Rev1 June 9, 2020



# 2021 RAV4, RAV4 HV, and RAV4 Prime Pre-Delivery Service (PDS)

Service

**Category** General

Section Pre-Delivery Service Market USA



#### **Applicability**

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2021	RAV4, RAV4 HV, RAV4 Prime	

#### **REVISION NOTICE**

August 05, 2020 Rev1:

• The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

#### Introduction

Pre-Delivery Service (PDS) is a critical step in satisfying our new car customers. Customer feedback indicates the following areas deserve special attention when performing PDS:

- Careful inspection for paint chips/scratches and body dents/dings.
- Proper operation of electrical accessories (including interior light, clock, and radio reset).
- Interior cleanliness.
- Proper function of mechanical systems.

Customer retention and proper maintenance of vehicles are and have always been a major focus for Toyota. To help remind customers that regular service is essential to the proper maintenance of the vehicle, dealers are required to install a service reminder sticker before delivery. By doing this, customers will be reminded to return to your dealership for service. Your current service reminder sticker may be used. (See PDS Check Sheet item 8 of "Final Inspection and Cleaning.")

This bulletin contains the PDS procedures which apply specifically to 2021 model year RAV4, RAV4 Hybrid, and RAV4 Prime vehicles. A universal PDS <u>Check Sheet</u> that contains PDS steps that apply to all 2021 model year Toyota vehicles has been developed. To properly perform a complete PDS, you must complete all procedures contained in this TSB as well as the universal PDS <u>Check Sheet</u>.

In addition, if the vehicle is stored for over 30 days, be sure to follow <u>Long-Term Vehicle</u> <u>Storage Guidelines</u>.

Page 2 of 11

# 2021 RAV4, RAV4 HV, and RAV4 Prime Pre-Delivery Service (PDS)

#### **Warranty Policy**

If the need for additional repairs or adjustment is noted during PDS, the required service should be performed under warranty. Reimbursement will be managed under the warranty policy.

The Warranty Policy and Procedures Manual requires that you maintain the completed Check Sheet in the customer's file. If you cannot produce a completed form for each retailed vehicle upon TMS and/or Region/Distributor audit, the PDS payment amount will be subject to debit.

An additional Repair Order completed in conjunction with normal PDS MUST have time punch/flags for service. If multiple repairs are performed, separate time flags MUST be punched for each repair.

#### **Warranty Information**

OP CODE	DESCRIPTION	MODEL	TIME	OFP	T1	T2
		RAV4	1.0			
001013	Pre-Delivery Service (PDS)	RAV4 HV	1.4	_	-	-
		RAV4 Prime	1.4			

#### **Required Tools & Equipment**

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY	
Techstream ADVi*		TSADVUNIT		
Techstream 2.0	ADE	TS2UNIT	1	
Techstream Lite		TSLITEPDLR01		
Techstream Lite (Green Cable)		TSLP2DLR01		

<sup>\*</sup>Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 15.00.028 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

June 9, 2020



# 2021 RAV4, RAV4 HV, and RAV4 Prime Pre-Delivery Service (PDS)

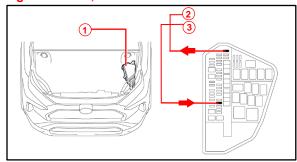
#### **Procedures**

•	D/C Cut Fuse Installation*	3
•	Seating Position Control ECU Initialization	4
•	Memorize Steering Angle Neutral Point	4
•	Perform Steering Sensor Zero Point Calibration*	4
•	Front and Rear Emergency Towing Eyelet Removal and Hole Cover Installation*	5
	Front License Plate and Mounting Bracket Installation*	
•	Enable Hybrid Battery Thermal Keep Control Mode*	8
•	Installation of Rubber Body Plugs*	10
	Tire Pressure Warning System (TPWS) Initialization	
•	Dealer Contact Information for Call Dealer Head Unit Function	11
	Entune™ 3.0 App Suite Connect Initialization/Update	
	annlicable	

#### D/C Cut Fuse Installation

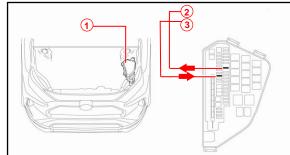
To minimize battery discharge, the D/C cut fuse has been removed and is stored in the engine compartment relay block. Install the D/C cut fuse and confirm ALL related Diagnostic Trouble Codes (DTCs) are cleared.

Figure 1. RAV4, RAV4 HV



1	Relay Block	
2	Remove D/C Cut Fuse (30A)	
3	Install D/C Cut Fuse (30A)	

Figure 2. RAV4 Prime



1	Relay Block
2	Remove D/C Cut Fuse (25A)
3	Install D/C Cut Fuse (25A)

<sup>&#</sup>x27;If applicable.

#### **Seating Position Control ECU Initialization**

Refer to the applicable Repair Manual for the seating position control ECU initialization procedure (RAV4 / RAV4 HV / RAV4 Prime) (procedure 2).

## **Memorize Steering Angle Neutral Point**

As a result of the removal of the DC cut fuse, the power source to the steering angle sensor is cut off. When the DC cut fuse is reinstalled, the parking assist monitor system/panoramic view monitor system will be operative, but it cannot display guidelines to assist parking operation because the center position recognized by the steering angle sensor may not be in an initial position. Therefore, perform steering angle neutral point initialization AFTER installing the DC cut fuse during PDS.

Refer to the applicable Repair Manual for the steering angle neutral point initialization procedure (RAV4 / RAV4 HV / RAV4 Prime).

#### **Perform Steering Sensor Zero Point Calibration**

As a result of the removal of the DC cut fuse, the steering angle sensor power source is cut off. When the DC cut fuse is reinstalled, the center position recognized by the steering angle sensor may not be the appropriate position. Therefore, it is necessary to perform steering sensor zero point calibration AFTER installing the DC cut fuse during PDS.

Refer to the applicable Repair Manual for the steering zero point calibration procedure:

- Steering zero point calibration procedure Driving Method (<u>RAV4</u> / <u>RAV4 HV</u> / <u>RAV4 Prime</u>).
- Steering zero point calibration procedure Techstream Method (RAV4 / RAV4 HV / RAV4 Prime) (procedure 4).



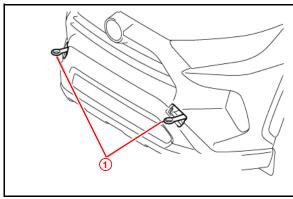
#### Front and Rear Emergency Towing Eyelet Removal and Hole Cover Installation

1. Remove the front emergency towing eyelets from the front bumper by turning them counterclockwise.

#### NOTE

If it is difficult to loosen the front emergency towing eyelet, use a steel bar.

Figure 3.



**Front Emergency Towing Eyelet** 

2. Place one of the removed emergency towing eyelets into the luggage tray in the luggage compartment.

Dispose of the other removed emergency towing eyelet.

# **TOYOTA**

# 2021 RAV4, RAV4 HV, and RAV4 Prime Pre-Delivery Service (PDS)

Rev1

#### Front and Rear Emergency Towing Eyelet Removal and Hole Cover Installation (continued)

- 3. Install the front emergency towing eyelet hole covers, which are stored in the glove compartment, onto the front bumper.
  - A. Insert the arrow-shaped part of the emergency towing eyelet hole cover "A" into the eyelet hole "B" as shown.
  - B. Install the front emergency towing eyelet hole cover to the hole of the front bumper.

Figure 4. RAV4, RAV4 HV

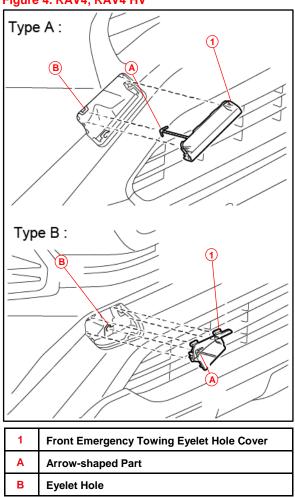
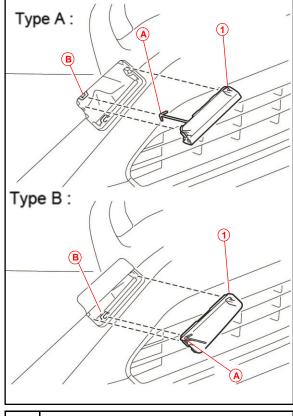


Figure 5. RAV4 Prime



1	Front Emergency Towing Eyelet Hole Cover
Α	Arrow-shaped Part
В	Eyelet Hole



#### Front License Plate and Mounting Bracket Installation

The front license plate bracket and two self-tapping screws are stored in the vehicle. Follow this procedure to install the front license plate bracket and front license plate in states where it is required by law.

1. Align holes "A" of the mounting bracket with the dimples on the front bumper cover. Mark the location of holes "B" on the bumper cover.

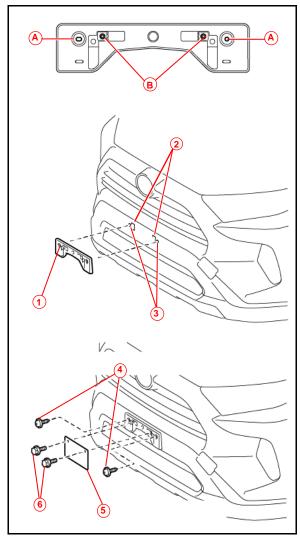
#### **NOTE**

- Holes "A" are used for installation of the mounting bracket to the bumper cover.
- Holes "B" are used for the installation of the front license plate to the mounting bracket.
- 2. Drill two relief holes with a diameter of 11 mm (0.43 in.) at the hole "B" marks on the front bumper cover to prevent the license plate retaining bolt end from contacting the cover.

#### **NOTICE**

- Do NOT pre-drill holes into the bumper.
- Do NOT overtighten the self-tapping screws.
- 3. Install the mounting bracket to the front bumper cover by attaching the two self-tapping screws into the dimples.

Figure 6.



Page 7 of 11

1	Mounting Bracket
2	Mark and Drill Hole
3	Dimple
4	Self-tapping Screw
5	License Plate
6	Bolt

## **Enable Hybrid Battery Thermal Keep Control Mode**

In extremely cold climates such as Canada and Alaska, the HV battery may be frozen. As a result, the HV battery may become excessively weak and the engine may not start. By setting the Hybrid Battery Thermal Keep Control Mode to ON, it is possible to warm the HV battery and maintain its current temperature in order to prevent it from becoming excessively weak. When this mode is set to ON, the charging timer settings are canceled at temperatures of 14°F (10°C) or lower, and charging will begin immediately when the charging cable is connected to the vehicle. Therefore, NEVER set this mode to ON in any region other than the region mentioned above.

#### **Confirm Hybrid Battery Thermal Keep Control Mode State**

T-SB-0056-20

- 1. Connect the Techstream to the DLC3.
- 2. Turn the power switch IG-ON.
- 3. According to the display on the Techstream, read the Data List.
- 4. Enter the following menus: Powertrain HV Battery –Data List Hybrid Battery Thermal Keep Control Mode Status.
- 5. Check the results by referring to the following table:

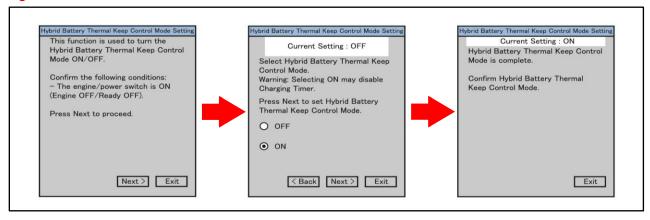
#### Table 1.

Tester Disp	lay	Measurement Item	Range	Normal Condition	
Hybrid Bat Thermal Keep Mode Sta	Control T	Hybrid Battery hermal Keep Control Mode State	ON or OFF	ON: Enabled OFF: Disabled	

#### **Set Hybrid Battery Thermal Keep Control Mode**

- 1. Connect the Techstream to the DLC3.
- 2. Turn the power switch to IG-ON.
- 3. Turn the Techstream ON.
- 4. Enter the following menus: Powertrain HV Battery Utility Hybrid Battery Thermal Keep Control Mode.

Figure 7.



June 9, 2020



# 2021 RAV4, RAV4 HV, and RAV4 Prime Pre-Delivery Service (PDS)

#### **Enable Hybrid Battery Thermal Keep Control Mode (continued)**

## **Set Hybrid Battery Thermal Keep Control Mode (continued)**

- Confirm the following message is displayed: "This function is used to turn the Hybrid Battery Thermal Keep Control Mode ON / OFF."
- 6. Confirm that the conditions displayed on the screen are met and then press Next.

#### NOTE

The power switch is ON (Ready OFF).

- 7. Confirm the following message is displayed: "Select Hybrid Battery Thermal Keep Control Mode."
- 8. Select ON and press Next.

#### **NOTICE**

Selecting ON may disable the charging timer.

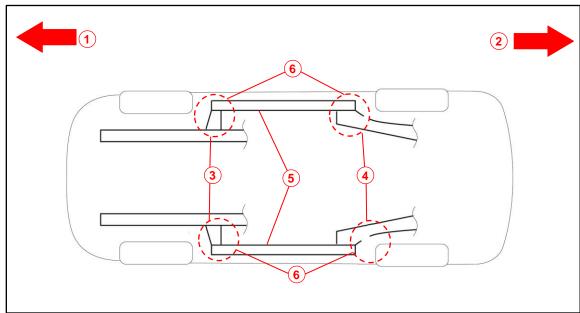
9. Confirm the following message is displayed: "Hybrid Battery Thermal Keep Control Mode is complete."



#### **Installation of Rubber Body Plugs**

- 1. Confirm the number of plugs in the glove box. If two plugs are present, perform substep 2A ONLY. If four plugs are present, perform substep 2A AND substep 2B.
- 2. Install plugs according the instructions below by confirming the number of plugs in the glove box.
  - A. Install two plugs in the rear side member hole or rocker inner hole (see Figure 8).
  - B. Install two plugs in the torque box hole or rocker inner hole (see Figure 8).

#### Figure 8.



1	Front Side	
2	Rear Side	
3	Torque Box Hole or Rocker Inner Hole	
4	Rear Side Member Hole or Rocker Inner Hole	
5	Rocker Inner	
6	Install Plug Here (if Applicable)	

#### **NOTICE**

- The installation of these plugs is required to prevent rust.
- These plugs are stored in the glove box.
- The number of plugs may vary according to production locations in the same vehicle model.

#### **Tire Pressure Warning System (TPWS) Initialization**

Refer to the applicable Repair Manual for the TPWS initialization procedure (RAV4 / RAV4 HV / RAV4 Prime). Note the spare tire does NOT have a TPWS sensor.

#### **NOTE**

To adjust the tire pressure correctly when the outside temperature is significantly colder than shop temperature, perform a Health Check using Techstream and select the compensation tire pressure checkbox. Compensation pressures will display on the Health Check results screen. Adjust the tire pressure when the tires are cold.

#### **Dealer Contact Information for Call Dealer Head Unit Function**

Refer to the Multimedia System Owner's Manual to add dealer contact information (RAV4 / RAV4 HV / RAV4 Prime).

#### **NOTE**

RAV4, RAV4 Hybrid, and RAV4 Prime model year vehicles equipped with Audio Plus and Premium Audio ONLY.

#### Entune™ 3.0 App Suite Connect Initialization/Update

Refer to T-SB-0039-20 Entune™ 3.0 App Suite Connect to initialize/update the Entune™ 3.0 App Suite Connect.