TECHNICAL INSTRUCTIONS

FOR

LIMITED SERVICE CAMPAIGN 22TD04
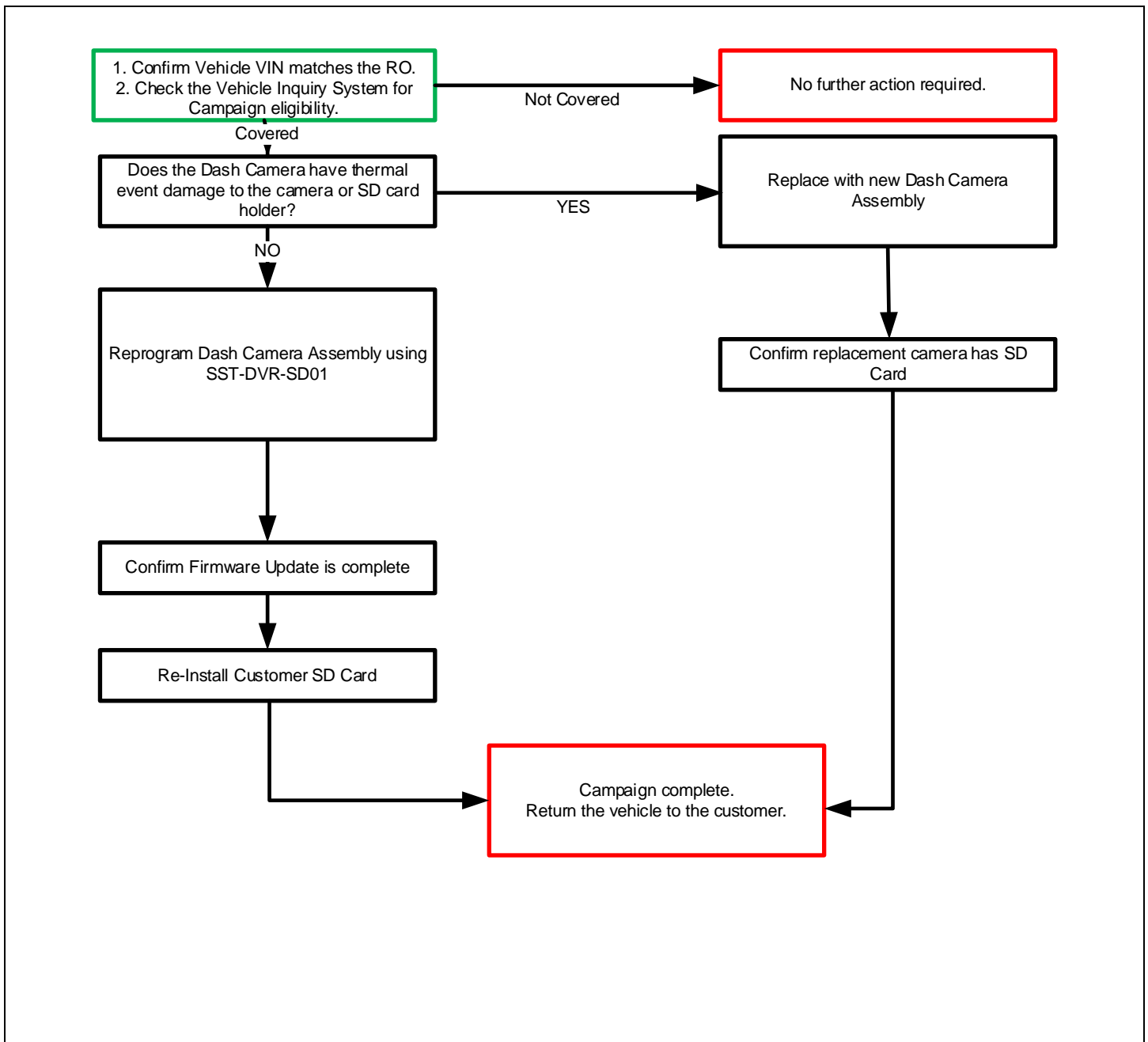
ACCESSORY DASH CAMERA FIRMWARE UPDATE

CERTAIN 2021 MODEL YEAR SIENNA VEHICLES
CERTAIN 2021 MODEL YEAR VENZA VEHICLES

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair 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 recall repair are required to currently have completed all of the following courses:

T623 – Electrical Circuit Diagnosis

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair. Carefully review your resources, the technician 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 perform this repair at all times.

I. OPERATION FLOW CHART

```
┌─────────────────────────────────┐                      ┌─────────────────────────────────┐
│ 1. Confirm Vehicle VIN matches   │    Not Covered       │    No further action required.   │
│    the RO.                       │ ───────────────────> │                                  │
│ 2. Check the Vehicle Inquiry     │                      │                                  │
│    System for Campaign           │                      │                                  │
│    eligibility.                  │                      │                                  │
└─────────────────────────────────┘                      └─────────────────────────────────┘
              │ Covered
              ▼
┌─────────────────────────────────┐                      ┌─────────────────────────────────┐
│ Does the Dash Camera have        │       YES            │  Replace with new Dash Camera    │
│ thermal event damage to the      │ ───────────────────> │  Assembly                        │
│ camera or SD card holder?        │                      │                                  │
└─────────────────────────────────┘                      └─────────────────────────────────┘
              │ NO                                                        │
              ▼                                                          ▼
┌─────────────────────────────────┐                      ┌─────────────────────────────────┐
│ Reprogram Dash Camera Assembly   │                      │  Confirm replacement camera      │
│ using SST-DVR-SD01               │                      │  has SD Card                     │
└─────────────────────────────────┘                      └─────────────────────────────────┘
              │                                                          │
              ▼                                                          │
┌─────────────────────────────────┐                                     │
│ Confirm Firmware Update is        │                                     │
│ complete                          │                                     │
└─────────────────────────────────┘                                     │
              │                                                          │
              ▼                                                          │
┌─────────────────────────────────┐                                     │
│ Re-Install Customer SD Card       │                                     │
└─────────────────────────────────┘                                     │
              │                                                          │
              ▼                                                          ▼
         ┌─────────────────────────────────────────┐
         │        Campaign complete.                │
         │  Return the vehicle to the customer.     │
         └─────────────────────────────────────────┘
```

II. IDENTIFICATION OF AFFECTED VEHICLES

1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY
a. Compare the vehicle's VIN to the VIN listed on the Repair Order to ensure they match.
b. Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

Note: TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

III. BACKGROUND

The involved vehicles are equipped with a Toyota Genuine Accessory Dash Camera. When the Micro SD Card in the accessory dash camera is damaged and an error is detected, the accessory dash camera continuously attempts the read/write function leading to a rise in temperature of the accessory dash camera components and potential melting of the Micro SD card and the surrounding area on the accessory dash cam.

IV. PREPARATION

1. PARTS

*Note: Parts needed will be dependent on inspection results. If thermal event damage is found on the Dash Camera Assembly, the vehicle will require a new Dash Camera Assembly. If no thermal event damage found, the vehicle DOES NOT REQUIRE Dash Camera Assembly.

Part Number	Part Description	Quantity
04001-32125	Dash Camera Assembly	1*

A. TOOLS & EQUIPMENT
- Techstream 2.0 / Techstream Lite with software version 17.0 or greater installed
- DCA-8000 Battery Diagnostic Tool/Charger

SST- Special Service Tools required for this repair:

Part Number	Tool Name	Quantity
SST-DVR-SD01	SD Card Reprogramming Kit	1

VI.	INSPECTING DASH CAMERA CONDITION

1. CHECK DASH CAMERA FOR THERMAL EVENT DAMAGE

    a. Visually inspect dash camera housing for signs of thermal damage.

    b. Visually inspect the dash camera SD card holder for signs of thermal damage.

Example of **OK** Dash Camera Housing and SD Card Holder	Example of **Failed/NG** Dash Camera Housing and SD Card Holder **(This damage is expected to be extremely rare)**
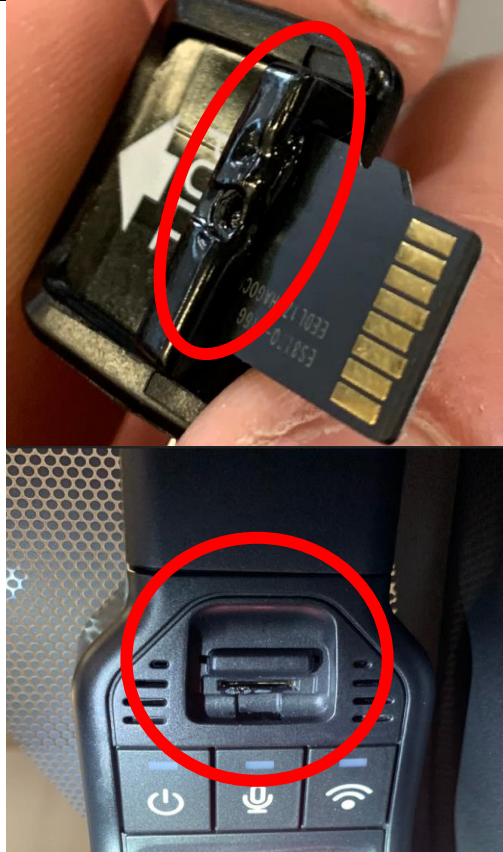
STOP — *REVIEW SECTION BELOW (POST INSPECTION FLOW CHART) TO DETERMINE NEXT STEPS*

POST INSPECTION FLOW CHART

Dash Cam Thermal Event Damage Present?

No → Section VII – Reprogram Dash Cam

Yes → Section VIII – Replace Dash Cam.
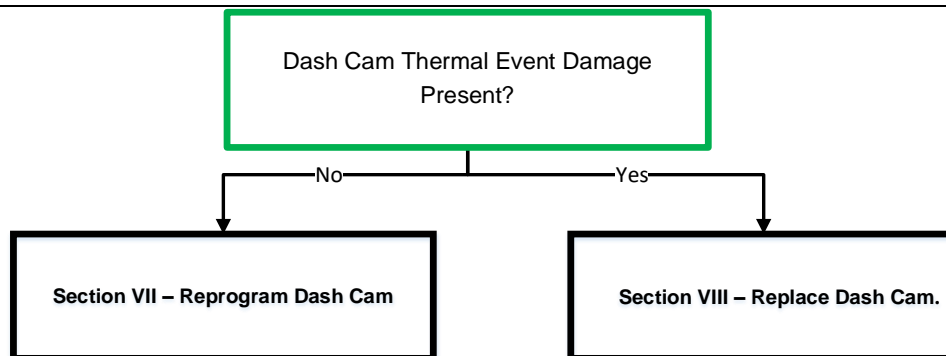
VII.   DASH CAMERA REPROGRAMING

1.   VEHICLE PREPARATION
   a. Ensure the vehicle is turned **OFF**
   b. Connect vehicle to DCA-8000 Battery or other type of
      power spply to the 12V battery.

   Note: A power supply must be connected during
   reprogramming

2.   VERIFY TECHSTREAM SETUP
   a. Verify that the Techstream meets the following conditions:
   - The latest version of the software is loaded

3.   CARD PREPARATION

a. Ensure the "LOCK Slider is in the "UNLOCK position so that
    the card is writable
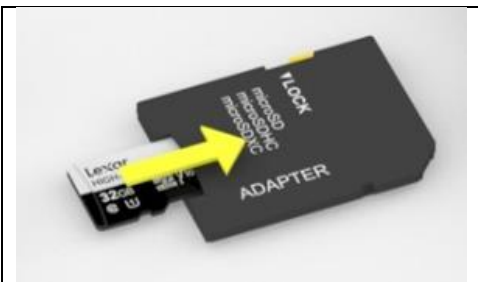
b. Insert LEXAR Update Card into supplied adapter.

c. Insert adapter into TechStream
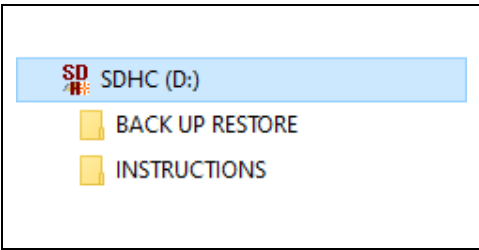
d. Open File Explorer and Navigate to SD Card
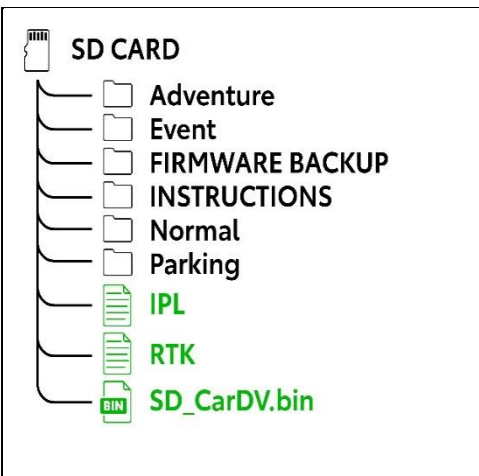
e. You should see files that look like the following structure. If you see the files "**IPL**", "**RTK**" and "**SD_CarDV.bin**" in the root folder of the SD Card (highlighted in green) **then the card is ready to be used and you can continue to step 4.**
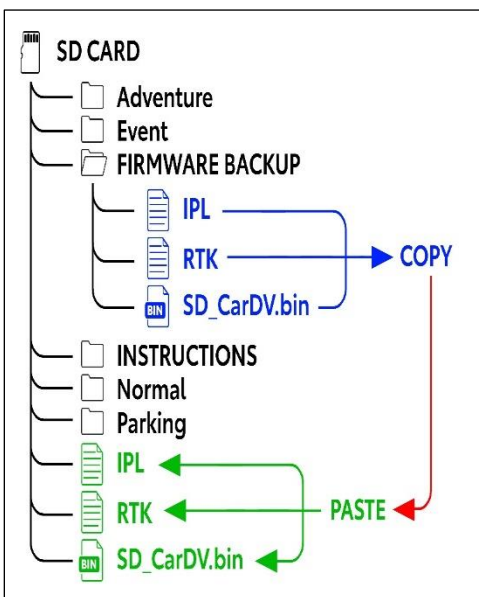
f. If the "**IPL**", "**RTK**" and "**SD_CarDV.bin**" files are **not visible**, then this means the card has been used once and this will have deleted the files.

Open the **"FIRMWARE BACKUP"** folder as shown and **COPY** *(do not "move" or "cut")* and **PASTE** the 3 files shown in blue into the main root folder of the SD card, shown in green. Verify that the files are now found in **both locations** on the card.

4. INSERT SD CARD INTO RED HOLDER
   a. Open the holder lid
   b. Slide the LEXAR Update card into the RED card holder sideways (as show in the picture to the left)

   Note: The markings on the holder show the direction of the card

5. REMOVE CUSTOMER SD CARD and holder (if present)
6. INSERT RED HOLDER WITH LEXAR Update CARD

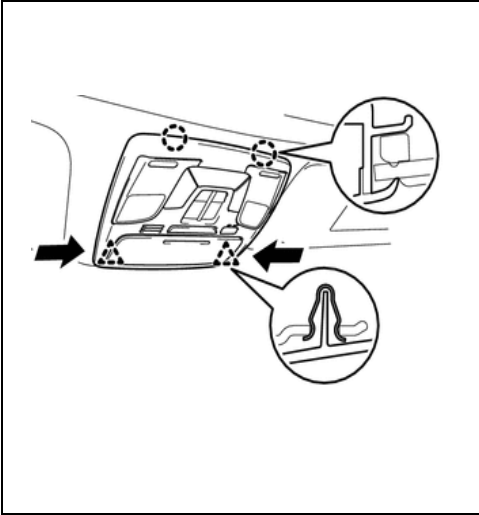   **Note:** Ensure that the card is level. Twisting the card with excessive force can cause damage to the card.

7. FIRMWARE UPDATE:
   a. Press and hold the Microphone and Wi-Fi buttons together
   b. While holding the buttons, start the engine
   c. Hold buttons until the camera starts the update process. You should observe the Microphone, Action and Wi-Fi buttons flashing in a counter-clockwise sequence (see picture below).

   Note: Process will take around 2 minutes to complete, **Don't leave from the vehicle during firmware update to ensure a completion. This is a necessary step to not miss step 8a.**

8. FIRMWARE UPDATE COMPLETE
   a. Upon Completion, the Wi-Fi LED light will hold steady for 1 second. A beep sound will be heard and the camera will boot up and the Power LED is on steady.
   b. Once Power LED is on steady, switch off the vehicle

9. REMOVE UPDATE CARD AND VERIFY UPDATE IS SUCCESSFUL
   a. Insert back into original **BLACK** card holder, and insert into Dash Camera Assembly
   b. Turn on the vehicle and verify the Wi-Fi LED is on for 1 second at start up

10. REMOVE UPDATE CARD FROM HOLDER AND RETURN TO STORAGE TO ENSURE CARD IS NOT LOST OR DAMAGED

| VIII. | Dash Camera Replacement |

1. REMOVE ROOF CONSOLE BOX

a. Disengage the 2 clips and 2 claws

NOTE:

- Pull down on the sides of the console box, in the locations indicated by the arrows in the illustration, to disengage the clips.
- Do not pull down on the center portion of the console box. Pulling down on the center portion may cause the console box assembly to distort or crack.
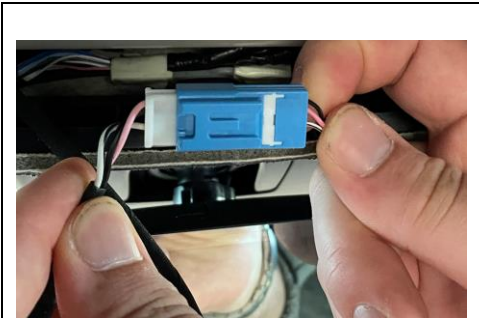
2. DISCONNECT DASH CAMERA CONNECTOR
a. Press tab to all connector
b. Separate by pulling connector bodies in opposing directions
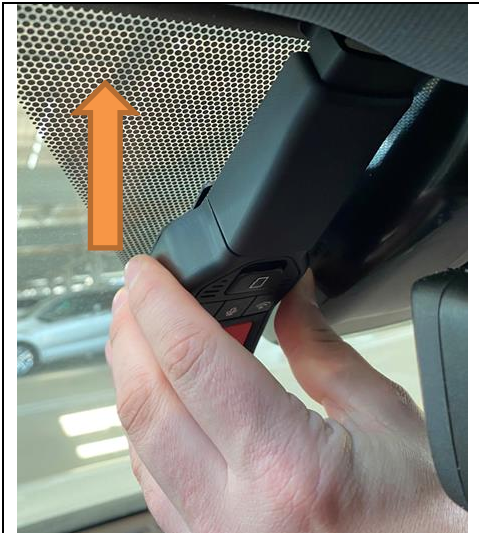
3. REMOVE DASH CAMERA ASSEMBLY FROM MOUNT

    HINT: Slide Camera Up from Mounting Bracket
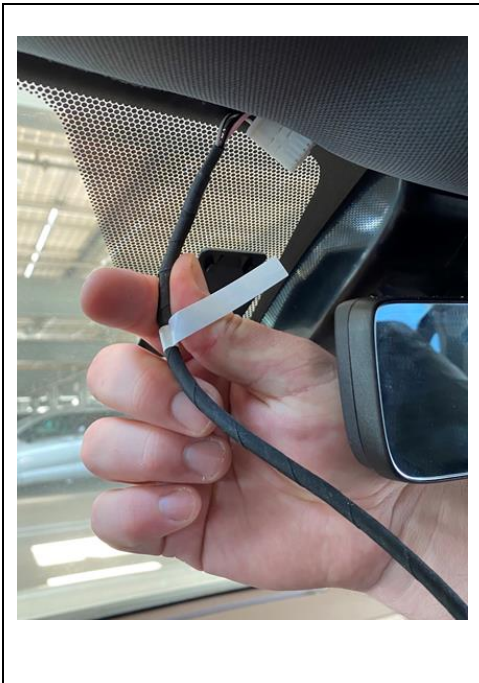
4. SLIDE WIRE HARNESS THROUGH HEADLINER AND REMOVE DASH CAMERA ASSEMBLY
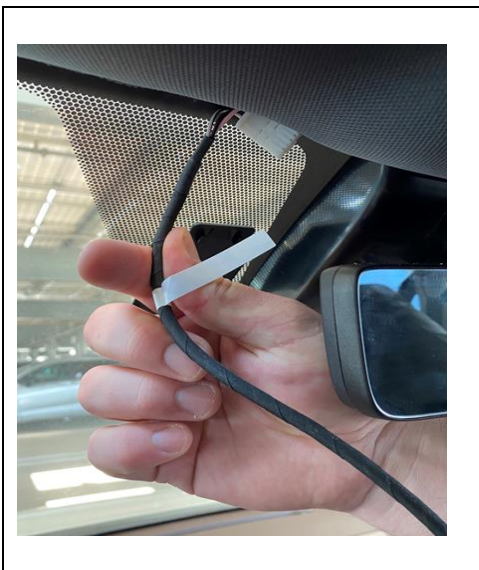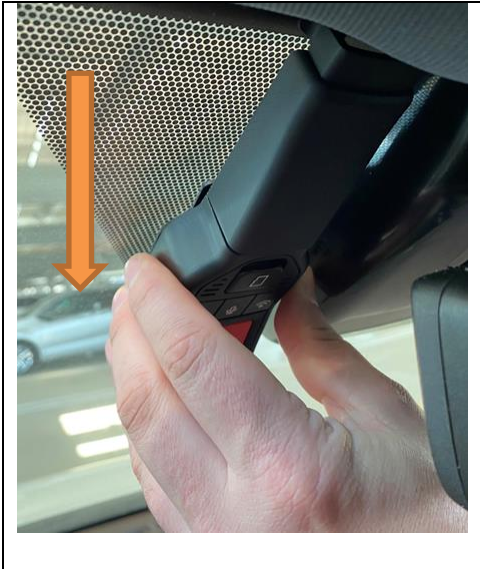

5. INSTALL NEW DASH CAMERA ASSEMBLY

    a. Slide new dash camera assembly wire harness through headliner
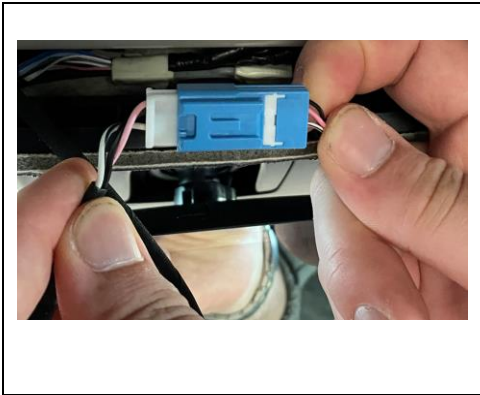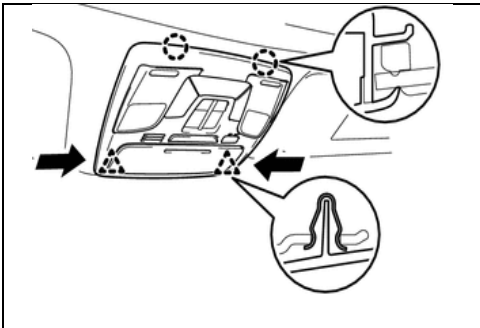
b. Connect Wire Connector

c. Mount Dash Camera Assembly to Mounting Bracket

Hint: Slide Dash Camera Down onto Mounting Bracket

6. **RE-INSTALL ROOF CONSOLE BOX**

a. Connect the connectors
b. Engage the 2 claws and 2 clips to install the roof console box assembly

7. CONFIRM NEW DASH CAMERA IS OPERATION AND SD CARD IS INSERTED

IX.	APPENDIX

A. CAMPAIGN DESIGNATION/PHASE DECODER

22TD04

19	T	A	01
Year Campaign is Launched	Vehicle Make	Field Action Category and Phase	Field Action Sequence

19 = 2019 20 = 2020 21 = 2021 22 = 2022 23 = 2023 Etc…	T = Toyota L = Lexus	A = Safety Recall _Remedy_ B = Safety Recall _Interim_ C = Special Service Campaign D = Limited Service Campaign E = Customer Support Program F = Emissions Recall (May use other characters in unique cases)	01 = 1st Field Action of the year 02 = 2nd Field Action of the year 03 = 3rd Field Action of the year (The sequence is unique for each Field Action category) (May use other characters in unique cases)

Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1st Safety Recall Launched in 2019

20TC02 = Launched in 2020, Special Service Campaign, 2nd Special Service Campaign Launched in 2020

21TE05 = Launched in 2021, Customer Support Program, 5th Customer Support Program Launched in 2021

B. RECALL PARTS DISPOSAL

As required by Federal Regulations, 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.*