

2003 GENERAL INFORMATION

Computer Relearn Procedures - Toyota

INTRODUCTION

NOTE: Before replacing any component that scan tool suggests is faulty, ensure that all wiring connections and harness connectors are okay. Ensure that power and ground circuits are functioning properly. For circuit identification, see **ENGINE PERFORMANCE** in **SYSTEM WIRING DIAGRAMS** article in **ELECTRICAL** for vehicle being tested.

BODY CONTROLS

Vehicles equipped with body, air conditioning, anti-lock brake or memory computers may require a computer relearn procedure after components are replaced or the vehicle battery is disconnected. Vehicle computers memorize and store vehicle information and operation selections. When the vehicle battery is disconnected, vehicle computer memory may be lost, requiring relearning or resetting. Depending on the vehicle and how it is equipped, the following memories may exist:

- Seat position.
- Tilt/telescoping steering wheel position.
- Mirror position.
- Radio presets and anti-theft code.
- Clock.
- Remote keyless entry custom features.
- Door key lock entry custom features.
- Power window or sunroof operation.

These do not affect vehicle operation. For systems that do not affect operation, see appropriate article for relearn procedures. Other computer relearn procedures are required for vehicle or system operation. These may include:

- Initial control unit programming.
- Traction control yaw sensor initializing.
- Multiplex communication.
- Anti-theft system or engine immobilizer system passwords.

ENGINE CONTROLS

Vehicles equipped with powertrain control computers may require a computer relearn procedure after the vehicle battery is disconnected. Vehicle computers memorize and store vehicle operation patterns for optimum driveability and performance. When the vehicle battery is disconnected, this memory is lost, which may result in a driveability problem. Depending on the vehicle and how it is equipped, the following driveability problems may exist:

- Rough or unstable idle.
- Hesitation or stumble.
- Rich or lean running.
- Poor fuel mileage.
- Harsh or poor transmission/transaxle shift quality.

Default data is used until NEW data from each key start is stored. As the computer restores its memory from each new key start, driveability is restored.

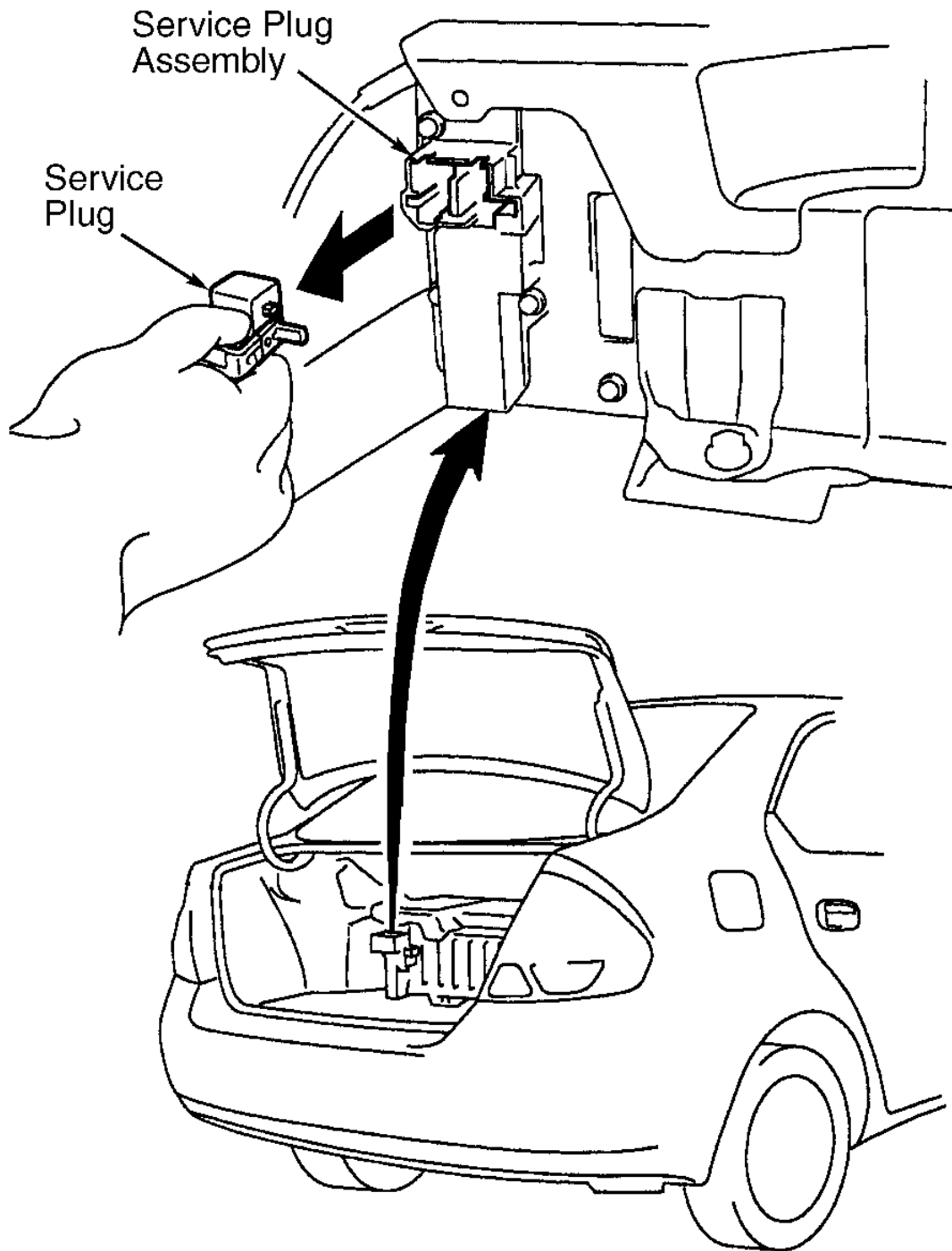
Driveability problems may occur during the computer relearn stage. To accelerate computer relearn process after battery removal and installation, specified computer relearn procedures should be performed. See appropriate procedure.

SERVICE PRECAUTIONS (PRIUS)

WARNING: When performing any inspection or service procedure on this vehicle, ensure following service precautions are followed to prevent personal injury or death due to the extremely high voltage.

The following service precautions must be followed:

- Ensure ignition is off and ignition key is removed from ignition before performing any inspection or service procedure in engine compartment, as engine may automatically start and shut off when ignition is on and READY light is illuminated. READY light is displayed just above the shift lever position indicator on instrument cluster at center of instrument panel.
- Read all service and warning labels in engine compartment before performing any procedures in engine compartment.
- All high-voltage wiring harness connectors contain Orange connectors. DO NOT touch any wiring harness that contains Orange connectors.
- High-voltage battery and other high-voltage components may be identified by HIGH VOLTAGE caution labels on them. DO NOT touch these components.
- If necessary to inspect or service high-voltage system, ensure ignition is off. Remove service plug and wait at least 5 minutes to ensure high voltage is fully discharged before touching any high-voltage wiring harness, connectors or components. Service plug is located on service plug assembly at driver's side front corner of trunk compartment, near high-voltage battery. See [Fig. 1](#). Ensure service plug is stored in a location in which no one may install service plug while technician is working on the vehicle.
- If necessary to touch any high-voltage wiring harness, connectors or components, ensure service plug is removed and battery voltage or less exists at electrical connector. Use Toyota insulated gloves when touching any high-voltage wiring harness, connectors or components. Ensure insulated gloves are dry and in good condition and that no holes exist in insulated gloves. Test insulated glove by applying air to glove before touching any high-voltage wiring harness, connectors or components.
- DO NOT wear any metal objects while working on vehicle which may accidentally drop and cause a short circuit.
- If any high-voltage wiring harness connector is disconnected, ensure terminal on wiring harness connector is wrapped with tape to prevent wiring harness connector from contacting any surface.
- If servicing high-voltage system, place sign on roof of vehicle to indicate to other technicians that high-voltage system is being serviced.



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Fig. 1: Locating Service Plug & Service Plug Assembly (Prius)
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IMMOBILIZER PROGRAMMING (EXCEPT PRIUS)

NOTE: In the case of having lost all the already registered master ignition keys, you are not able to do additional registration or deletion of ignition key codes. You must

change the Engine Control Module (ECM) and then perform ignition key registration.

IGNITION KEY REGISTRATION

NOTE: This procedure **MUST BE** performed **ONLY** when **NEW** Engine Control Module (ECM) is installed. A new ECM is in automatic registration mode. On Avalon, Camry Solara, Land Cruiser and MR2 up to 4 ignition key identification codes be may registered in the ECM at one time. On Camry models produced from January 2003 and later, Highlander and 4Runner, only up to 4 ignition key codes can be made: 3 master ignition key identification codes and 1 sub-key ignition key identification code may be registered in the ECM at one time. On Camry models produced before January 2003, RAV4, Sequoia and Sienna, up to 3 ignition key identification codes may be registered in the ECM at one time. For all models except Camry models produced after January 2003, Land Cruiser and 4Runner, in automatic registration mode, the last ignition key to be registered becomes the sub-key. For Camry models produced after January 2003 and 4Runner, the registration order is not specified because the transponder key ECU can distinguish keys types. On Land Cruiser, master and sub-key codes are registered automatically.

NOTE: A master key is a Black-colored ignition key and a sub-key is a Gray-colored ignition key.

1. Ensure SECURITY indicator light is flashing. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
2. Insert ignition key into ignition lock cylinder. Note that SECURITY indicator light should now remain on steady. On Camry models produced after January 2003, Land Cruiser, Sequoia and 4Runner models SECURITY indicator light should turn off when ignition key is inserted into ignition lock cylinder.
3. On all models, once ignition key registration is under way, SECURITY indicator light should turn off. After ignition key registration is complete, SECURITY indicator light should come on steady. Remove ignition key.
4. If ignition key registration was complete, and system is operating normally, SECURITY indicator light should flash when ignition key was removed from ignition lock cylinder. If ignition key registration was not completed with ECM in automatic registration mode, a code 2-1 will be displayed by SECURITY indicator light. See [Fig. 2](#). When inserting an already registered ignition key, a code 2-2 will be displayed by SECURITY indicator light. See [Fig. 2](#).
5. If programming additional ignition keys, repeat process starting with step [1](#). If additional ignition keys do not need programming, procedure is complete. SECURITY indicator light should turn off once last ignition key (sub-key) is registered.
6. On Avalon, Camry models produced before January 2003, Camry Solara and Highlander, to complete automatic registration mode, without removing or installing registered ignition key in ignition lock cylinder, depress and release brake pedal at least 5 times within 15 seconds, or request automatic registration mode completion by using Toyota hand-held tester connected to data link connector No. 3. Data link connector No. 3 is located at driver's side of instrument panel.
7. On Camry models produced after January 2003 and 4Runner, to forcibly complete automatic registration mode when at least one key code for the master key has been registered turn ignition switch from ON position to OFF position 5 times within 10 seconds using the already registered master key.
8. On Land Cruiser and Sequoia, to forcibly complete registration mode when at least one key code for the master key has been registered, turn ignition switch from the LOCK position to the ON position 5 times within 10 seconds using the already registered master key. If using hand-held tester, select automatic

registration mode completion by using Toyota hand-held tester connected to data link connector No. 3. Data link connector No. 3 is located at driver's side of instrument panel.

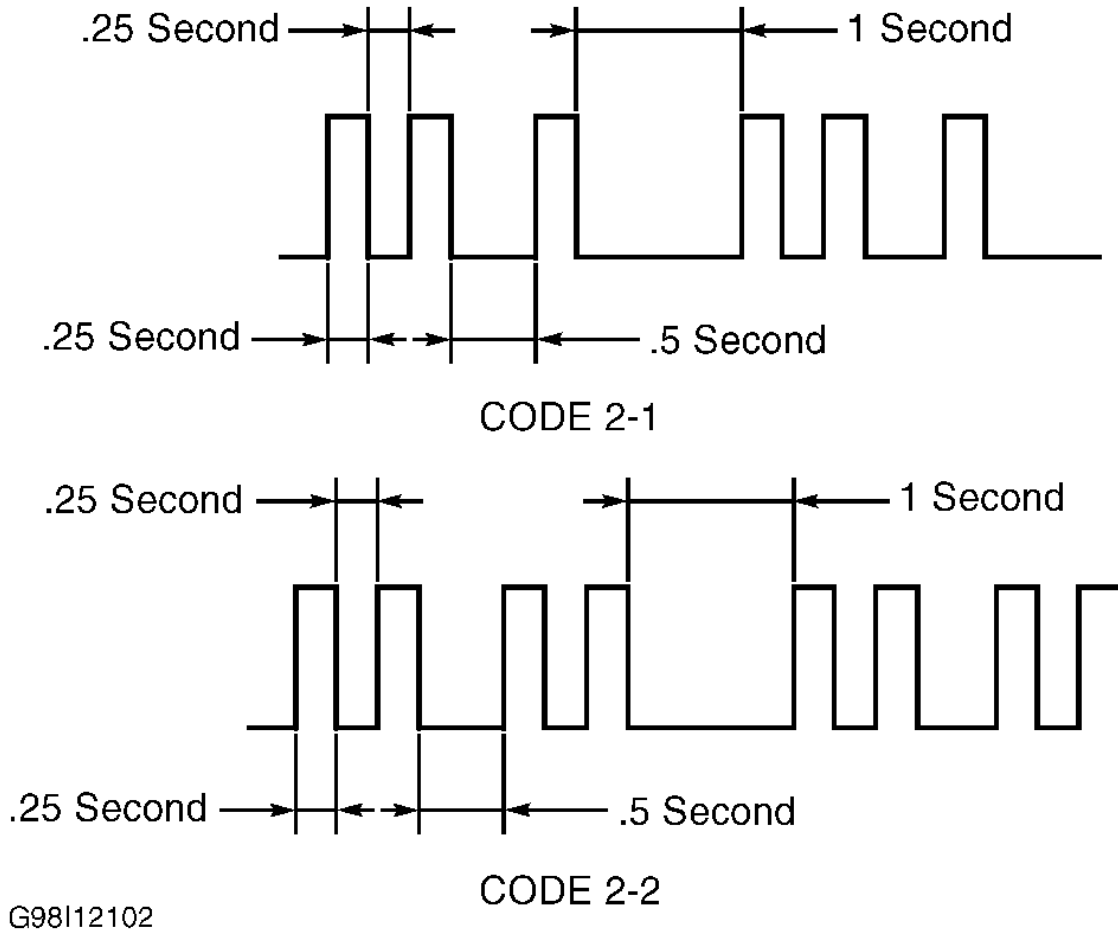


Fig. 2: Identifying Code Displays (All models)

Courtesy of © TOYOTA, LICENSE AGREEMENT TMS1002

ADDITIONAL MASTER KEY REGISTRATION (EXCEPT PRIUS)

NOTE: A master key is a Black-colored ignition key. Additional master key may be registered by 2 different methods: using brake pedal and accelerator pedal, or using Toyota hand-held tester. It is possible to register up to 7 master key codes including the already registered key code.

NOTE: When any operation time described in following procedures is over, registration mode completes. When next procedure is performed while timer is working, the timer completes counting time and then the next timer starts.

USING BRAKE PEDAL & ACCELERATOR PEDAL

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Insert registered master key into ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, depress and release accelerator pedal 5 times.

2. Within 20 seconds of depressing and releasing accelerator pedal 5 times, depress and release brake pedal 6 times and remove master key from ignition lock cylinder.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert master key to be registered in ignition lock cylinder.
4. Within 10 seconds of inserting master key to be registered in ignition lock cylinder, depress and release accelerator pedal one time. Ensure SECURITY indicator light flashes. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
5. After one minute, additional master key should be registered and SECURITY indicator light should then turn off. If registering additional master keys, repeat process starting with step 3 within 10 seconds.
6. The registration mode is complete after removing master key from ignition lock cylinder and depressing and releasing brake pedal at least once within 10 seconds after SECURITY indicator light has turned off, or at least 10 seconds has passed.

USING TOYOTA HAND-HELD TESTER

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Insert registered master key in ignition lock cylinder. Turn ignition on. Select master key registration on hand-held tester. Within 20 seconds, remove master key from ignition lock cylinder.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert master key to be registered in ignition lock cylinder. Ensure SECURITY indicator light flashes. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
4. After one minute, additional master key should be registered and SECURITY indicator light should then turn off. The registration mode is complete after removing master key from ignition lock cylinder and depressing and releasing brake pedal at least once within 10 seconds after SECURITY indicator light has turned off, or at least 10 seconds has passed.

Camry (Jan. 2003 & Later Production) & 4Runner

NOTE: A master key is a black-colored ignition key. Additional master key may be registered using Toyota hand-held tester. It is possible to register up to 5 master key codes and 3 sub-key codes with this procedure.

NOTE: Perform the following operation when registering an additional master key or sub-key.

NOTE: If ignition key registration was complete, and system is operating normally, SECURITY indicator light should flash when ignition key was removed from ignition lock cylinder. If ignition key registration was not completed with ECM in automatic registration mode, a code 2-1 will be displayed by SECURITY indicator light. When inserting an already registered ignition key, a code 2-2 will be displayed by SECURITY indicator light. See [Fig. 2](#).

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure. Data link connector No. 3 is located at driver's side of instrument panel.
2. Ensure SECURITY indicator light is flashing. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
3. Insert already registered master key in ignition lock cylinder. Turn ignition on.

4. Once ignition key registration is under way, SECURITY indicator light should turn off. Within 120 seconds of turning ignition on, using hand-held tester select the menus in the following order:
 - a. Select vehicle model
 - b. Select IMMOBILIZER
 - c. Select ID UTILITY
 - d. Select TRANSP CODE REG
5. With completion of hand-held tester operation, SECURITY indicator light should turn on steady. After tester instruction, remove the already registered master key within 20 seconds.
6. Within 10 seconds of removing the master key, insert the key that is to be registered in the ignition lock cylinder.
7. While ignition key registration is taking place, SECURITY indicator light should be to blinking. Once registration is complete in about 1 minute, the SECURITY indicator light should turn off. Remove ignition key and SECURITY light should begin blinking again signaling normal operation of the engine immobilizer system.

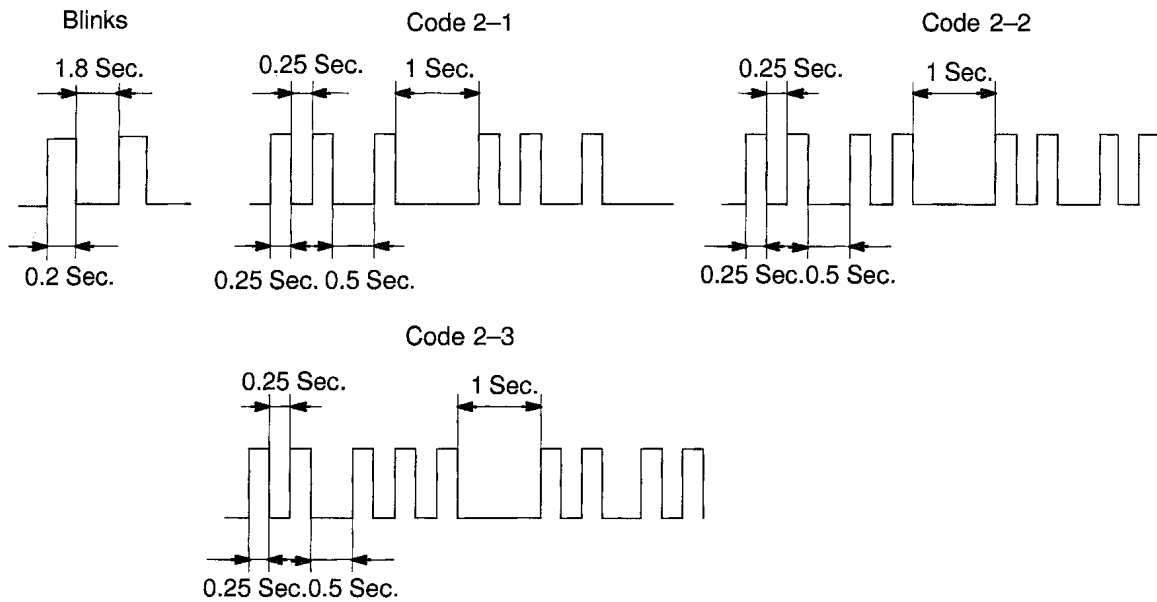
Land Cruiser

NOTE: A master key is a black-colored ignition key. Additional master key may be registered using Toyota hand-held tester. It is possible to register up to 5 master key codes and 3 sub-key codes with this procedure.

NOTE: If ignition key registration was complete, and system is operating normally, SECURITY indicator light should flash when ignition key was removed from ignition lock cylinder. If ignition key registration was not completed with ECM in automatic registration mode, a code 2-1 will be displayed by SECURITY indicator light. When inserting an already registered ignition key, a code 2-2 will be displayed by SECURITY indicator light. When exceeding the number of keys which can be registered, a code 2-3 will be displayed by SECURITY indicator light. See [Fig. 3](#).

NOTE: Perform the following operation when registering an additional master key or sub-key. Master and sub-key codes are registered automatically.

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Insert registered master key in ignition lock cylinder. Turn ignition on.
3. Within 120 seconds of turning ignition on, use hand-held tester to select key registration menu. SECURITY indicator light should be off. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
4. With completion of hand-held tester operation, SECURITY indicator light should turn on steady. After tester instruction, remove the already registered master key within 20 seconds.
5. Within 10 seconds of removing master key from ignition lock cylinder, insert master key to be registered in ignition lock cylinder. Ensure SECURITY indicator light flashes.
6. With master key to be registered in ignition lock cylinder, turn ignition switch on for 60 seconds or more. Ensure SECURITY indicator light flashes. When SECURITY indicator light turns off, remove master key. The registration mode is complete after removing master key from ignition lock cylinder. Upon removal of key, SECURITY indicator light will begin flashing.



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Fig. 3: Identifying Code Displays (Land Cruiser)

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SEQUOIA

NOTE: Using the procedure below, it is possible to register up to 4 master key codes and up to 2 sub-key codes including already registered master key and sub-key.

NOTE: Perform the following operation when registering an additional master key or sub-key.

1. Ensure all doors are closed and there is no key in ignition lock cylinder.
2. Insert registered master key in ignition lock cylinder. Turn ignition switch from LOCK position to ON position 5 times within 15 seconds.
3. With completion of ignition operation, open and close driver side door 6 times within 20 seconds.
4. With completion of closing driver door for final time, remove registered master key from ignition lock cylinder within 10 seconds.
5. When registered master key is removed from ignition lock cylinder, insert key to be registered in ignition lock cylinder within 10 seconds.
6. Turn ignition switch to ON position for 60 seconds or more. After 60 second period, remove master key. If registering additional master keys, repeat process starting with step 5 within 10 seconds. If not registering additional master keys, open and close driver door within 10 seconds or more after master key is removed.

ADDITIONAL SUB-KEY REGISTRATION (EXCEPT PRIUS)

NOTE: A sub-key is a Gray-colored ignition key. Additional sub-key may be registered by 2 different methods: using brake pedal and accelerator pedal, or using Toyota hand-held tester. It is possible to register up to 3 sub-key codes including the already registered key code.

NOTE: When any operation time described in following procedures is over, registration

mode completes. When next procedure is performed while timer is working, the timer completes counting time and then the next timer starts.

USING BRAKE & ACCELERATOR PEDAL

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Insert registered master key in ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, depress and release accelerator pedal 4 times.
2. Within 20 seconds of depressing and releasing accelerator pedal 4 times, depress and release brake pedal 5 times and remove master key from ignition lock cylinder.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert sub-key to be registered in ignition lock cylinder.
4. Within 10 seconds of inserting sub-key in ignition lock cylinder, depress and release accelerator pedal one time. Ensure SECURITY indicator light flashes. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
5. After one minute, additional sub-key should be registered and SECURITY indicator light should then turn off. If registering additional sub-keys, repeat process starting with step 3 within 10 seconds.
6. The registration mode is complete after removing sub-key from ignition lock cylinder and depressing and releasing brake pedal at least once within 10 seconds after SECURITY indicator light has turned off, or at least 10 seconds has passed.

USING TOYOTA HAND-HELD TESTER

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Insert registered master key in ignition lock cylinder. Turn ignition on. Select SUB-KEY REGISTRATION on hand-held tester. Within 20 seconds, remove master key from ignition lock cylinder.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert sub-key to be registered in ignition lock cylinder. Ensure SECURITY indicator light flashes. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
4. After one minute, additional sub-key should be registered and SECURITY indicator light should then turn off. The registration mode is complete after removing sub-key from ignition lock cylinder and depressing and releasing brake pedal at least once within 10 seconds after SECURITY indicator light has turned off, or at least 10 seconds has passed.

CAMRY (JAN. 2003 & LATER PRODUCTION) & 4RUNNER

For registration of additional sub-keys, see [USING TOYOTA HAND-HELD TESTER](#) under ADDITIONAL MASTER KEY REGISTRATION (EXCEPT PRIUS).

LAND CRUISER

For registration of additional sub-keys, see [USING TOYOTA HAND-HELD TESTER](#) under ADDITIONAL MASTER KEY REGISTRATION (EXCEPT PRIUS).

SEQUOIA

For registration of additional sub-keys, see [SEQUOIA](#) under ADDITIONAL MASTER KEY REGISTRATION (EXCEPT PRIUS).

ERASURE OF TRANSPONDER KEY CODE (EXCEPT PRIUS)

NOTE: There are 2 different methods to erase the transponder key code: using brake pedal and accelerator pedal, or using Toyota hand-held tester. All other master and sub-key codes are deleted leaving the master key code which was used when performing the operation. When using the ignition key which was used before deleting, it is necessary to register the code again.

NOTE: When any operation time described in following procedures is over, registration mode completes. When next procedure is performed while timer is working, the timer completes counting time and then the next timer starts.

USING BRAKE & ACCELERATOR PEDAL

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Insert registered master key in ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, depress and release accelerator pedal 6 times.
2. Within 20 seconds of depressing and releasing accelerator pedal 6 times, depress and release brake pedal 7 times.
3. Within 10 seconds of depressing and releasing brake pedal 7 times, remove master key from ignition lock cylinder. Procedure should now be complete and transponder key code should now be erased. If master key cannot be removed from ignition lock cylinder, the transponder key code erasure is cancelled.

USING TOYOTA HAND-HELD TESTER

Avalon, Camry (Up To Jan. 2003 Production), Camry Solara, Highlander, MR2, RAV4 & Sienna

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Insert registered master key in ignition lock cylinder. Turn ignition on. Request KEY CODE DELETION from hand-held tester. Ensure SECURITY indicator light flashes. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
3. Within 10 seconds of requesting KEY CODE DELETION on hand-held tester, remove master key from ignition lock cylinder. Procedure is now complete and transponder key code should now be erased. If master key cannot be removed from ignition lock cylinder, transponder key code erasure is cancelled and SECURITY indicator light will turn off.

Camry (Jan. 2003 & Later Production) & 4Runner

NOTE: All key codes are erased except for master key which is used to ensure erasure operation. In order to use a key for which the code has been erased, it will be necessary to register the key code again.

NOTE: Registration operation will be cancelled if each step is not completed within the specified time.

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Ensure SECURITY indicator light is flashing until master key is inserted in key lock cylinder. SECURITY indicator light will turn off. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer. Turn ignition on.
3. Within 120 seconds of turning ignition on, use hand-held tester to select the menus in the following order:

- a. Select vehicle model
 - b. Select IMMOBILIZER
 - c. Select ID UTILITY
 - d. Select TRANSP CODE ERS
4. With completion of hand-held tester operation, SECURITY indicator light will turn on for 1 second and then turn off. Within 10 seconds after the hand-held tester indicates to, remove the master key.
 5. After the master key is removed from the ignition lock cylinder, SECURITY light will begin to blink signaling that the immobilizer system is operating normally.

Land Cruiser

1. Connect hand-held tester to data link connector No. 3. When using hand-held tester, more detailed procedures may be displayed on tester while performing this procedure.
2. Insert registered master key in ignition lock cylinder. Turn ignition on. Select key deletion from hand-held tester. Ensure SECURITY indicator light is on. SECURITY indicator light is displayed as a vehicle icon near the center of the tachometer.
3. Within 10 seconds of completing hand-held tester operation, remove master key from ignition lock cylinder. SECURITY indicator light should flash ON and OFF in 1 second intervals. Procedure is now complete and transponder key code should now be erased. SECURITY indicator light should begin flashing signaling normal operation of immobilizer system.

SEQUOIA

NOTE: Delete all other master and sub-key codes leaving the master key code to use operation. When using key which was used before deletion, it is necessary to register the code again.

NOTE: When any operation time described in following procedures is over, registration mode completes. When next procedure is performed while timer is working, the timer completes counting time and then the next timer starts.

1. Ensure all doors are closed and that key is not in ignition lock cylinder.
2. Insert registered master key in ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, turn ignition switch from LOCK position to ON position 6 times.
3. With completion of ignition operation, open and close driver side door 7 times within 20 seconds.
4. Upon completion of closing driver side door for final time, remove registered master key.

IMMOBILIZER COMPONENT REPLACEMENT PROGRAMMING PROCEDURES (PRIUS)

WARNING: Read service precautions before proceeding with any service procedure on engine immobilizer system. See [SERVICE PRECAUTIONS \(PRIUS\)](#).

NOTE: Proper procedure must be followed when replacing transponder key Electronic Control Unit (ECU) and/or hybrid vehicle control Electronic Control Unit (ECU).

PROGRAMMING WHEN REPLACING TRANSPONDER KEY ELECTRONIC CONTROL UNIT

Once replacement transponder key Electronic Control Unit (ECU) is installed, register ignition keys to transponder key ECU. See [IGNITION KEY REGISTRATION](#). Insert ignition key into ignition lock cylinder and turn

ignition switch to ON position. Leave ignition switch in ON position for at least 30 minutes and then start the engine.

PROGRAMMING WHEN REPLACING HYBRID VEHICLE CONTROL ELECTRONIC CONTROL UNIT

Once replacement hybrid vehicle control Electronic Control Unit (ECU) is installed, insert ignition key into ignition lock cylinder and turn ignition switch to ON position. Leave ignition switch in ON position for at least 30 minutes and then start the engine.

PROGRAMMING WHEN REPLACING TRANSPONDER KEY ELECTRONIC CONTROL UNIT & HYBRID VEHICLE CONTROL ELECTRONIC CONTROL UNIT

Once replacement transponder key Electronic Control Unit (ECU) and hybrid vehicle control Electronic Control Unit (ECU) are installed, register ignition keys to transponder key ECU. See [IGNITION KEY REGISTRATION](#). Once ignition keys are registered, insert ignition key into ignition lock cylinder and start the engine.

PROGRAMMING IF ALL IGNITION KEYS ARE LOST

NOTE: Procedure must be followed if all ignition keys are lost.

Purchase NEW ignition keys along with NEW transponder key Electronic Control Unit (ECU). Replace original transponder key ECU with replacement transponder key ECU. Insert NEW ignition key into ignition lock cylinder and turn ignition switch to ON position. Leave ignition switch in ON position for at least 30 minutes.

IGNITION KEY REGISTRATION

NOTE: This procedure **MUST BE** performed **ONLY** when **NEW** transponder key Electronic Control Unit (ECU) is installed. A new transponder key ECU is in automatic registration mode and up to 2 master key identification codes and one sub-key identification code may be registered in transponder key ECU at one time. In automatic registration mode, the last ignition key to be registered becomes a sub-key.

NOTE: Master key is a Black-colored ignition key that opens all locks. A sub-key is a Gray-colored ignition key that will not open the trunk.

1. Check that battery is connected and there is no ignition key in the ignition lock cylinder. Check that SECURITY indicator light is flashing. SECURITY indicator light is displayed as a vehicle icon near the clock at the center of instrument panel.
2. To register the first master key, insert master key into ignition lock cylinder. SECURITY indicator light should turn off for one second and then turn back on. Remove master key from ignition lock cylinder.
3. To register the second master key, insert master key into ignition lock cylinder. SECURITY indicator light should turn off for one second and then turn back on. Remove master key from ignition lock cylinder.
4. To register the sub-key, insert sub-key into ignition lock cylinder. SECURITY indicator light should turn off for one second and then turn back on. Remove sub-key from ignition lock cylinder. Ensure SECURITY indicator light starts flashing.
5. If the registration was complete and system is operating normally when ignition key was removed from ignition lock cylinder, the SECURITY indicator light should flash. If ignition key registration was not completed with transponder key Electronic Control Unit (ECU) in automatic registration mode, a code 2-1 will be displayed by SECURITY indicator light. See [Fig. 2](#). When inserting an already registered ignition key, a code 2-2 will be displayed by SECURITY indicator light. See [Fig. 2](#).

6. To complete automatic registration mode after more than one key has been registered, insert master key into ignition lock cylinder and turn ignition switch from LOCK to ON position 5 times within 10 seconds without removing master key from ignition lock cylinder.

ADDITIONAL MASTER KEY REGISTRATION

NOTE: Master key is a Black-colored ignition key that opens all locks.

1. Ensure all doors are closed and there is no ignition key in ignition lock cylinder. Insert registered master key into ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, repeatedly turn ignition switch from LOCK to ON position 5 times, and then open and close the driver's door 6 times. Driver's door must be opened and closed within 15 seconds after inserting master key into ignition lock cylinder.
2. Within 20 seconds of opening and closing the driver's door 6 times, remove master key from ignition lock cylinder. Master key must be removed from ignition lock cylinder within 20 seconds after the first opening and closing of the driver's door.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert master key to be registered in ignition lock cylinder.
4. Within 10 seconds of inserting master key to be registered in ignition lock cylinder, turn ignition switch from LOCK to ON position. Leave ignition switch in ON position for at least 60 seconds.
5. After ignition switch has been in ON position for at least 60 seconds, turn ignition off and remove ignition key from ignition lock cylinder. If registering additional master keys, repeat process starting with step [3](#) within 10 seconds. Once all master keys are registered, open and close the driver's door.

ADDITIONAL SUB-KEY REGISTRATION

NOTE: A sub-key is a Gray-colored ignition key that will not open the trunk.

1. Ensure all doors are closed and there is no ignition key in ignition lock cylinder. Insert registered master key into ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, repeatedly turn ignition switch from LOCK to ON position 4 times, and then open and close the driver's door 5 times. Driver's door must be opened and closed within 15 seconds after inserting master key into ignition lock cylinder.
2. Within 20 seconds of opening and closing the driver's door 5 times, remove master key from ignition lock cylinder. Master key must be removed from ignition lock cylinder within 20 seconds after the first opening and closing of the driver's door.
3. Within 10 seconds of removing master key from ignition lock cylinder, insert sub-key to be registered in ignition lock cylinder.
4. Within 10 seconds of inserting sub-key to be registered in ignition lock cylinder, turn ignition switch from LOCK to ON position. Leave ignition switch in ON position for at least 60 seconds.
5. After ignition switch has been in ON position for at least 60 seconds, turn ignition off and remove ignition key from ignition lock cylinder. If registering additional sub-key, repeat process starting with step [3](#) within 10 seconds. Once all sub-keys are registered, open and close the driver's door.

ERASURE OF TRANSPONDER KEY CODE

NOTE: Procedure is used to erase all key codes from transponder key Electronic Control Unit (ECU). All other master and sub-key codes are deleted leaving the master key code which was used when performing the operation. When using the ignition key which was used before deleting, it is necessary to register the code again.

1. Ensure all doors are closed and there is no ignition key in ignition lock cylinder. Insert registered master key into ignition lock cylinder. Within 15 seconds of inserting master key into ignition lock cylinder, repeatedly turn ignition switch from LOCK to ON position 6 times, and then open and close the driver's door 7 times. Driver's door must be opened and closed within 15 seconds after inserting master key into ignition lock cylinder.
2. Within 20 seconds of opening and closing the driver's door 7 times, remove master key from ignition lock cylinder. Master key must be removed from ignition lock cylinder within 20 seconds after the first opening and closing of the driver's door.

POWER SLIDING DOOR REINITIALIZATION PROCEDURE (SIENNA)

NOTE: Following procedure should be performed if power sliding door system does not operate properly under the following conditions: battery is disconnected and reconnected, battery is discharged and recharged, or open power sliding door warning light remains on even with power sliding doors closed.

1. If power sliding door system does not operate properly and open power sliding door warning light remains on, even with power sliding doors closed, go to next step. If power sliding door system does not operate properly after battery is disconnected and reconnected or battery is discharged and recharged, go to step [4](#).
2. Ensure power sliding door main switch is in OFF position. Power sliding door main switch is located on driver's side of instrument panel, just to the left of steering column and is marked as PWR DOOR OFF. Close power sliding door by hand. Disconnect battery for one minute and then reconnect the battery.
3. Turn on power sliding door system by placing power sliding door main switch in the ON position. Wait 5 seconds and then go to next step.
4. Ensure power sliding door main switch is in ON position if not previously done. Power sliding door main switch is located on driver's side of instrument panel, just to the left of steering column and is marked as PWR DOOR OFF. Open one of the power sliding doors by using the power sliding door control switch. Power sliding door control switches are located near center of instrument panel, just below the stereo.
5. Wait 3 seconds after power sliding door stops at the fully open position and then close power sliding door by using power sliding door control switch on instrument panel or by using remote keyless entry transmitter.
6. Wait 3 seconds after power sliding door stops at the fully closed position and then repeat steps [4](#) and [5](#).

SUN ROOF INITIALIZATION (CAMRY & CELICA)

CAMRY

NOTE: Following procedure should be performed if battery is disconnected and reconnected, or battery is discharged and recharged to provide proper automatic operation and jam protection operation of power sun roof.

1. Ensure ignition is on. Depress and hold TILT UP side of power sun roof switch until power sun roof tilts all the way upward and then tilts downward a little. Power sun roof switch is located on headliner, just in front of power sun roof.
2. Check proper operation of open/closing and tilt up/down function for power sun roof using power sun roof switch. Power sun roof should operate anytime ignition is on, or for 43 seconds after ignition is off provided both front doors are closed. It will stop operating if any front door is opened. Depressing SLIDE OPEN side of power sun roof switch for one second should open power sun roof.
3. Depressing TILT UP side of power sun roof switch for one second should close power sun roof. To tilt power sun roof upward, depress and hold TILT UP side of power sun roof switch for one second. To tilt power sun roof downward, depress and hold SLIDE OPEN side of power sun roof switch for one second.

CELICA

Close power sun roof using power sun roof switch and continue to depress power sun roof switch briefly after power sun roof is fully closed. Power sun roof switch is located on headliner, just in front of power sun roof.

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