FST_2

device **FST_2** designed for emergency opening and starting Toyota/Lexus vehicles 2017-2022 years of production, in case of loss or malfunction of the keys.

Instrument capabilities:

_disabling the standard alarm

_opening / closing of the central lock

_emergency engine start

_blocking non-standard systems connected via CAN bus

After using the device, the working keys of the car remain operational, all systems work normally and it is not required to perform diagnostics, programming and binding procedures!

Supported key types: A8, A9, AA, 39

88– supported only on vehicles with stock alarms
Emergency engine start on cars with 88 key does not work.

Equipment:

1. Instrument FST_2
2. Micro USB charger

3. Cable with needles to connect to CAN bus
4. OBD cable for connection to the vehicle's diagnostic socket.
   (Applies only to vehicles without GATEWAY module)

5. Cables with adapters for connection to Smart ECU (type A8, A9/AA, 39).

Connection points:

Depending on the vehicle, the device is connected via the CAN bus of the following blocks:

headlight control unit (cable with needles);

Body ECU (cable with needles);

Smart ECU (cable with needles or additional cable with adapters (type A8, A9/AA, 39);

ABS block, Radar, etc. (cable with needles);

OBD (OBD cable). Connection via OBD-connector is possible if in the car missing Gateway module.

Operating procedure (keys A8, A9/AA, 39)

1. Connect depending on the selected device connection option:

- a cable with needles to CAN (Body ECU, headlight control unit, ABS, radar, etc.) or

- adapter (A8, A9/AA, 39) to Smart ECU

- OBD cable for models without Gateway.

* For connection points, see the CONNECTION POINTS section.

2. Connect the cable to the instrument's USB connector. The device will automatically turn on. LED flashes green, then light up green constantly. The standard alarm will automatically turn off. (in case of incorrect connection to the CAN bus or its malfunction, the red LED)

3. Opening the central lock. Briefly press the RED button of the device. The doors and steering column are unlocked.

4. Closing the central lock. Press the BLACK button on the device.

5. After disabling the standard alarm and unlocking the central lock, disconnect the USB cable from the device. Within about a minute, after switching off, an emergency start of the engine is possible.

6. Engine start. Wait until the instrument panel goes out (LEDs and backlight will turn off). While pressing the brake pedal, press the START button. The car engine will start. It is not possible to restart the engine (to start, repeat steps 1-6).

7. Closing the car. After starting the engine, turn on the device again, connect the connector to it and press the BLACK button of the device.

The device allows you to turn on the ignition of the car once and START the engine. To restart, repeat the procedure for connecting and turning on the device (clauses 1-6 of the instructions).

Operating procedure (key 88):

1. Connect depending on the selected device connection option:

- cable with pins to CAN

- OBD cable for models without Gateway.

* For connection points to CAN, see wiring diagrams of the required model.

2. Press red button and connect the cable to the USB connector of the device with the button pressed. The device will automatically turn on and the red LED will light up. The standard alarm will automatically turn off and the locks will open. let go red button. LED flashes green, then light up green constantly. (in case of incorrect connection to the CAN bus or its malfunction, the red LED)

3. Opening the central lock. Briefly press the RED button of the device.

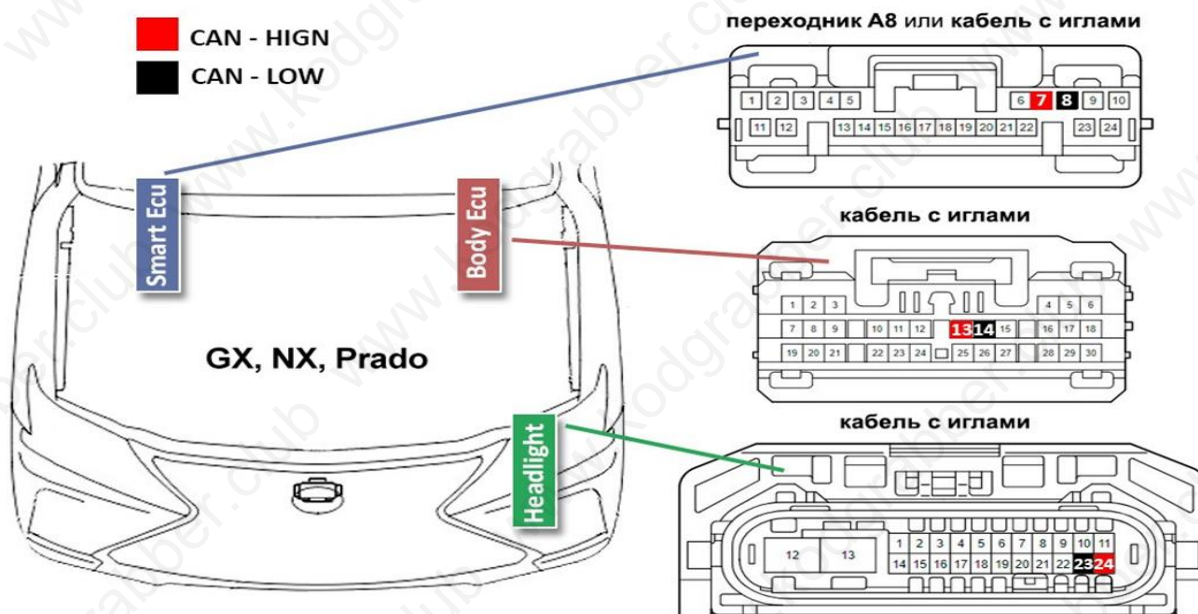4. Closing the central lock. Press the BLACK button on the device.
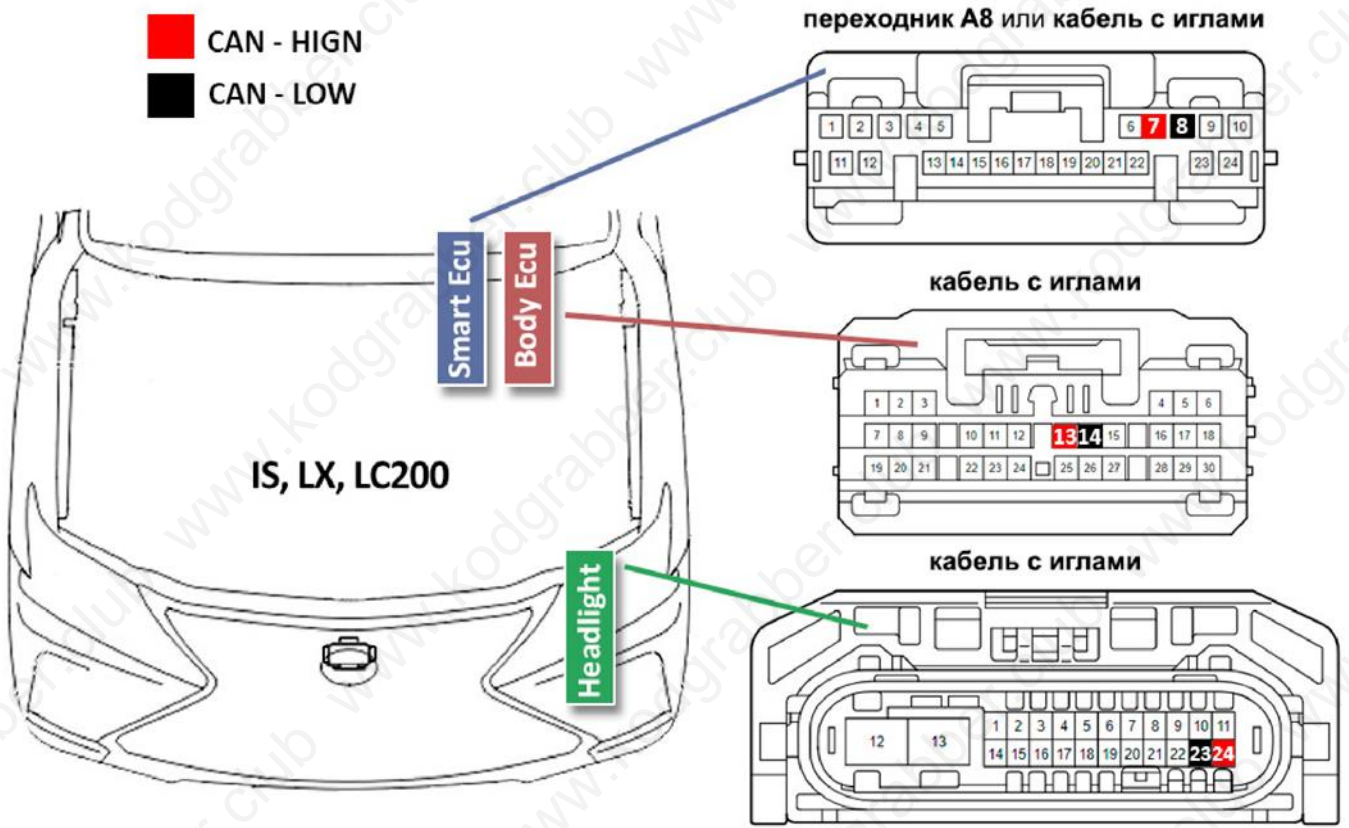
Device Charging:

To charge the instrument, plug the included Micro USB charger into the connector at the end of the instrument. While charging, the LED next to the connector will glow. **red**, at the end - **blue**.
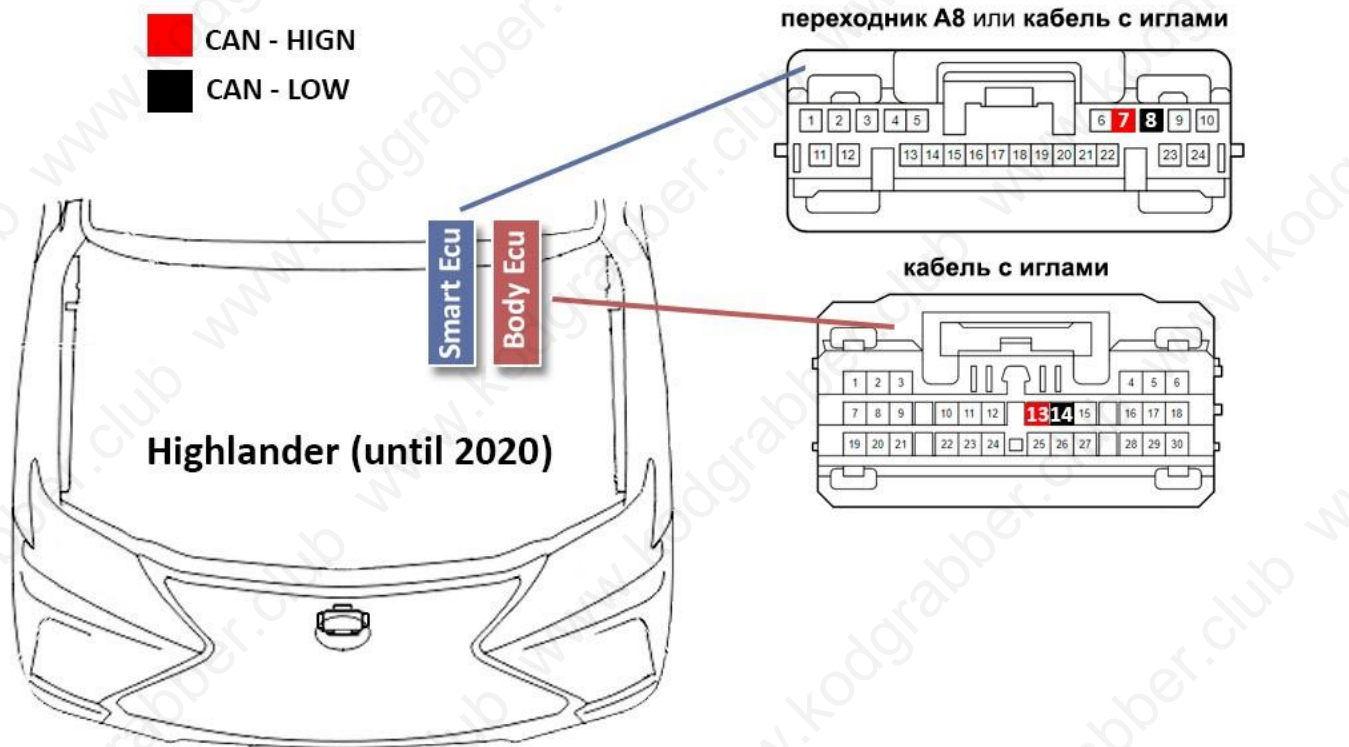
CONNECTION POINTS

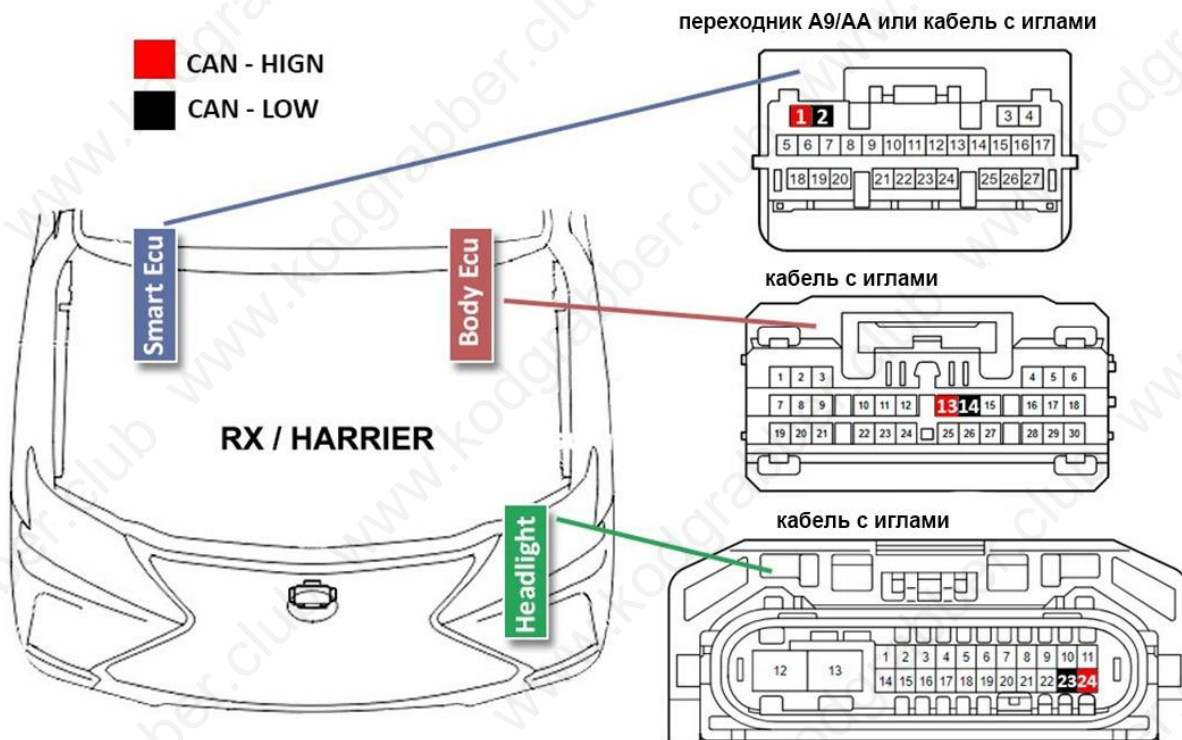# 1) Connection points for GX, NX, Alphard, Prado (key A8)

CAN - HIGN
CAN - LOW

Smart Ecu

Body Ecu

Headlight

GX, NX, Prado

переходник A8 или кабель с иглами

| 1 | 2 | 3 | 4 | 5 | | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | | 23 | 24 |

кабель с иглами

	1	2	3				4	5	6
7	8	9	10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30

кабель с иглами

| 12 | 13 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| | | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

2) Connection points for IS, LX, LC200 (key A8)

CAN - HIGN
CAN - LOW

переходник A8 или кабель с иглами

IS, LX, LC200

Smart Ecu
Body Ecu
Headlight

кабель с иглами

кабель с иглами

3) Connection points for Highlander (until 2020) (Key A8)

CAN - HIGN
CAN - LOW

переходник A8 или кабель с иглами

Smart Ecu
Body Ecu

Highlander (until 2020)

кабель с иглами

4) Connection points for RX, Harrier (Key A9, AA)

переходник A9/AA или кабель с иглами

кабель с иглами

кабель с иглами

RX / HARRIER

CAN - HIGN
CAN - LOW

Smart Ecu

Body Ecu

Headlight

5) Connection points for UX, Camry (Key A9, AA)

переходник A9/AA или кабель с иглами

кабель с иглами

кабель с иглами

UX, CAMRY

CAN - HIGN
CAN - LOW

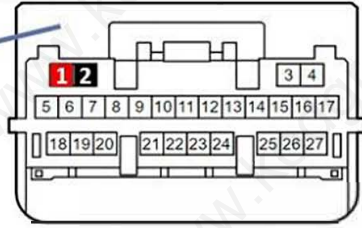Smart Ecu

Body Ecu

Headlight
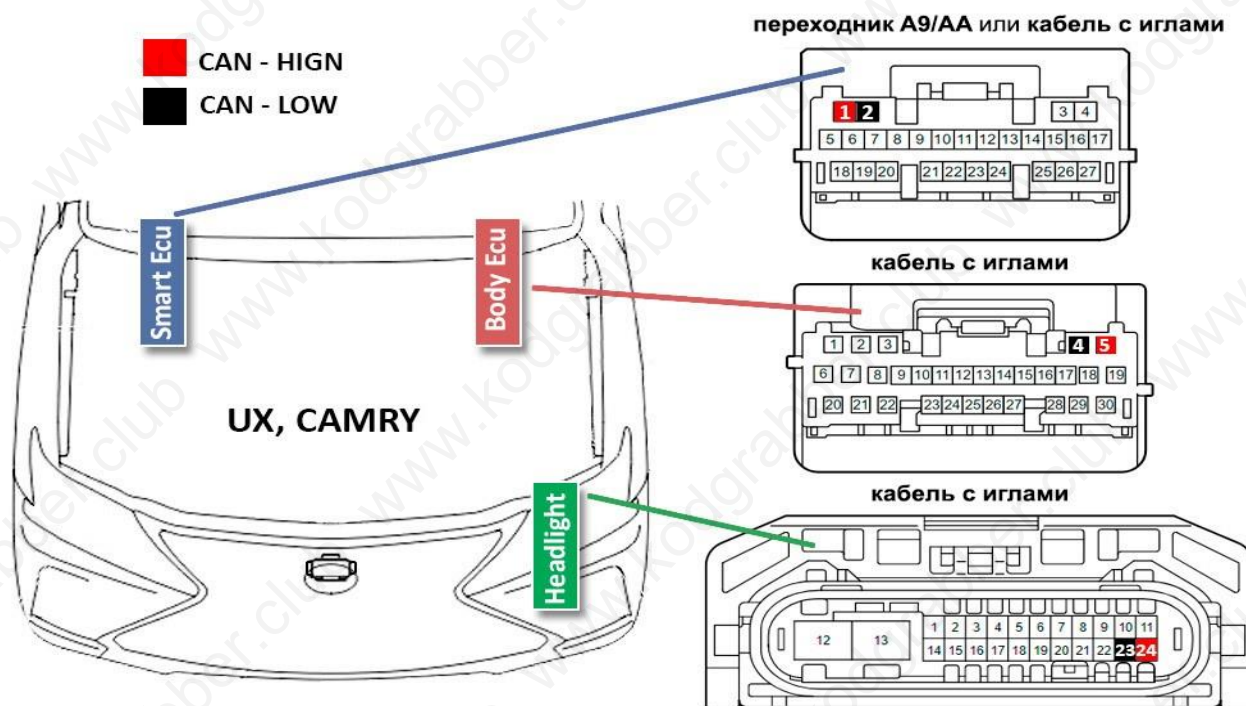
6) Connection points for LS (Key AA)
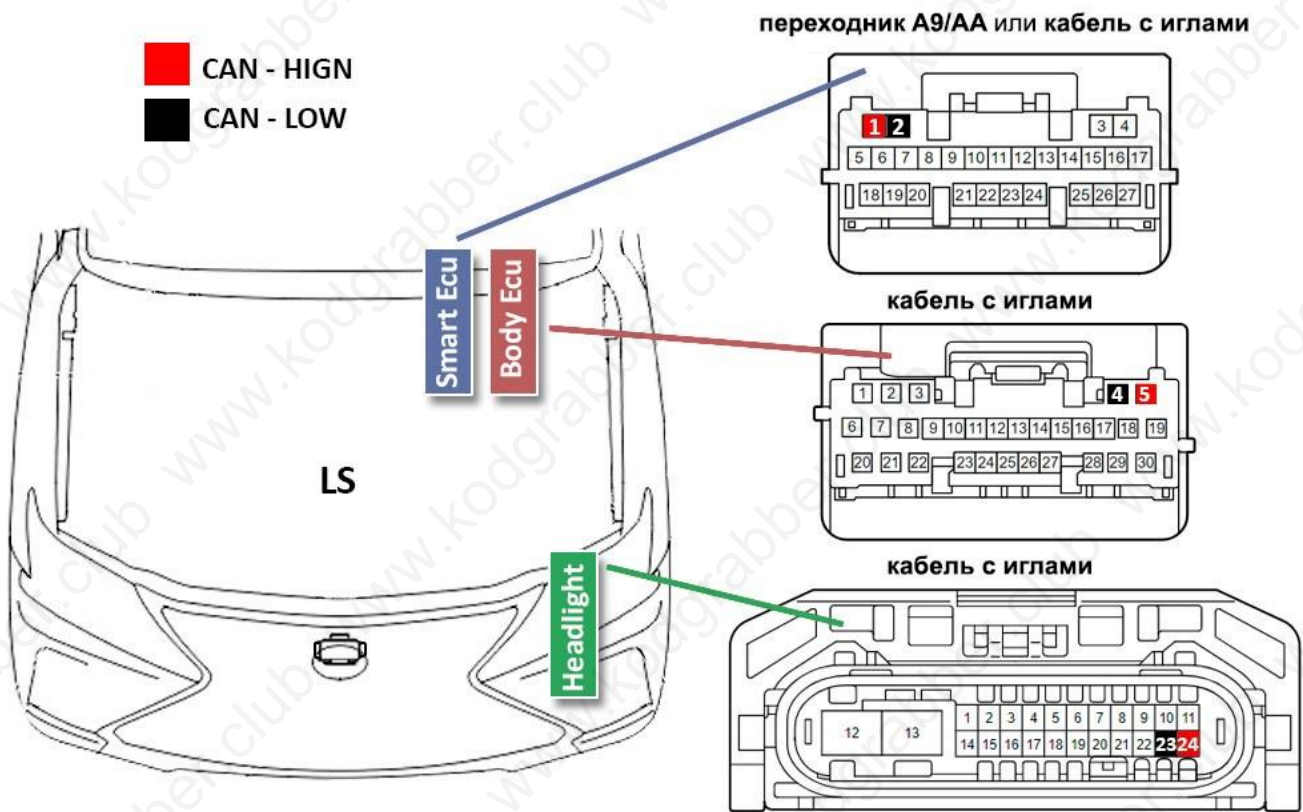
7) Connection points for RAV4 (Key AA)
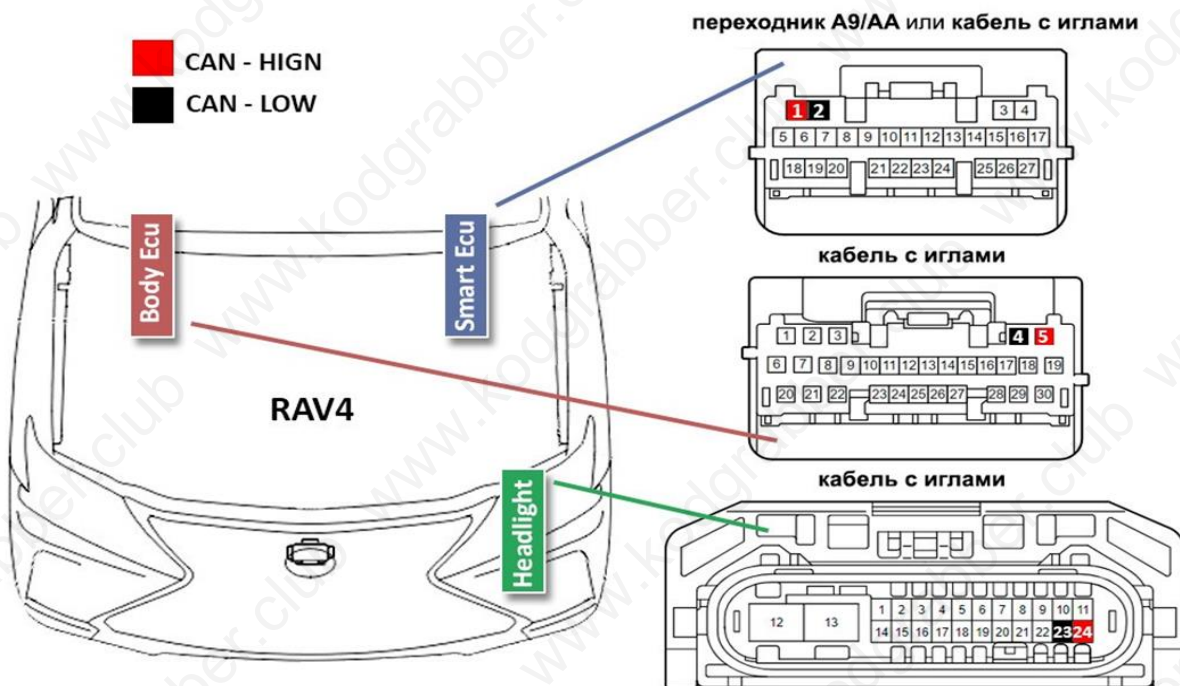
8) Connection points for Highlander (after 2020) (Key AA)

CAN - HIGN
CAN - LOW

Highlander (after 2020)

Smart Ecu

Body Ecu

переходник A9/AA или кабель с иглами

1 2   3 4
5 6 7 8 9 10 11 12 13 14 15 16 17
18 19 20   21 22 23 24   25 26 27

кабель с иглами

1 2 3   4 5
6 7 8 9 10 11 12 13 14 15 16 17 18 19
20 21 22   23 24 25 26 27   28 29 30