TOYOTA

Technical Service BULLETIN

August 30, 2002

Title:
IMMOBILIZER KEY CODE RESET

Models:
Applicable 4Runner, Camry, Highlander, Land Cruiser, MR2 Spyder, RAV4, Sequoia, & Solara

TSB

TSB REVISION NOTICE:
- **June 25, 2003: Preparation procedure on page 3 now applies to all model years of MR2 Spyder.**
- **January 20, 2003: Updated terminals in Figure 1 on page 3.**
- **August 30, 2002: The information contained in this TSB supercedes the original SS003–01. Previous TSBs should be discarded.**

Introduction   Immobilizer Reset is a new feature that allows the registration of a new Master Key even if all original Master Keys are lost. Once the Immobilizer system is reset, all previously registered keys will be erased.

Applicable Vehicles

MODEL YEAR	MODEL	ENGINE MODEL
2000 & Later	MR2 Spyder*	1ZZ
2001	RAV4*	1AZ
2001 & Later	4Runner	5VZ
	Highlander	2AZ
	Land Cruiser	2UZ
2001 & 2002	Sequoia	2UZ
2002 & Later	Camry	1MZ & 2AZ
	RAV4	1AZ
	Solara	2AZ

*   Refer to special preparation procedure in this bulletin.

NOTE:
Refer to TIS (Technical Information System) for the most current applicable vehicle information.

Parts Information

PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME
N/A	Model Specific	Replacement Key (Master or Sub)

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

Toyota Supports ASE Certification

Required SSTs

SPECIAL SERVICE TOOLS (SSTs)		PART NUMBER	QUANTITY
Toyota Diagnostic Tester Kit*		01001271	1
12 Megabyte Diagnostic Tester Program Card with version 10.0a Software (or later)*		01002593-005	1
Diagnostic Check Wire (or equivalent)		09843–18020	1

*   Essential SSTs.

> **NOTE:**
> **Additional Diagnostic Tester Kits, Program Cards or SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.**

Function Description

The Immobilizer Reset function is a 5-step process:

1. Using the Diagnostic Tester, retrieve a "Seed Number" through the **OBD/MOBD Immobilizer** function.
   - A "Seed Number" is a unique number provided by the Diagnostic Tester and validated by TIS (Technical Information System) in order to return a Passcode.

2. Using TIS (Technical Information System), select **Immobilizer Reset**, and complete the request form to retrieve a "Passcode Number."
   - A "Passcode Number" is a unique number required by the Diagnostic Tester to reset the ECU allowing it to accept a new Master Key.

3. Enter the "Passcode Number" received from TIS into the Diagnostic Tester.

4. Confirm successful Immobilizer reset and new Master Key registration.

5. Register any additional customer keys.

**Preparation:
'00 & Later
MY MR2
Spyder & '01
MY RAV4
Only**

Before beginning the Key Code Reset function on 2000 and later model year MR2 Spyder and 2001 model year RAV4 vehicles, it is necessary to short terminals T_C to E_1 at the ECM connector, using SST No. 09843–18020. (Refer to Figure 1.)

With ECU connectors in place, back–probe and short terminals T_C to E_1 (pin 17 to pin 5).

FIGURE 1. ECM TERMINALS ON '00–'01 MY MR2 SPYDER & '01 MY RAV4
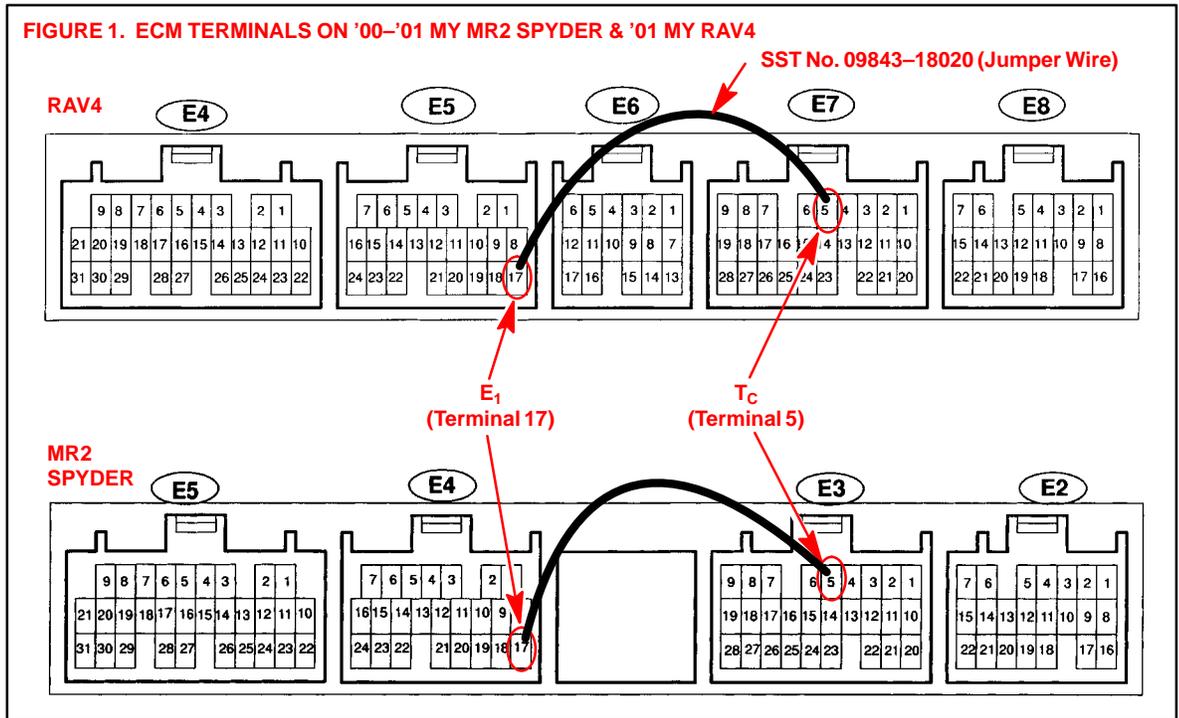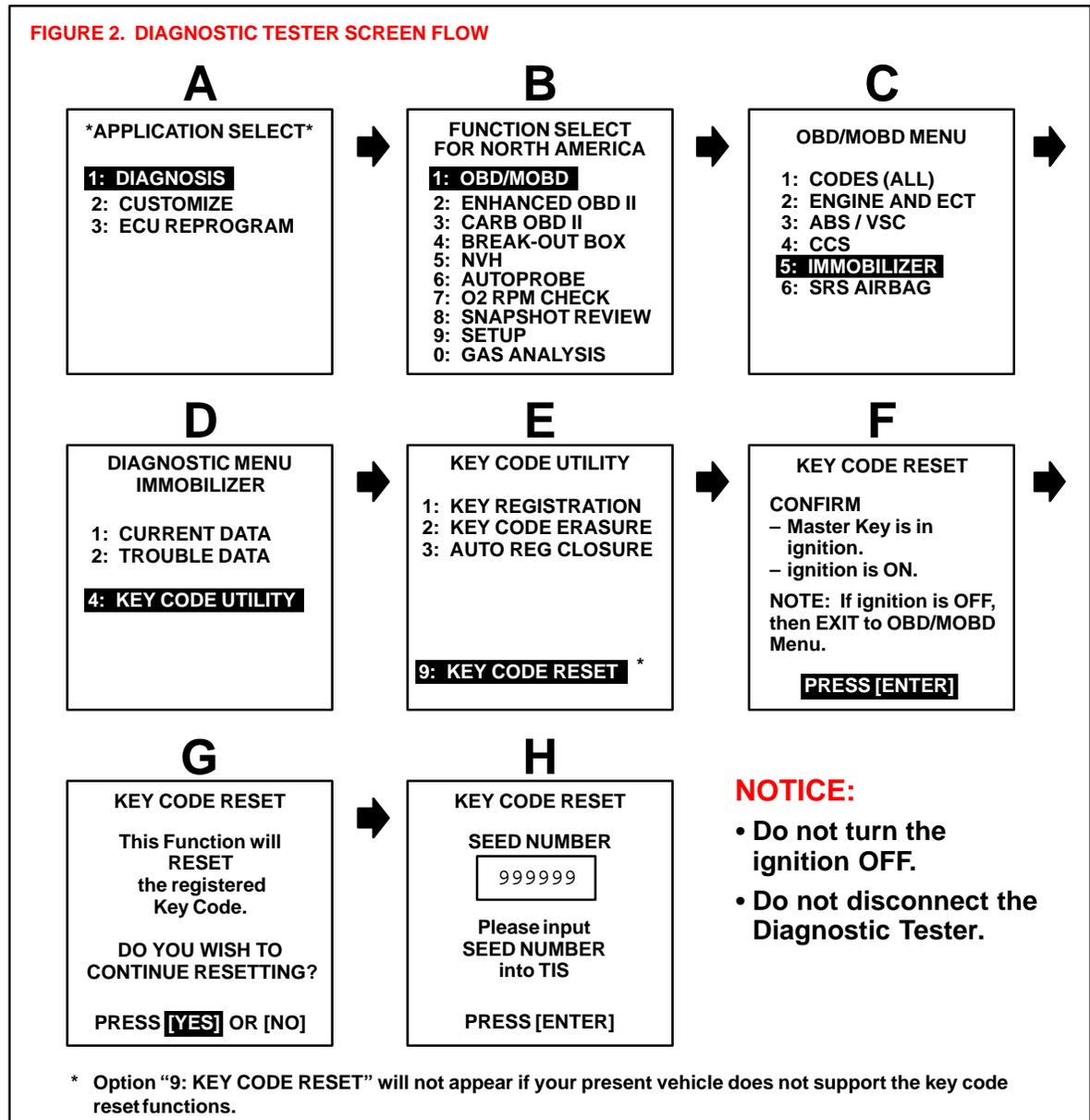
NOTE:
- **With the key ON and the engine OFF, the SRS, Cruise and ABS lights will flash on the instrument panel when terminals T_C to E_1 are shorted together correctly.**
- **Leave the SST No. 09843–18020 in place for the entire Key Code Reset procedure.**

Key Code Reset Procedure

> **NOTE:**
>
> **Ensure that the Diagnostic Tester is equipped with the latest version of software (9.01a or later).**

Connect the Diagnostic Tester to DLC3 and turn the ignition ON.

1. Using the Diagnostic Tester, follow the screen flow in Figure 2 below to retrieve the "Seed Number." (**DO NOT DISCONNECT** the Diagnostic Tester from the vehicle during this process.)

FIGURE 2. DIAGNOSTIC TESTER SCREEN FLOW

A

APPLICATION SELECT

1: DIAGNOSIS
2: CUSTOMIZE
3: ECU REPROGRAM

➡

B

FUNCTION SELECT
FOR NORTH AMERICA

1: OBD/MOBD
2: ENHANCED OBD II
3: CARB OBD II
4: BREAK-OUT BOX
5: NVH
6: AUTOPROBE
7: O2 RPM CHECK
8: SNAPSHOT REVIEW
9: SETUP
0: GAS ANALYSIS

➡

C

OBD/MOBD MENU

1: CODES (ALL)
2: ENGINE AND ECT
3: ABS / VSC
4: CCS
5: IMMOBILIZER
6: SRS AIRBAG

➡

D

DIAGNOSTIC MENU
IMMOBILIZER

1: CURRENT DATA
2: TROUBLE DATA

4: KEY CODE UTILITY

➡

E

KEY CODE UTILITY

1: KEY REGISTRATION
2: KEY CODE ERASURE
3: AUTO REG CLOSURE

9: KEY CODE RESET *

➡

F

KEY CODE RESET

CONFIRM
– Master Key is in
  ignition.
– ignition is ON.

NOTE: If ignition is OFF,
then EXIT to OBD/MOBD
Menu.

PRESS [ENTER]

➡

G

KEY CODE RESET

This Function will
RESET
the registered
Key Code.

DO YOU WISH TO
CONTINUE RESETTING?

PRESS [YES] OR [NO]

➡

H

KEY CODE RESET

SEED NUMBER

999999

Please input
SEED NUMBER
into TIS

PRESS [ENTER]

NOTICE:

- **Do not turn the ignition OFF.**

- **Do not disconnect the Diagnostic Tester.**

* Option "9: KEY CODE RESET" will not appear if your present vehicle does not support the key code reset functions.
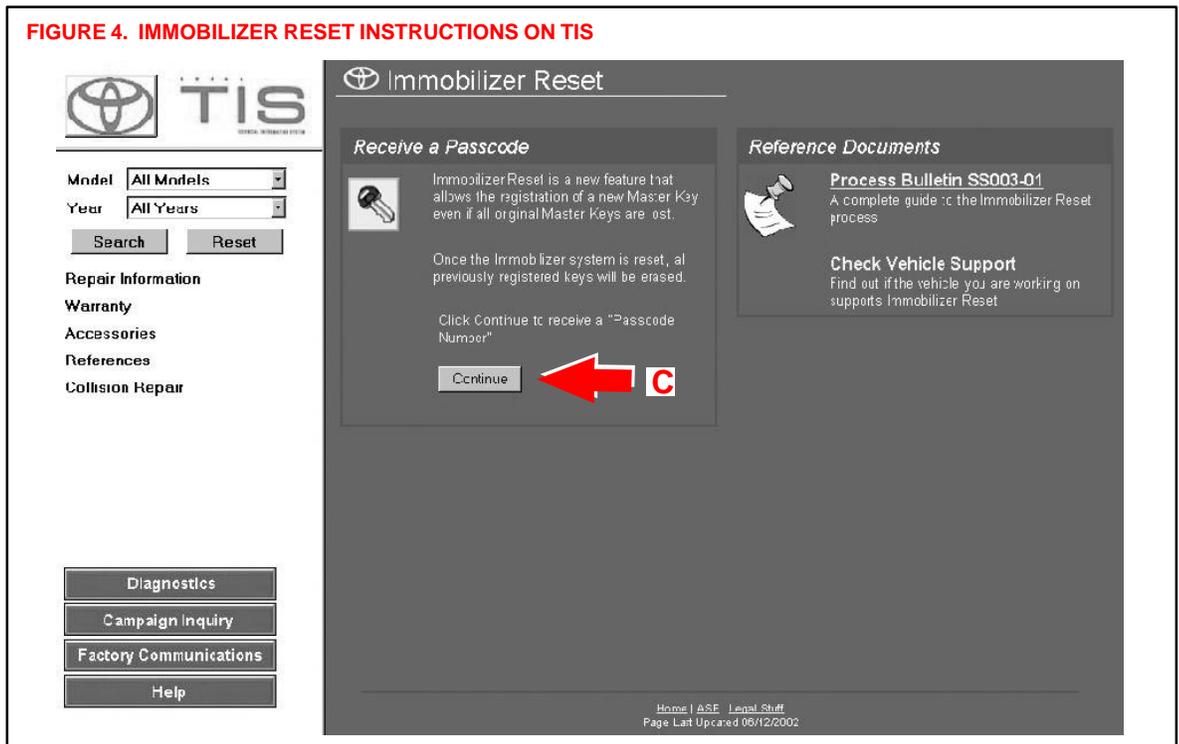

Key Code Reset Procedure
(Continued)

2. Using TIS (Technical Information System), select **Immobilizer Reset**, and complete the request form to retrieve a "Passcode Number."

   A. Click on **Diagnostics**.

   B. Click on **Immobilizer Reset**.

FIGURE 3. SELECTING IMMOBILIZER RESET ON TIS
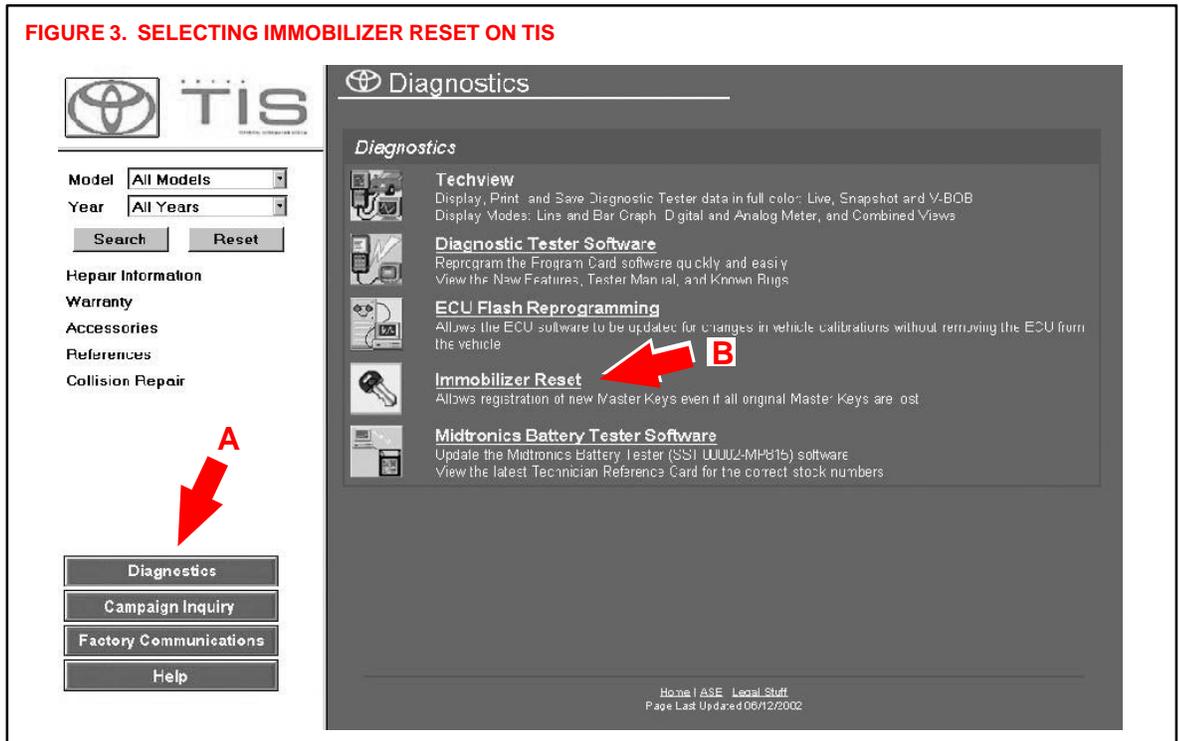
   C. Read the instructions on the screen and click on **Continue**.
      (See Figure 4 below.)

FIGURE 4. IMMOBILIZER RESET INSTRUCTIONS ON TIS

Key Code Reset Procedure (Continued)

D. Complete the request form and enter the "Seed Number" from the Diagnostic Tester. Click on **Request Passcode** (Figure 5).

NOTE: All fields must be completed.

FIGURE 5. REQUEST FORM ON TIS

E. TIS will now return the Passcode that needs to be entered into the Diagnostic Tester.

NOTE: The Passcode given by TIS is only valid for one Immobilizer Reset Event.

FIGURE 6. RECEIVING PASSCODE FOR DIAGNOSTIC TESTER

**Key Code
Reset
Procedure**
(Continued)

3. Using the numbered keys (0–9) on the Diagnostic Tester, enter the "Passcode Number" received from TIS. Press **ENTER** to clear all registered key codes.

> **NOTE:**
> **Key Code Reset takes approximately 16 minutes.**

FIGURE 7. PASSCODE ENTRY SCREEN FLOW

A

KEY CODE RESET

**Please insert PASSCODE
NUMBER from TIS**

PASSCODE NUMBER

```
000414
```

PRESS [ENTER]

➡

B

KEY CODE RESET

NOW RESETTING
**If the key was in the IG
cylinder, do not remove it.**

**Remaining Time
<16> Min.**

➡

C

KEY CODE RESET

RESET COMPLETE

**If the engine starts,
this key code is
registered correctly.**

PRESS [ENTER]

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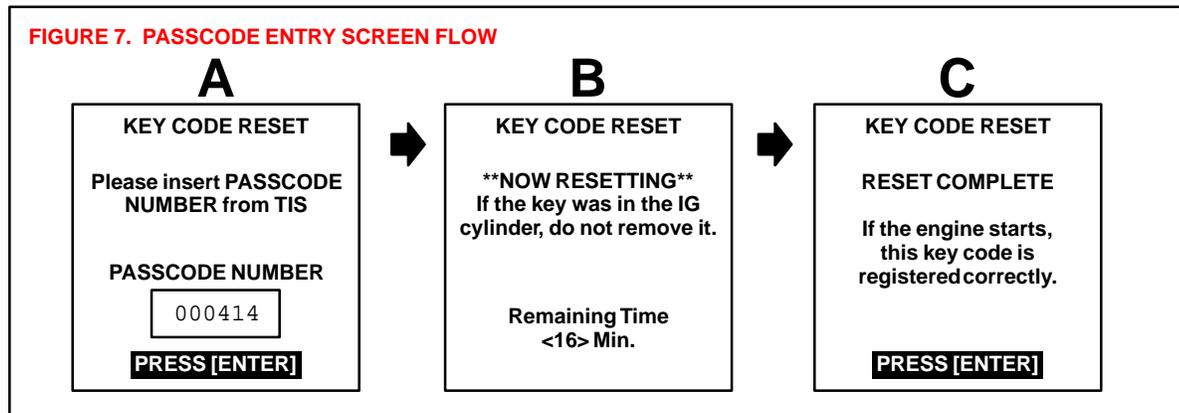
4. Confirm successful Immobilizer reset and new Master Key registration by starting the vehicle.

> **NOTE:**
> **If the vehicle starts, the new Master Key code is registered correctly.**
> **If the vehicle does not start, perform the Immobilizer Reset function again.**

5. All previously registered key codes have been erased except the Master Key used during "Key Code Reset."

   Register any additional customer keys by using "Key Registration."

   Each key will start the engine if registered correctly.

   • Please refer to TSB No. SS001–99, *"Scantool Immobilizer Key Code Utility,"* for additional detail on this procedure.

FIGURE 8. KEY REGISTRATION

A

KEY CODE UTILITY

1: KEY REGISTRATION
2: KEY CODE ERASURE
3: AUTO REG CLOSURE

9: KEY CODE RESET

➡ **(See TSB No. SS001–99)**