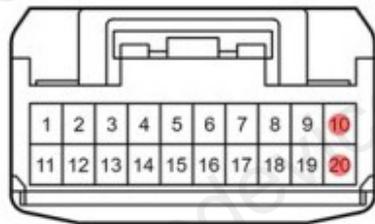
A12) Connection points for Toyota Camry V80



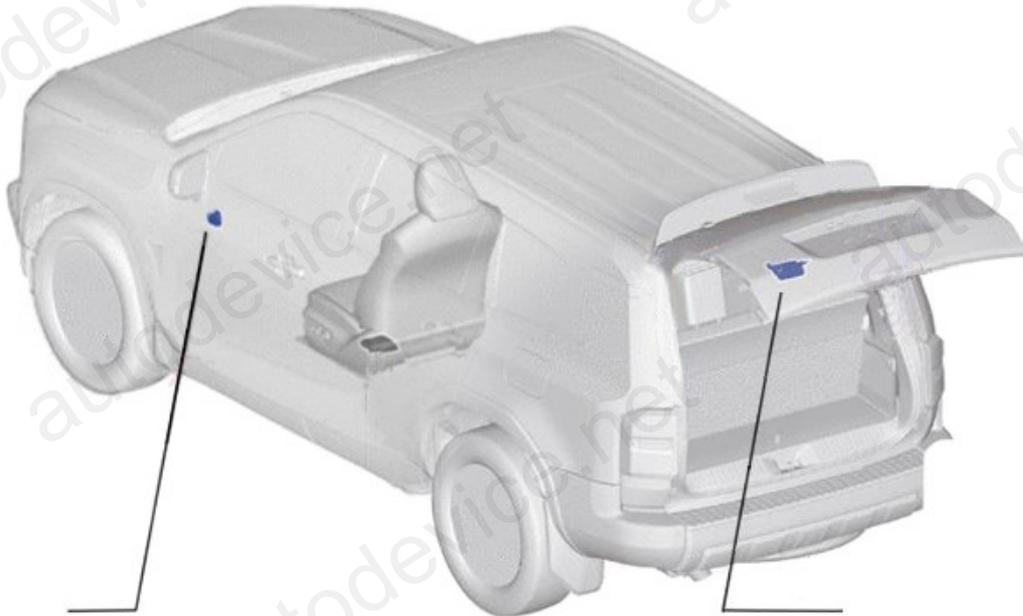
A13) Connection points for Toyota Corolla Cross



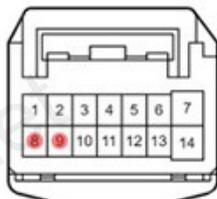
MULTIPLEX NETWORK DOOR ECU



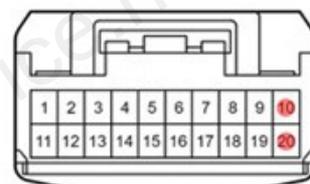
A14) Connection points for Land Cruiser 250



OUTER MIRROR CONTROL ECU



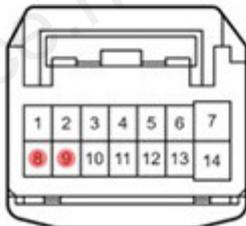
MULTIPLEX NETWORK DOOR ECU



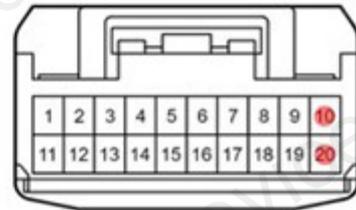
A15) Connection points for Land Cruiser 300



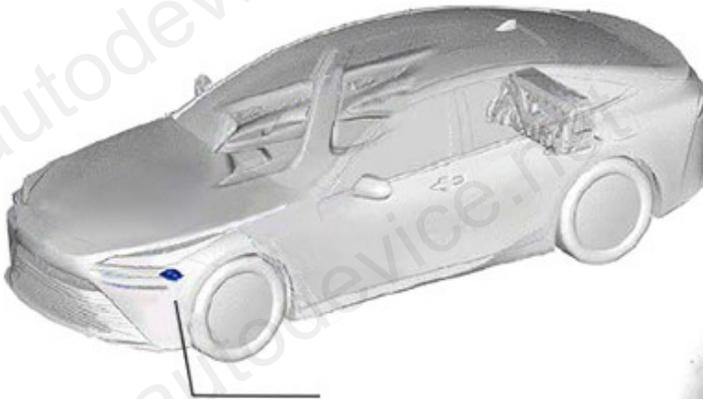
OUTER MIRROR CONTROL ECU



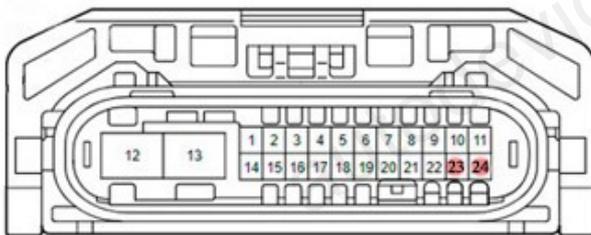
MULTIPLEX NETWORK DOOR ECU



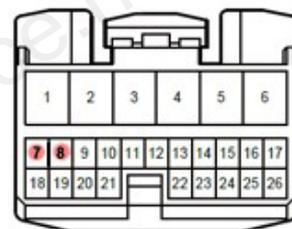
A16) Connection points for Toyota Mirai 2023



HEADLIGHT



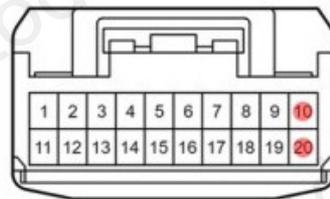
MULTIPLEX NETWORK DOOR ECU



A17) Connection points for Toyota Prius 2024



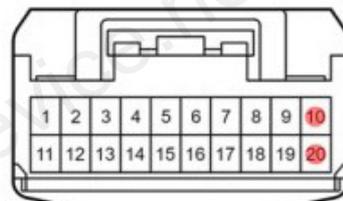
MULTIPLEX NETWORK DOOR ECU



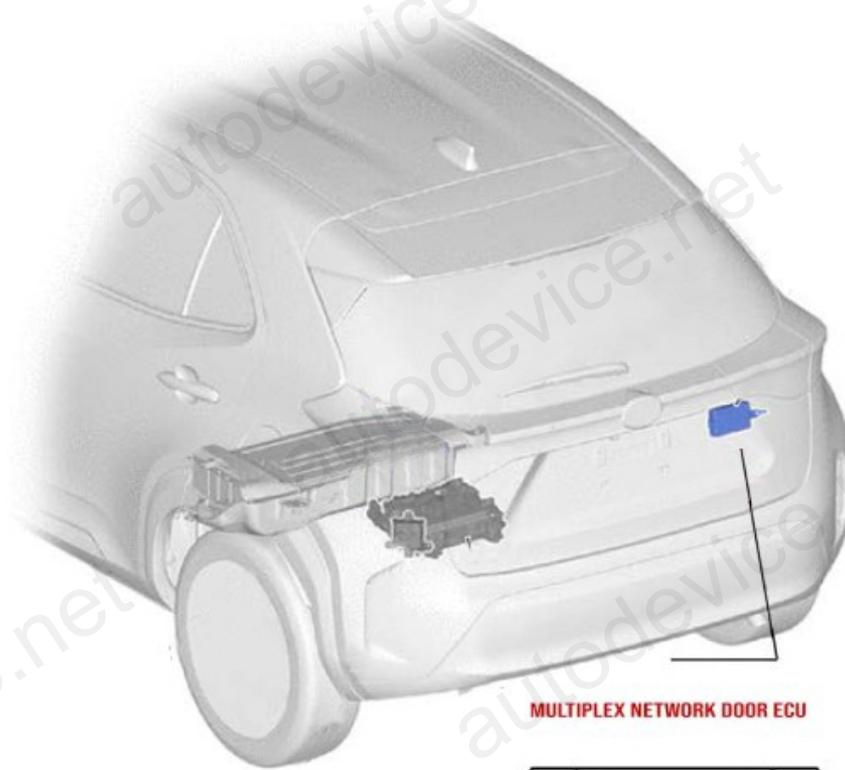
A18) Connection points for Toyota RAV4 PHV



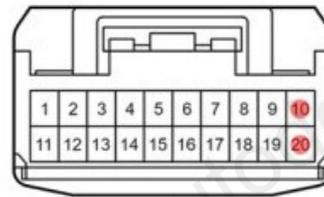
MULTIPLEX NETWORK DOOR ECU



A19) Connection points for Toyota Yaris Cross



MULTIPLEX NETWORK DOOR ECU



➤ **MODEL LIST**

Lexus	
Model	Year
GX550	2023
LX600	2022+
NX	2022+
NX450h+ Hybrid	2023+
RX	2022+
RX450h+ Hybrid	2024+
RZ450e	2023+
TX	2023+
UX	2023+
LBX	2023+
LM	2023+

Toyota	
Alphard/ Vellfire	2023+
BZ4X	2023+
Crown	2023+
Grand Highlander	2024+
Harrier	2021+
Land Cruiser 300	2022+
Land Cruiser Prado	2023+
Mirai	2023+
Noah/Voxy	2022+
Prius	2023+
Prius Prime	2023+
RAV4 Plug-in Hybrid	2021+
RAV4 Prime Hybrid	2021+
Sequoia	2023+
Sienna	2023+
Tacoma	2023+
Tundra	2023+
Venza	2023+

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