



Accessory Installation Practices

This document is written and maintained by Toyota Motor Sales, U.S.A., Inc. as an aid to defining accessory installation best practices.

Safety

1.1 Eye protection should be worn during any drilling and cutting, and when power tools are used to remove or attach fasteners.

Eye protection should also be used when using any special chemicals (as listed on the first page of the Installation Instruction Sheet) to reduce the risk of these chemicals entering the eye.

1.2 Rechecking of fastener tightness.

For some accessories it is necessary to recheck the tightness of the fasteners securing the accessory, for example: wheel lug nuts, running board bolts, tow hitch bolts etc. Where a recheck is required it will be noted in the Installation Instruction Sheet (either in the Procedure Section and/or the Checklist Section)

1.3 Supplemental Restraint System SRS

Any vehicle equipped with a supplemental restraint system (SRS). Failure to carry out the following procedures listed below could result in possible deployment of airbag, personal injury, or unnecessary repairs to SRS.

1.3.1 Turn the key switch to the LOCK position.

1.3.2 Remove key from ignition switch.

1.3.3 Disconnect the negative battery cable.

1.3.4 Never use a voltmeter to troubleshoot any of the harnesses or connectors to the SRS. Accidentally probing the connectors to the SRS can lead to deployment of the airbag.

1.3.5 SRS wire harness loom/cover is bright yellow in color.

1.3.6 SRS contains a battery backup system; therefore ALWAYS wait for a minimum of 90 seconds after disconnecting the battery negative cable before removal/disassembly of electrical components. (Reference TSB: EL93-001).

Vehicle Protection

2.1 Vehicle should be clean before performing any accessory installation.

2.2 Prepare grille cover, fender cover, seat cover, and floor mat cover as appropriate to the installation area on the vehicle of the accessory before starting installation. Blankets, seat covers, paper floor coverings are suitable for this purpose.

2.3 Do not place any tools on unprotected vehicle surfaces, or leave inside vehicle. Use a tool tray to keep tools separate from the vehicle surface.

2.4 It is recommended that no exposed jewelry (rings, watches etc.), zippers, buttons, rivets, belt buckles or other scratch potential objects be worn. Articles of clothing or jewelry that have the potential to come into contact with the vehicle surface (i.e., generally below the chest) and contain any of the above items should be covered with tape and/or other protective material to prevent scratching of the vehicle.

2.5. Clothing and shoes must be free of grease and dirt to maximize vehicle cleanliness.

2.6 Parts and tool trays should be used for interior installations whenever possible. Parts, tools or trays must not be placed onto unprotected, seats, carpets or trim panels.

2.7 Tools, air hoses and power cords should be free of grease and dirt.

2.8 Blanket should be used to cover engine bay while working on accessory that requires hood to be open (e.g. Hood Protector) to prevent fasteners from being dropped into engine bay.

Vehicle Disassembly/Re-assembly

Panel Removal

3.1 Many panels on the vehicle are held in place with clips. Where the location of this clip its critical it is shown on the figure(s) in the Installation Instruction Sheet. Care must be taken to remove the panel and it's dip(s) without damage. Toyota recommends use of plastic (nylon) removal tools, rather than metal and two Toyota Special Service Tools are available:-

Panel Pry Tool #1 Toyota SST # 00002-06001-01

Panel Pry Tool #2 Toyota SST # 00002-06002-01

Panel Protection

3.2. Place all removed parts on a protected surface.

3.3. All work benches, tables, or platforms used for assembly or temporary storage of parts should be carpeted or suitably covered to provide a soft, non-abrasive surface.

Parts Container

3.4 Use a small parts container to keep removed bolts and tapping screws so that they can be reassembled correctly.

Electrical Component Disassembly/Reassembly

Battery Cable

4.1 Unless otherwise stated battery negative terminal must be disconnected and isolated before performing work on any electrical components (i.e. connecting or disconnecting any electrical connectors, etc.). In some installations fuse removal is used instead of battery terminal disconnection, and will be referred to in the Installation Instruction Sheet.

4.2 Do not touch the positive terminal with any tool when removing the negative battery cable.

4.3 Use a fender cover (blanket) when connecting or disconnecting battery negative terminal and/or when replacing or removing fuses. Ensure battery negative terminal is fully seated when reconnecting.

4.4 Power tools that can exceed 60 pound force-inch of torque and should not be used to tighten battery cable. The torque value for battery cable tightening is given in the Installation Instruction Sheet.

Connectors

4.4. When disconnecting connectors, do not pull on the wires; pull on the connectors.

4.5. DO NOT pull on vehicle wires and/or wire harnesses. To uncouple electrical connectors, pull only on the connector itself and release the connector securing tab (identified in the Installation Instruction Sheet).

4.6. Disconnected wires must not have any strain on connectors or wires (i.e., do not allow components hanging from a wire harness).

4.7. When reconnecting connectors, ensure connectors are securely snapped together and wires are not twisted or kinked.

Wire Harnesses

4.8. When installing the accessories that use wire harnesses (e.g. audio, alarm, trailer wire harness), make sure the harness is not cut or perforated by any sharp metal objects/edges.

Wire Ties

4.9. When using wire ties to secure harness, clip the wire ties after securing them.

4.10. Ensure that wire routing does not interfere with movement of mechanical components before tightening the wire tie.

Functional Checks

4.11. Functional checks (from the Checklist Section of the Installation Instruction Sheet) must be performed on all disconnected electrical components.

Use of Special Chemicals

Cleaners

5.1 All cloths used for preparatory installations must be cleaned and periodically changed. Any cloth that is dropped on the floor should not be used until cleaned.

5.2. Cleaning solutions/solvents are identified in the Installation Instruction Sheet and are not to be sprayed directly onto vehicle surfaces (interior/exterior).

5.3. Cleaning solutions/solvents are not to be sprayed onto cloth/rag inside of vehicle (this is to prevent over spray on interior).

5.4. When using cleaners such as Prep-Solvent-70, or Household Windex follow manufacturer's recommendations:-

5.4.1 Always use a clean (lint free scratch resistant) soft cloth (or wipe), and clean a small area at a time (~ 3 ft. x 3 ft. max.).

5.4.2 Shake well.

5.4.3 Apply cleaner to cloth or wipe. Do not spray cleaning solution directly on any vehicle surfaces.

5.4.4 Clean surface thoroughly and wipe dry immediately with a new clean cloth. Do not allow cleaner to air dry.

Sealers

5.5 Follow Installation Instruction Sheet recommendations.

5.6 For any cleanup follow sealer manufacturer recommendations.

Temperature

6.1. Some accessories require installation in a controlled temperature environment. The installation instructions will provide the temperature range of this temperature and will differentiate between vehicle and accessory temperature (should it not be the same for both.)

6.2. The installation location will be responsible for determining whether the temperature range has been met.

6.3. The method of temperature measurement will NOT be called out in the instructions.

6.4. Recommended tools for measuring vehicle and accessory temperature are:-
Non-Intrusive IR Temperature Probe/Gun

6.5. Recommended heating/cooling methods are:-
Heat box (for small components), Car HVAC, Heat Gun

Torque Recheck

7.1. When rechecking of a fastener torque is called out in the Installation Instruction Sheet it is sufficient to ensure that the fastener does not rotate when the installation torque is reapplied. If the fastener rotates then continue tightening until the specified torque is reached. Do not loosen fastener.

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Notes:

For factory remote keyless entry system programming information, refer to the vehicle's repair manual.

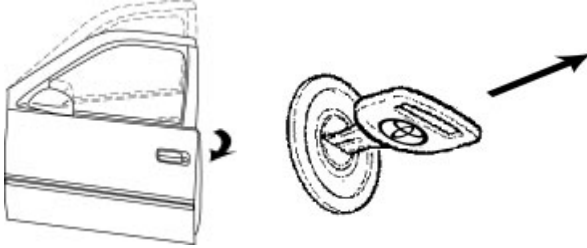
Refer to the RS3000 Owner's guide for RS3000 feature programming.

ADD ADDITIONAL REMOTE CONTROL(S) TO SYSTEM

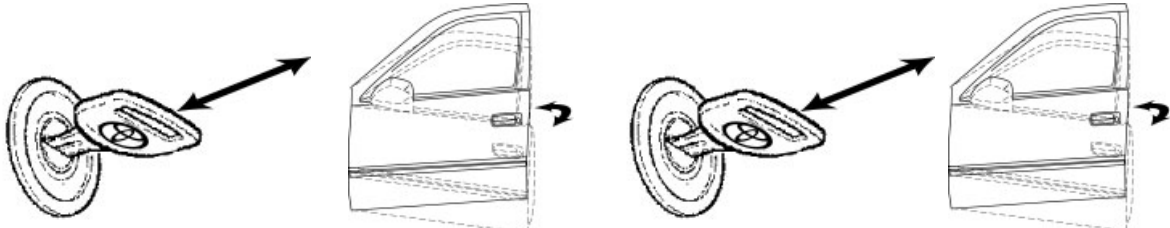
Follow this procedure to add *additional* remote controls to a system. The RS3200 may be programmed to operate with a maximum of four remote controls. When a new remote controls is programmed, it will work in the default operation mode (press the UNLOCK button twice to unlock all doors and no AUX button function on 4 button remote controls); to change the operation mode, you must perform the separate REMOTE CONTROL FUNCTION SELECT procedure as shown on pages 6 and 7.

1. Before you begin:

Open the driver's door and remove the key from the ignition switch.



2. Start the programming procedure. (Complete these steps within 40 seconds.)

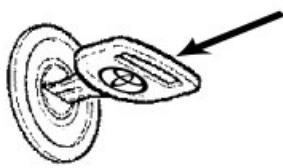


a. Insert the key into, and remove it from the ignition switch 2 times.

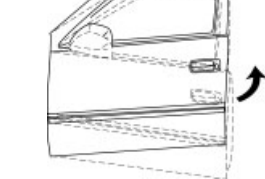
b. Close, then open the driver's door 2 times.

c. Insert the key into, and remove it from the ignition switch 1 time.

d. Close, then open the driver's door 2 times.



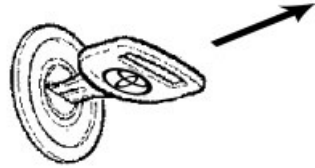
e. Insert the key into, the ignition switch and leave it in.



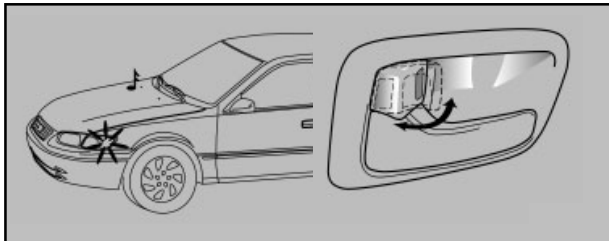
f. Close the driver's door.



g. Turn the key from LOCK to ON, then back to LOCK.



h. Remove the key from the ignition switch.

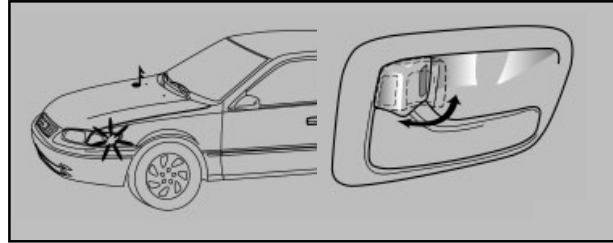
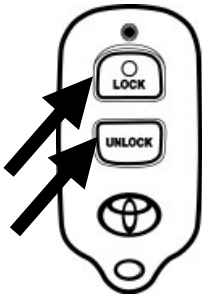


i. The tail and marker lights flash 1 time, the buzzer chirps 1 time and the doors lock and unlock 1 time.*

* If the system does not activate the lights, buzzer and door locks 1 time, start over.

ADD ADDITIONAL REMOTE CONTROL(S) TO SYSTEM (continued)

3. Program (add) an additional remote control.



a. **Press and release both the LOCK and UNLOCK buttons on one remote control at the same time.**

b. **Press and release the LOCK button.**

c. **The tail and marker lights flash 1 time, the buzzer chirps 1 time, and the doors lock and unlock 1 time.***

Note: Repeat the above steps to add additional remote controls.

4. Complete the programming steps.



a. **Open the driver's door**

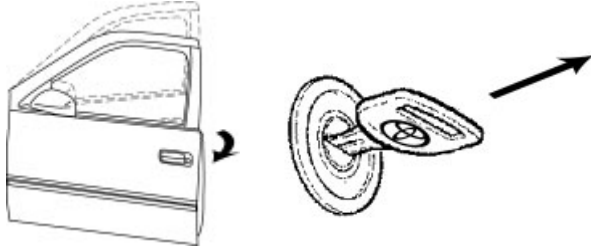
* If the system activates the lights, buzzer and door locks 2 times, start over.

REPROGRAM EXISTING REMOTE CONTROLS

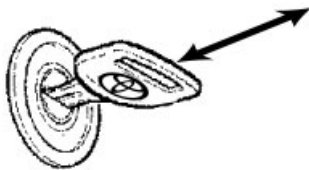
Follow this procedure to clear all existing remote control codes and reprogram existing remote controls to a system. When existing remote controls are reprogrammed, they will work in the default operation mode (press the UNLOCK button twice to unlock all doors and no AUX button function on 4 button remote controls); to change the operation mode, you must perform the separate REMOTE CONTROL FUNCTION SELECT procedure as shown on pages 6 and 7.

1. Before you begin:

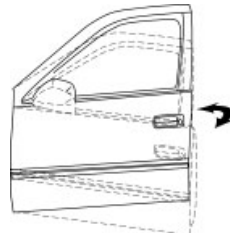
Open the driver's door and remove the key from the ignition switch.



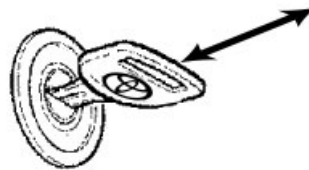
2. Start the programming procedure. (Complete these steps within 40 seconds.)



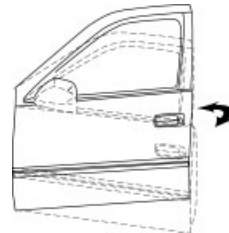
a. Insert the key into, and remove it from the ignition switch 2 times.



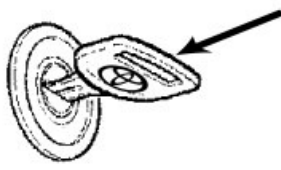
b. Close, then open the driver's door 2 times.



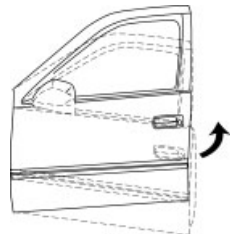
c. Insert the key into, and remove it from the ignition switch 1 time.



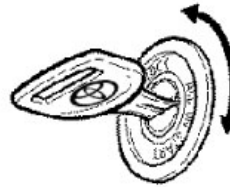
d. Close, then open the driver's door 2 times.



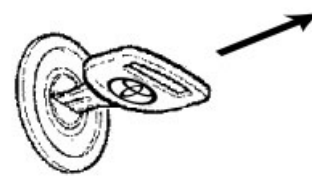
e. Insert the key into, the ignition switch and leave it in.



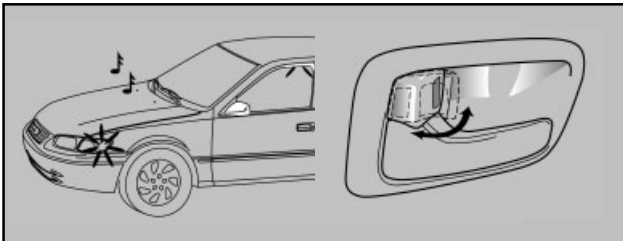
f. Close the driver's door.



g. Turn the key from LOCK to ON 2 times (ending at LOCK).



h. Remove the key from the ignition switch.

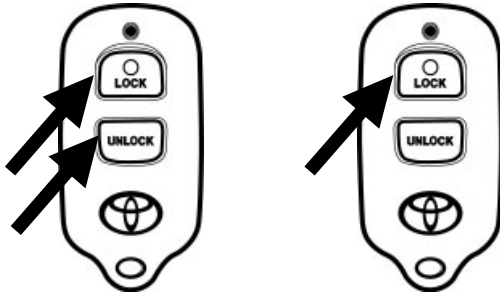


i. The tail and marker lights flash 2 times, the buzzer chirps 2 times and the doors lock and unlock 2 times.*

*If the system does not activate the lights, buzzer and door locks 2 times, start over.

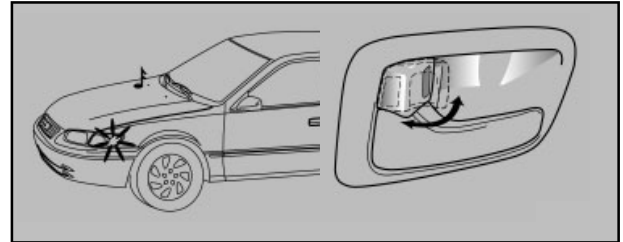
REPROGRAM EXISTING REMOTE CONTROLS (continued)

3. Reprogram an existing remote control.



a. **Press and release both the LOCK and UNLOCK buttons** on one remote control **at the same time.**

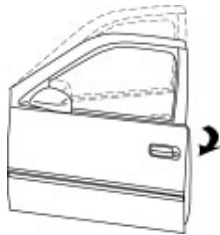
b. **Press and release the LOCK button.**



c. **The tail and marker lights flash 1 time, the buzzer chirps 1 time, and the doors lock and unlock 1 time.***

Note: Repeat the above steps to program (add) additional remote controls.

4. Complete the programming steps.



a. **Open the driver's door**

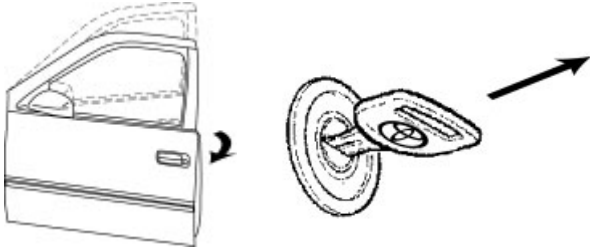
* If the system activates the lights, buzzer and door locks 2 times, start over.

REMOTE CONTROL FUNCTION SELECT

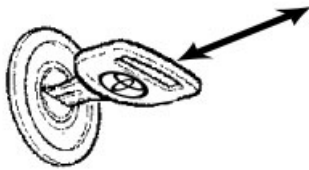
Follow this procedure to change the operating functions of remote controls already programmed into a system. You may change the remote control's default unlock operation mode so that pressing the UNLOCK button once causes all doors to unlock at the same time. Also, you may activate the AUX button function on 4 button remote controls.

1. Before you begin:

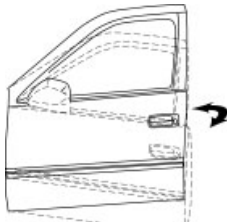
Open the driver's door and remove the key from the ignition switch.



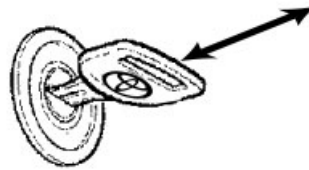
2. Start the programming procedure. (Complete these steps within 40 seconds.)



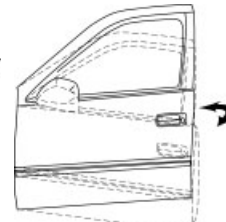
a. Insert the key into, and remove it from the ignition switch 2 times.



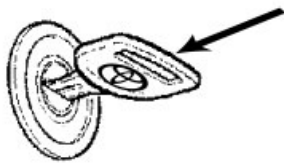
b. Close, then open the driver's door 2 times.



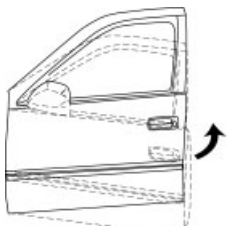
c. Insert the key into, and remove it from the ignition switch 1 time.



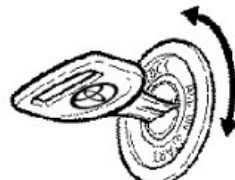
d. Close, then open the driver's door 2 times.



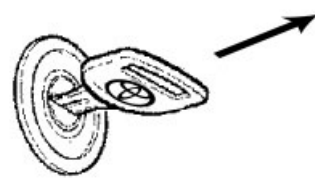
e. Insert the key into, the ignition switch and leave it in.



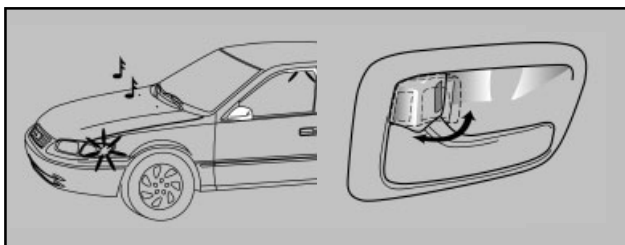
f. Close the driver's door.



g. Turn the key from LOCK to ON 4 times (ending at LOCK).



h. Remove the key from the ignition switch.

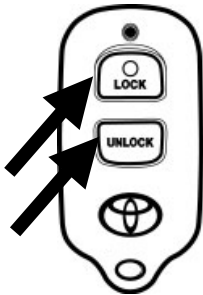


i. The tail and marker lights flash 4 times, the buzzer chirps 4 times and the doors lock and unlock 4 times.*

* If the system does not activate the lights, buzzer and door locks 4 times, start over.

REMOTE CONTROL FUNCTION SELECT (continued)

3. Select the operating functions for an existing remote control.



a. Press and release both the LOCK and UNLOCK buttons on one remote control at the same time.

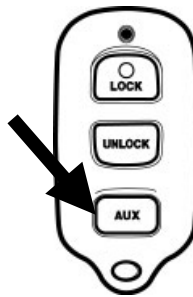
b. Select one of the following modes:



Press and release the LOCK button to select double unlock function (press the UNLOCK button twice to unlock all the doors.)



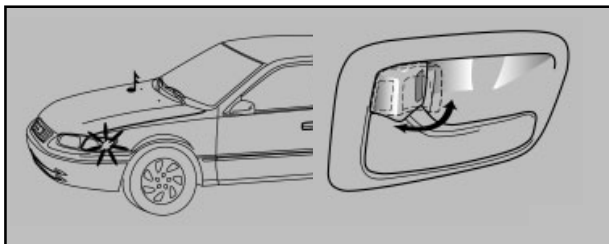
or Press and release the UNLOCK button to select all door unlock function (press the UNLOCK button once to unlock all the doors at the same time.)



or Press and release the AUX button to select double unlock function (press the UNLOCK button twice to unlock all the doors) and activate the auxiliary output for the optional electric trunk release accessory.*



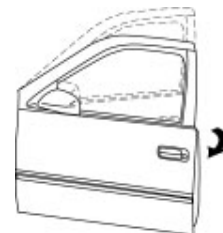
or Press and release the PANIC button to select all door unlock function (press the UNLOCK button once to unlock all the doors at the same time) and activate the auxiliary output for the optional electric trunk release accessory.*



c. The tail and marker lights flash 1 time, the buzzer chirps 1 time, and the doors lock and unlock 1 time. †

Note: Repeat the above steps to select the operating functions for additional remote controls.

4. Complete the programming steps.



a. Open the driver's door

* Program for 4 button remote controls, only.

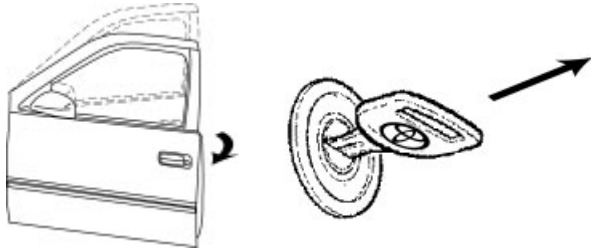
† If the system activates the lights, buzzer and door locks 2 times, start over.

CLEAR ALL REMOTE CONTROL CODES

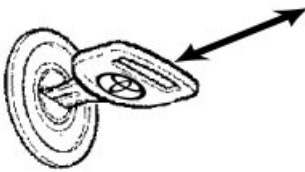
Follow this procedure to clear all remote controls programmed to operate the system. Please note, if you have remote controls to program into the system and you want to first clear all existing remote controls from the system, follow the reprogram procedure as shown on pages 4 and 5.

1. Before you begin:

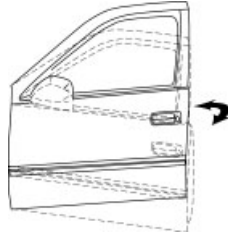
Open the driver's door and remove the key from the ignition switch.



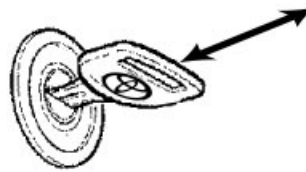
2. Start the programming procedure. (Complete these steps within 40 seconds.)



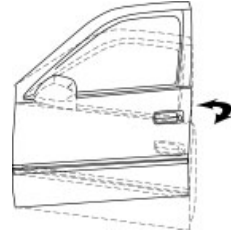
a. Insert the key into, and remove it from the ignition switch 2 times.



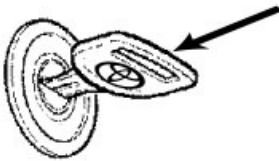
b. Close, then open the driver's door 2 times.



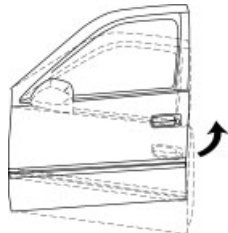
c. Insert the key into, and remove it from the ignition switch 1 time.



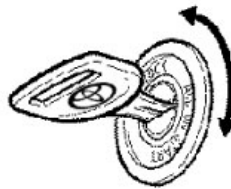
d. Close, then open the driver's door 2 times.



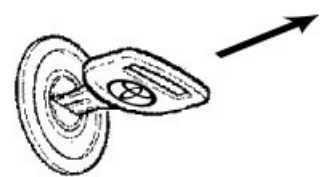
e. Insert the key into, the ignition switch and leave it in.



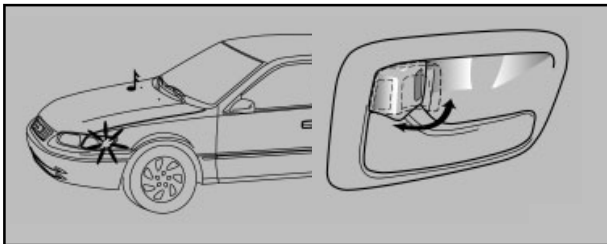
f. Close the driver's door.



g. Turn the key from LOCK to ON 5 times (ending at LOCK).

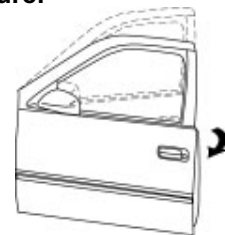


h. Remove the key from the ignition switch.



i. The tail and marker lights flash 5 times, the buzzer chirps 5 times and the doors lock and unlock 5 times.*

3. Complete the code clearing procedure.



a. Open the driver's door

* If the system does not activate the lights, buzzer and door locks 5 times, start over.

PASSIVE ARMING ON/ OFF SELECTION AND ENTRY DELAY TIME SELECTION

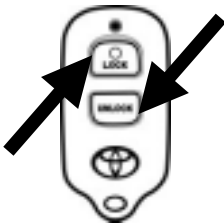
The RS3200 is factory set to not passively arm. To change the system's operation for passive arming, as well as to adjust the entry delay time, follow the procedure below.

1. Before you begin:

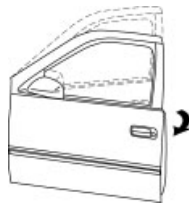
Close all the doors and the trunk or hatch, unlock all the doors with the inside lock switch, then remove the key from the ignition switch.



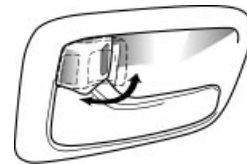
2. Start the programming procedure. (Complete these steps within 30 seconds.)



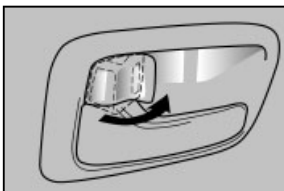
a. Using a remote control, lock, then unlock the doors 3 times.



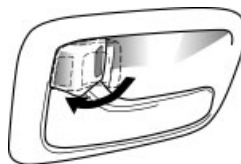
b. Open the driver's door.



c. Lock, then unlock the driver's door inside lock button 3 times.

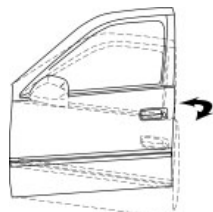


d. The system locks the door in 2 seconds; if this does not happen, start over.

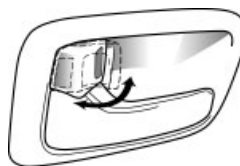


e. Unlock the driver's door inside lock button.

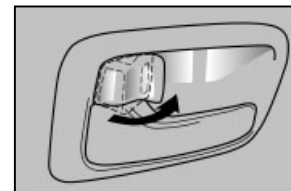
3. Select the operating mode and entry time delay, and complete the programming steps.



a. Close, then open the door:
 2 times= passive arming **off**
 3 times= passive arming **on**,
 0 sec. entry delay.
 4 times= passive arming **on**,
 15 sec. entry delay.
 5 times= passive arming **on**,
 30 sec. entry delay.



b. Lock, then unlock the driver's door inside lock button 1 time.



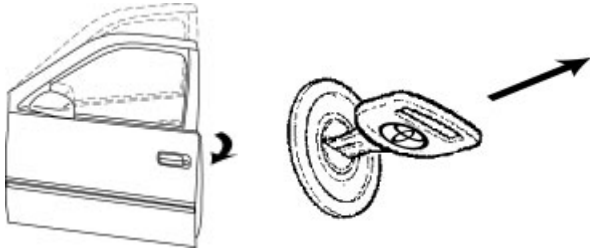
c. The system locks the door in 2 seconds; Programming is now complete. If this does not happen, start over.

IGNITION-CONTROLLED AUTOMATIC DOOR LOCK/ UNLOCK

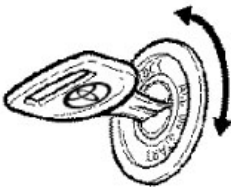
When all doors are closed, the RS3200 is factory set to automatically lock the vehicle's door when the ignition key is turned to ON or START, and unlock them (open or not) when the key is turned back to ACC or LOCK. Follow the procedure below to change this feature's operation mode.

1. Before you begin:

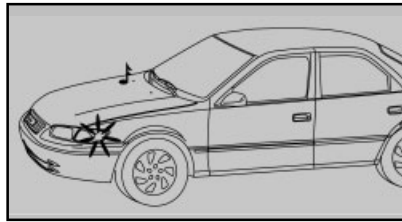
Open the driver's door and remove the key from the ignition switch.



2. Start the programming procedure. (Complete these steps within 30 seconds.)



- a. Insert the key into the ignition switch and **turn it from LOCK to ON 5 times** (ending at ON).



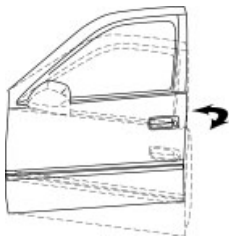
- b. **The tail and marker lights flash 1 time, and the buzzer chirps 1 time.**



- c. **The status monitor's LED (or the engine immobilizer system's LED) turns on for 30 seconds.**

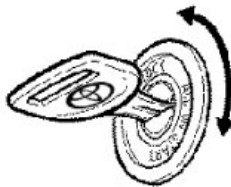
Note: If the system does not activate the lights and buzzer, start over.

3. Select the operating mode and complete the programming steps.

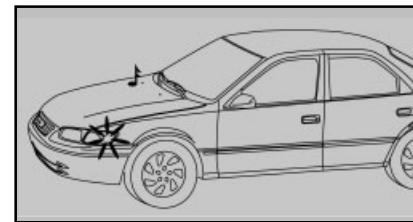


- a. **Close the door: Ignition controlled door locks on.**

Close, then open and close the door: Ignition controlled door locks off.



- b. **Turn the ignition key back to lock.**



- b. **The tail and marker lights flash 1 time, and the buzzer chirps 1 time if the system was set for IG door lock control ON, twice for IG door lock control OFF.** If this does not happen, start over: otherwise, programming is now complete.

PASSIVE ARMING ON/ OFF SELECTION AND ENTRY DELAY TIME SELECTION

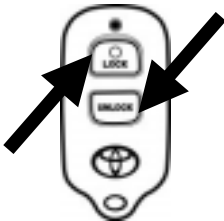
The RS3200 PLUS is factory set to not passively arm. To change the system's operation for passive arming, as well as to adjust the entry delay time, follow the procedure below.

1. Before you begin:

Close all the doors and the trunk or hatch, unlock all the doors with the inside lock switch, then remove the key from the ignition switch.



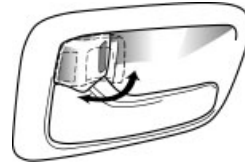
2. Start the programming procedure. (Complete these steps within 30 seconds.)



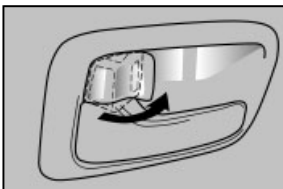
a. Using a remote control, lock, then unlock the doors 3 times.



b. Open the driver's door.



c. Lock, then unlock the driver's door inside lock button 3 times.

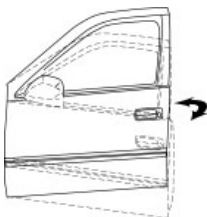


d. The system locks the door in 2 seconds; if this does not happen, start over.

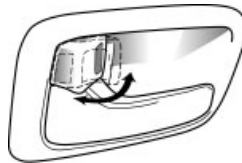


e. Unlock the driver's door inside lock button.

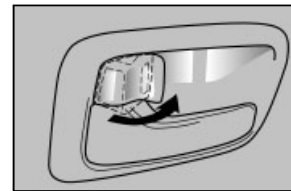
3. Select the operating mode and entry time delay, and complete the programming steps.



a. Close, then open the door:
 2 times= passive arming **off**
 3 times= passive arming **on**,
 0 sec. entry delay.
 4 times= passive arming **on**,
 15 sec. entry delay.
 5 times= passive arming **on**,
 30 sec. entry delay.



b. Lock, then unlock the driver's door inside lock button 1 time.



c. The system locks the door in 2 seconds; Programming is now complete. If this does not happen, start over.