Acura RDX Infotainment Upgrade

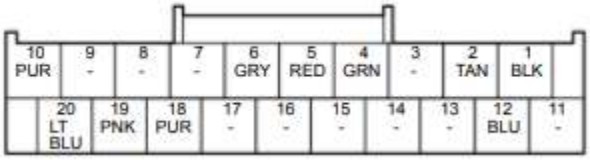
Summary

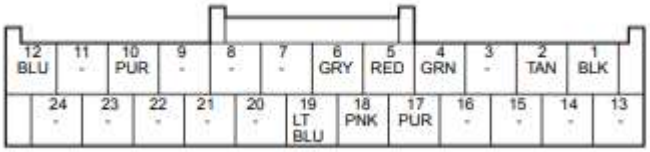
Upgrade 2019-2021 unit to 2022-2023 unit, which requires the part numbers shown below. Reference: https://acurazine.com/forums/3g-rdx-audio-bluetooth-electronics-navigation-455/retrofit-rdx-2020-infotainment-control-unit-1005545/

- **Acura Infotainment Unit**: You must match your trim. Below are some examples. Replace A with C for the Canadian version.
    - SH-AWD: 39540-TJB-AF1
    - SH-AWD Tech: 39540-TJB-AG1
    - SH-AWD A-Spec: 39540-TJB-AH1
    - **SH-AWD Advance: 39540-TJB-AJ1**
    - SH-AWD A-Spec Advance: 39540-TJB-AK1
- **20-Pin Male Harness MX34020PF1**: https://a.aliexpress.com/_mNOIsNC (prewired version available) or https://www.digikey.com/en/products/detail/jae-electronics/MX34020PF1/18996306 (harness only)
- **24-Pin Female Harness MX34024SF1**: https://a.aliexpress.com/_mPeXTlU (prewired version available) or https://www.digikey.com/en/products/detail/jae-electronics/MX34024SF1/2139263 (harness only)
- **LVDS Rectangular Connector**: https://a.aliexpress.com/_mKSqbTC (with or without cable)
- **LVDS Cable with Square Connector (13352918579)**: https://a.aliexpress.com/_mOdmGAE (better quality cable may reduce screen flicker)

20-Pin Male to 24-Pin Female Conversion (from docs supplied by Mustachio)

Connect like colors in the pin position shown in the diagrams, for example 1/black to 1/black; and 19/light blue to 20/light blue. Here is where having the prewired connectors is helpful. If you wire it yourself, use 20-gauge wire.



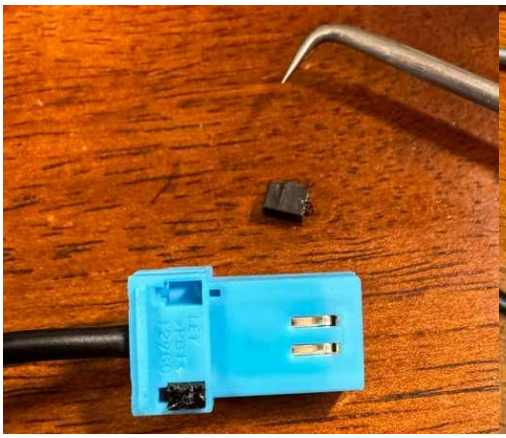


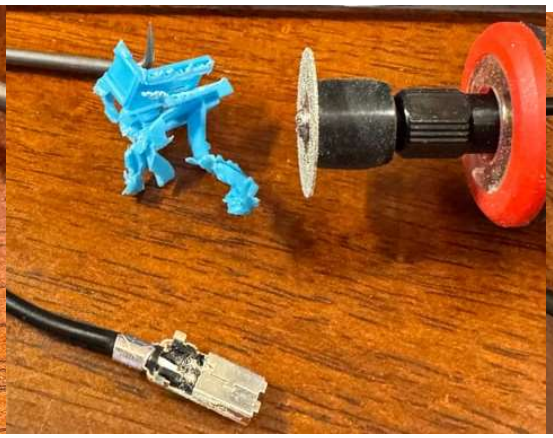
Cavity	Terminal Name	Description
A1	GND	Ground for infotainment control unit (G404)
A2	+B_AUDIO	Continuous power source
A3	Not used	———
A4	RS485+	Communication signal to touchpad unit
A5	RS485-	Communication signal to touchpad unit
A6	SH_RS485	Shield for terminals No. 4 and No. 5
A7	Not used	———
A8	Not used	———
A9	Not used	———
A10	DISP_CONT	Outputs signal for center display unit switching on/off
A11	Not used	———
A12	TOUCHPAD_CONT	Outputs signal for touchpad unit switching on/off
A13	Not used	———
A14	Not used	———
A15	Not used	———
A16	Not used	———
A17	Not used	———
A18	MOST_ECL	Inputs ECL signal
A19	MOST_ECL	Outputs ECL signal
A20	K-LINE	Detects scan tool signal (serial data)

LVDS display cable conversion (from skddoc)

The plug for the new deck is more square and the other end had a newer rectangular plug (this is the end that will have to be replaced with the ordered parts).

(1) Remove black pins from gray plug cap and pop it off with a screwdriver; (2) Cut off the sides to slide off the blue plug cap; (3) It only slides on one way; (4) Add the two black pins that come with it to lock:





Anti-theft code entry (from bebo)

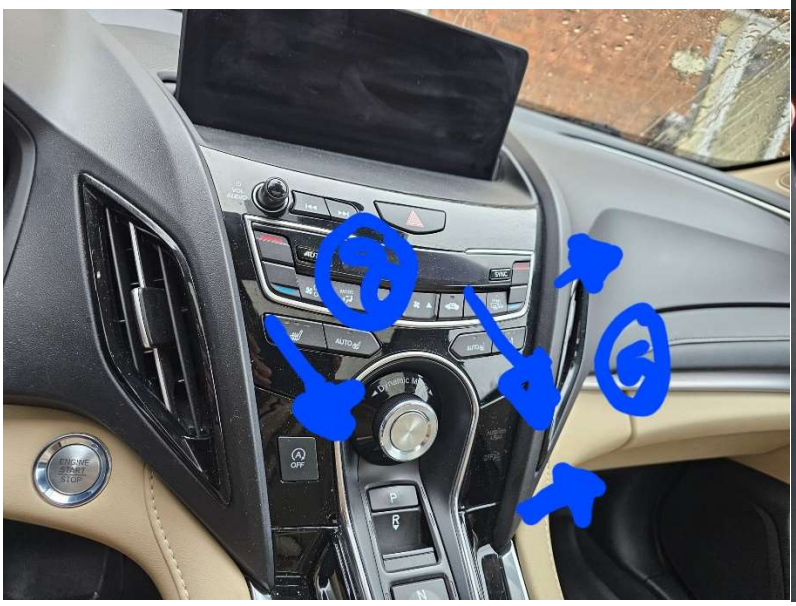
For the theft code you can get it from honda.com. It was quick, and I got the code in few seconds. On the Honda site, search for theft code then choose Acura and enter your car vin and the new control unit serial number, and you will get the code immediately [this did not work for me]. You can also call the Honda hotline (1-800-382-2238) to get the radio code. Just give them your serial code for the new unit and they will give you the code [this worked for me].

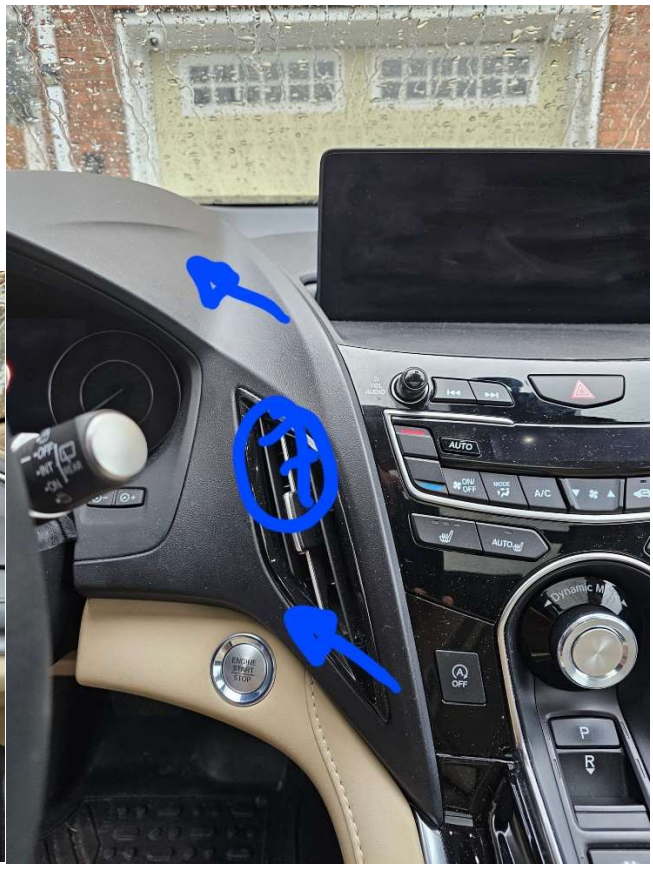
Clear diagnostic mode (from bebo)

To pass the in-line diagnostic, you need to hold the three buttons to reach the hidden menu then you hold Home button for few seconds a message will come showing diagnostic completion or incompletion. You click completion and you are done.

Dash Disassembly (from bebo)

Here are some pictures of what you have to remove. The control unit is held in place with 3 screws: 2 screws at the top, and you can access them if you remove the A/C dash control. The lower screw is easy to access once you remove the cover for the control unit. Check the pictures and be careful and take care to avoid breaking any tabs. For #5 and #7 just lift it up a little bit to make it easy for you to remove the A/C control.


8
5
6


4
8


6
POWER OUTLET
AUX

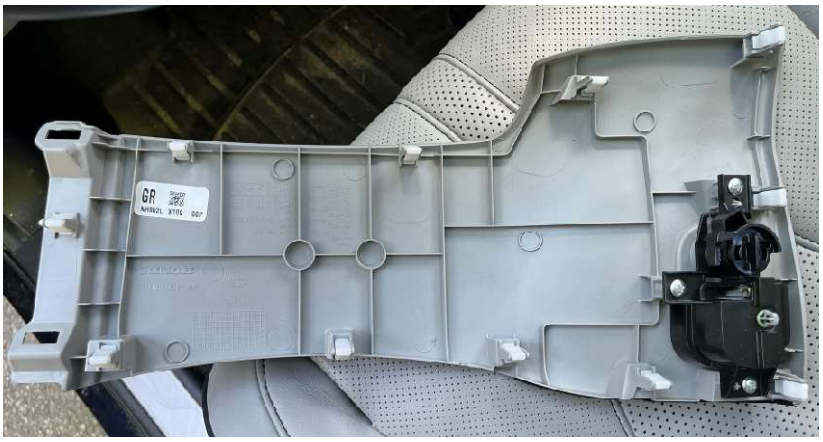

4
9

More Details on Dash Disassembly

This YouTube video shows most of the steps from above: https://www.youtube.com/watch?v=K5uU1zu9cWE. Only #1, #2, #6, and #9 are not shown in the video, so they are shown below, so you can see where the tabs reside.

Left picture: Tabs on #1 and two screws you must remove before pulling #2. Right picture: Tabs on #2.

Tabs on #6:

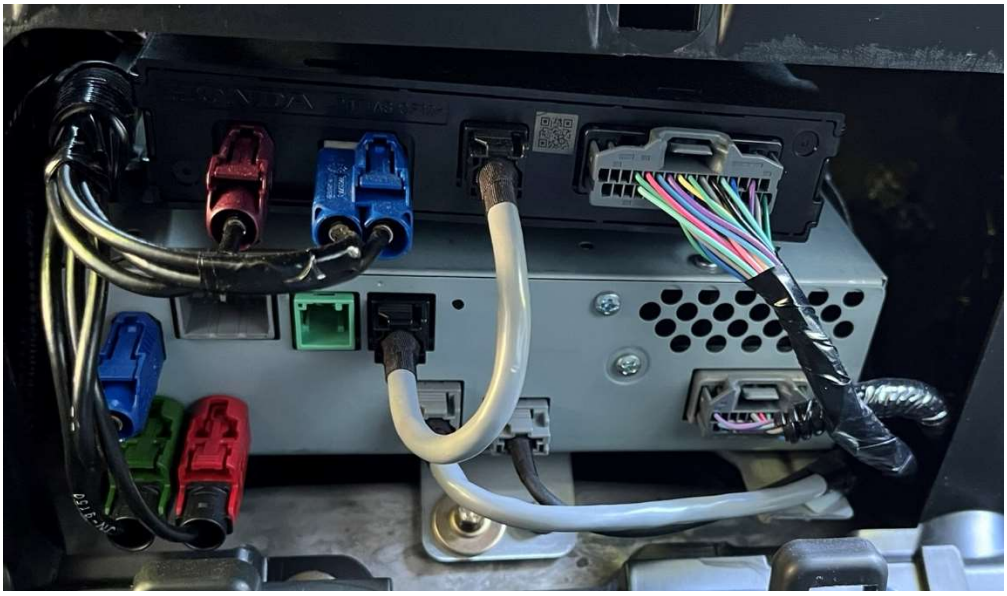


Tabs on #9, some of which are all black and very tight, so be patient:

Close up of one of the three bolts that holds the radio in place (a 1/4 inch socket works on these):

Left: Old radio. Right: New radio with 2 new cables. This is before black unit and metal cage was transferred.

Old unit before removal:



New unit after rough installation. Note that the gray wire on the bottom is very tight because it's located farther to the left than on the old radio.

Location of Audio Fuses

I managed to blow the 15A fuse due to some bad soldering, so I'm showing its location below.