TOYOTA PRIUS C w/ Smart Key PREPARATION

Part #: PT398-52121

Conflicts:

Do not install into Vehicles with Pre-Collision System or Factory Alarm System.

Kit Contents



V5 Owner's Guide



Service Part #'s

Recommended Tools

Personal & Vehicle Protection	Description
Safety Glasses	
Safety Gloves	(Optional)
Vehicle Protection	Blankets, Parts Boxes
Special Tools	
Striker Tool	CAD-E IADS P/N ALL 02-016-01
Installation Tools	
Pick Tool	
Screwdriver	#2 Phillips, Flat Blade Jeweler's
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST# 00002-06001-01
Side Cutters	
Torque Wrench	Battery: 48 in•lbf (5.4 N•m),
	Driver's Knee Airbag: 88.5 in•lbf (10 N•m)
	Ground Bolt: 74 in•lbf (8.4 N•m)
Таре	Clear, Electrical
Ratcheting Wrench	
Socket	10mm, Extension
Special Chemicals	
Cleaner	VDC Approved Cleaner
Glass Cleaner	Household Glass Cleaner

Additional Items

(may be required)

ltem#	Description

Recommended Sequence of Application

ltem#	Description

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Legend



Accessory Installation Practice (read before installation)

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.)
- Safety (eye protection, checking torque procedure, etc.)
- · Vehicle Disassembly/Reassembly (panel removal, part storage, etc.)
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

Please see your TOYOTA dealer for a copy of this document.



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TVIP V5 RS3200 PLUS

Disassembly Overview

1	PS Rear Seat Under Cover	
2	DS Step Cover	
3	DS Cowl Cover	
4	Lower Dash Cover	
5	DS Knee Airbag (Do not disconnect Airbag connectors)	
6	Lower Steering Column Cover	
Dise Cor	Disconnect all Corresponding Connectors.	

1. Vehicle Disassembly.

- a. Place the Vehicle in Park with the Parking Brake set.
- b. Make sure that the Short Pin is not installed.
- c. Remove the Passenger's Side Rear Seat Under Cover.
 - Remove 2 Clips.

- d. Disconnect the Negative Battery Terminal.
 - Note the Battery Cable Position as it will be re-installed in the same position.

CAUTION: Do not touch the Positive Terminal.

e. Remove the Driver's Side Step Cover.

- f. Remove the Driver's Side Cowl Cover.
 - Remove 1 Nut.

g. Remove the Lower Dash Cover.



CAUTION: To avoid damage, disengage clips from the bottom first and work upwards.

- h. Remove 2 screws securing the Lower Steering Column Cover.
 - Turn the steering wheel left and right to gain access to 2 screws.



CAUTION: Use tape to protect the Steering Wheel.

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- i. Remove the Lower Steering Column Cover.
 - Remove 1 Screw.



CAUTION: Apply pressure between the clip locations, on both sides, of the lower steering cover to disengage clips.

j. Dislodge the Driver's Knee Airbag carefully.





CAUTION: Do not disconnect the Vehicle's Connector.

k. Wrap the Airbag in a Blanket or the like as shown.



CAUTION: Prevent stress on the Airbag Wire.

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2. V5 ECU Preparation and Installation.

a. Set the GBS Sensitivity Value to "8."

b. Attach the Security ECU Bracket to the Security ECU.

Install the Security ECU C. using the supplied Nut.



NOTE: Make sure the Guide Pin is seated correctly and verify that the Nut is tightened securely.



3. V5 Harness Installation.

- a. Locate and disconnect the White 1P Connectors on the V5 Harness.
 - Discard the White 1P Female Connector's Harness.

b. Connect the V5 Harness's White 24P Connector to the Security ECU.

c. Route the V5 Harness's White Tape Marker toward the Lower Dash Cover area.

d. Route the V5 Harness's White Tape Marker toward the Lower Dash Cover area.

- e. Disconnect the Vehicle's White 40P Connector from the Connector Block.
 - Release the Connector's Gray Lever.



- f. Remove the Vehicle Connector's Lever.
 - Release the lock on both sides of 40P Connector.



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CAUTION: Do not pull out the Retainer Clip.

of the 40P Connector.

g. Lift the Terminal Retainer Clip

- Fig. 3-8
- Fig. 3-9 40P Vehicle Connector V5 Purple Wire Blue Tape Marker V5 Blue Wire

h. Pull out the Vehicle's Blue Wire Terminal from the indicated location on the 40P Vehicle Connector.

- i. Insert the V5 Blue Wire Terminal into the indicated location on the 40P Vehicle Connector.
- j. Insert the V5 Purple Wire Terminal into the indicated location on the 40P Vehicle Connector.
- **VERIFY:** That Terminal Pins are properly inserted and do not come out.
 - k. Close the Terminal Retainer Clip.



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p. Reconnect the V5 White
5P Connector to the V5
Harness's 5P Connector.

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q. Re-attach the Vehicle Connector's Lever.

r. Reconnect the Vehicle's White 40P Connector to the Connector Block.





s. Secure the V5 Harness's White Tape Marker to the Vehicle Harness using 1 Wire Tie.

t. Secure the 5P Connectors and the bundled up Blue and Purple Wires to the Vehicle Harness using 1 Wire Tie.

u. Secure the V5 Harness with the V5 1P Connector to the Vehicle Harness using 1 Wire Tie.

v. Secure the V5 Harness to the Vehicle Harness using 1 Wire Tie.

 w. Locate and remove the tape securing the Vehicle's White 5P Pre-Connector.

- x. Connect the V5 White 5P Connector to the Vehicle's White 5P Pre-Connector.
- y. Secure the V5 Harness to the Vehicle's Harness with 1 Wire Tie.

- z. Secure the 5P Connectors to the Vehicle Harness using 1 Wire Tie.
- aa. Route the V5 ground terminal towards the Driver's Side Cowl area.

ab. Remove the Bolt from the Vehicle's Ground Terminal.



NOTE: Do not remove the Vehicle's Ground Terminal.

ac. Secure the V5 Ground Terminal to the Vehicle's Ground Terminal using the same Bolt.



NOTE: Tighten the Ground Bolt to 74 in•lbf (8.4 N•m)

ad. Secure the V5 Harness to the Vehicle Harness using 3 Wire Ties.

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4. Status Monitor Installation.

a. Remove the Knockout Cover.

 B. Route the V5 Harness Black 4P Connector through the Open Knockout Location.

c. Connect the V5 Black 4P Connector to the Status Monitor.

d. Install the Status Monitor in the panel until it snaps in place.

e. Secure the V5 Harness's Red Tape Marker to the Vehicle Harness using 1 Wire Tie.

f. Secure the V5 Harness to the Vehicle Harness using 1 Wire Tie.

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5. Reassembly.

- a. Reassemble the Vehicle except for the Passenger's Side Rear Seat Under Cover.
- NOTE: When reinstalling Knee Airbag, make sure to tighten the Bolts to 88.5 in-lbf(10 N-m).
 - **VERIFY:** That all Connectors are plugged in.
- **VERIFY:** That panels fit together properly, with no uneven gaps.



VERIFY: That the Guide Pins and Clips Align properly.

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6. Complete the Installation.

- Use Household Glass a. Cleaner to clean the inside of the Front Door Windows.
- b. Use a piece of Clear Tape to lift the Label off its protective backing.

CAUTION: Do not touch the adhesive surface.

c. Attach the Label as shown.

NOTE: Make sure to Align the Label according to Etching or Other Label.

REPEAT: steps a-c with the other Window.

d. Position the Negative Battery Cable at the original factory position.



CAUTION: Do not touch the Positive Terminal.

e. Reinstall the Passenger's Side Rear Seat Under Cover.

VERIFY: That the Under Cover

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Guide Pins and Clips Align properly.

- Clean up and Remove trash. f.
- Sealed in its protective bag, g. place the Owner's Manual in the Glove Box.

 $CHECKLIST- these \ points \ \textbf{MUST} \ be \ checked \ to \ ensure \ a \ quality \ installation.$

Accessory Function Checks

Roll up all windows, and exit the vehicle with the remote.

Take out the Smart Key and the Smart Card Key from the Vehicle. Place them 7 ft. (2 meters) or more away from the Vehicle.

	Perform	Look For
1	Press and release the remote control lock button to start the system's arming process.	The turn signal lights flash once. All doors lock. The security LED lights up.
2	Wait 30 seconds.	Security LED starts flashing; the system is now armed.
3	Press and release the remote control's unlock button to disarm the system.	The turn signal lights flash twice. The driver's door unlocks. The Security LED stops flashing.

Open the driver's door, with the smart key in your possession, press the power button to "ON." Roll down all the windows, remove the key and exit the vehicle.

4	Arm and disarm the system with the remote again, then wait 30 seconds.	The doors automatically relock. The system automatically starts the arming process.
5	Press and release the remote control's unlock button again to stop the arming process.	Refer to step 3
6	Press the lock button on the driver's exterior door handle to start the arming process.	All doors lock. The Security LED lights up.
7	Wait 30 seconds.	Security LED starts flashing; the system is now armed.
8	Reach inside and manually unlock the driver's door to trigger an alarm.	The driver's door automatically relocks. The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The Security LED lights up.
9	Manually unlock the driver's door again and hold it unlocked, open the door, then sit in the driver's seat.	The driver's door lock attempts to lock repeatedly. The horn continues to sound repeatedly. The headlights and turn signal lights continue flashing. The Security LED remains on.
10	The smart key in your possession, press the power button twice to "START" to stop the alarm.	The horn stops sounding. All the lights stop flashing and/or turn off. The Security LED turns off. The starter cranks and the engine starts.

Press the power button to turn the vehicle off, and then exit the vehicle.

11	With the door open, press the lock switch on the door to lock the doors, then close the door to start the system's arming process.	All doors lock. The Security LED lights up.
12	Wait 30 seconds.	Security LED starts flashing; the system is now armed.

CHECKLIST - these points MUST be checked to ensure a quality installation.

	13	Reach inside and manually unlock the front passenger's door to trigger an alarm.	The front passenger's door automatically relocks. The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The SECURITY LED lights up.
	14	Press and release the remote control's unlock button to stop the alarm.	The horn stops sounding. All the lights stop flashing. The Security LED stops flashing.
	15	Press and release the remote control's lock button to start the system's arming process, then wait 30 seconds until the system is armed.	Refer to steps 1 and 2.
	16	Unlock and open one of the rear passenger doors to trigger an alarm. (if available).	Refer to step 13.
	17	Press and release the remote control's unlock button to stop the alarm.	Refer to Step 14
Î	18	Repeat the above steps with the other rear passenger door. (if available).	Refer to steps 1, 2, and 13.

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Roll up all windows, remove the key and exit the vehicle.

19	Press and release the remote control's lock button to start the arming process.	Refer to step 1.
20	Wait 30 seconds.	After 30 seconds, the Security LED starts flashing; the system is now armed.

Perform the following check in a temperature-controlled environment. (50°- 90° F)

21	With the tip of a key, or Striker Tool pulled all the way out (PPO only), tap the center of the driver's door window to trigger the alarm.	The horn sounds repeatedly. The headlights flash repeatedly. The turn signal lights flash repeatedly. The Security LED lights up.
22	Insert the key into the driver's door key cylinder and turn it toward the back of the vehicle to stop the alarm.	Refer to Step 14

NOTE: If the alarm does not trigger during functional verifications the Smart Key and Smart Card Key might be too close. Move them farther from the vehicle and test the system again.

NOTE: If the alarm does not trigger during the Glass Breakage Test, increase the GBS sensitivity to the next setting and test again.

NOTE: If you do not disarm the system, the alarm will last 20 seconds. It is not necessary to check the alarm duration.

Vehicle Appearance Check

Perform	Look For
After accessory installation and removal of protective cover(s), perform a visual inspection of the vehicle.	Ensure no damage (including scuffs and scratches) was caused during the installation process. (For PPO installations, refer to TMS Accessory Quality Shipping Standard.)

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Vehicle Function Checks

		Function	Function
En	ter the	Vehicle	
		Dome/Courtesy Lights	Steering Wheel Column Adjusts Without Interference
		Horn	

Start the Vehicle

Starter			Gauges	
Panel/Switch Illumination			ABS Light (if equipped) If the warning light remains on, it may indicate a system malfunction.	(ABS)
Lamp Failure Sensor If the warning light remains on, it may indicate a system malfunction.	Ĵ.		Track/Skid Control Light (if equipped) If the warning light remains on, it may indicate a system malfunction.	¢.
Seat Belt Warning Light If the warning light remains on, it may indicate a system malfunction.			Tire Pressure Monitoring System (TPMS)	
Air Bag Warning Light If the warning light remains on, it may indicate a system malfunction.			Service (PDS) of the Vehicle the TPMS lig will blink when IG is turned on. After TPMS activation and PDS of the Ve	
Cruise Control Light (if equipped)	CRUISE		hicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.	
	Starter Panel/Switch Illumination Lamp Failure Sensor If the warning light remains on, it may indicate a system malfunction. Seat Belt Warning Light If the warning light remains on, it may indicate a system malfunction. Air Bag Warning Light If the warning light remains on, it may indicate a system malfunction. Air Bag Warning Light If the warning light remains on, it may indicate a system malfunction. Cruise Control Light (if equipped)	Starter Panel/Switch Illumination Lamp Failure Sensor If the warning light remains on, it may indicate a system malfunction. Seat Belt Warning Light If the warning light remains on, it may indicate a system malfunction. Air Bag Warning Light If the warning light remains on, it may indicate a system malfunction. Air Bag Warning Light If the warning light remains on, it may indicate a system malfunction. Cruise Control Light (if equipped)	Starter □ Panel/Switch Illumination □ Lamp Failure Sensor □ If the warning light remains on, it may □ Indicate a system malfunction. □ Seat Belt Warning Light □ If the warning light remains on, it may □ Air Bag Warning Light □ If the warning light remains on, it may □ Air Bag Warning Light □ If the warning light remains on, it may □ Cruise Control Light (if equipped) Cuise	Starter Gauges Panel/Switch Illumination ABS Light (if equipped) If the warning light remains on, it may indicate a system malfunction. Track/Skid Control Light (if equipped) If the warning light remains on, it may indicate a system malfunction. Track/Skid Control Light (if equipped) Seat Belt Warning Light Image: Control Light (if equipped) If the warning light remains on, it may indicate a system malfunction. Tire Pressure Monitoring System (TPMS) Air Bag Warning Light Image: Control Light (if equipped) If the warning light remains on, it may indicate a system malfunction. Prior to TPMS activation and Pre-delivery Service (PDS) of the Vehicle the TPMS light will blink when IG is turned on. After TPMS activation and PDS of the Vehicle the TPMS light will blink when IG is turned on. After TPMS activation and PDS of the Vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.

Using a Mirror or Assistant check the following.

Trunk/Tailgate/Bed Lights (if equipped)	Tail Lights
Brake Lights	Daytime Running Lights (if equipped)
Backup Lights	Marker Lights
Clearance Sonar (if equipped)	

Stop the Engine, Place the Vehicle's IG in the ON position.

	Hazard Lights	Turn Signal Lights
	Head Light	Fog Lights (if equipped)
	High Beams	Accessory Controls/Illumination (if equipped)
	Power Side Mirrors (if equipped)	Convenience Memory Settings (if equipped)
	Power Sliding Door (if equipped)	Rear Sunshade (if equipped)

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CHECKLIST – these points **MUST** be checked to ensure a quality installation.

Function		Function
Front Wiper/Washer		Rear Wiper/Washer (if equipped)
Power Sun/Moon Roof (if equipped)		Rollover Side Curtain Air Bag Switch (RSCA) (if equipped)
Clock (if equipped)		Navigation System (if equipped)
Audio/Video (if equipped)		USB Connections (if equipped)
Steering Wheel Audio Control (if equipped)		HVAC
Front Windshield Defogger (if equipped)		Rear Window Defogger (if equipped)
Side Mirror Defogger (if equipped)		Accessory Power Socket (if equipped)
Massage Seats (if equipped)		Heated/Vented Seats (if equipped)
	•	
Glovebox Light (if equipped)		Passenger Air Bag Switch (if equipped)
Power Locks (if equipped)		Power Windows (if equipped)
Power Seats (if equipped)		Key Sensor Buzzer