

2012 - Mazda6 - Body and Accessories

IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

NOTE:

- For a key that can start the engine, or no advanced key, the M-MDS can be used to force the ignition to switch to IG ON.

Foreword

- When replacing immobilizer system-related parts or programming an additional key, program the immobilizer system-related parts so that the system operates normally. For immobilizer system-related parts programming, select the programming procedures according to the service. (See [Selection of Procedure for Immobilizer System-Related Parts Programming](#).)

CAUTION:

- The engine cannot be started if any step or procedure for each service operation is skipped. Perform all procedures in the order of the steps.
- If any metallic or magnetic object is near the key, communication between the key and the vehicle may be obstructed, resulting in a failure to program the immobilizer system-related parts. Remove any metallic or magnetic objects, such as key holders, from the key when programming immobilizer system-related parts.
- If any of the following devices are inside the vehicle, programming of immobilizer system-related parts may fail. Do not bring any of the following devices or similar products inside the vehicle when programming immobilizer system-related parts.
 - Advanced key
 - M-MDS
 - Personal computer
 - Devices that can send/receive radio waves
- If the engine is started during immobilizer system-related parts programming, the programming mode cancels. Therefore, do not start the engine unless indicated in the procedure. Repeat the procedure from the beginning if the engine is started during the immobilizer system-related parts programming.
- If an advanced key is near the vehicle during immobilizer system-related parts programming, it may be programmed mistakenly. Keep advanced keys 1 m away from the vehicle unless indicated in the procedure.

NOTE:

- The "Valid key" or "Valid advanced key" referred to in this manual indicates the key that can start the engine.
- Two or more key ID numbers must be programmed for the engine to start.
- A maximum of eight key ID numbers can be programmed for one vehicle.
- The number of programmed key ID numbers can be verified using the M-MDS.
- Do not select any screen menu other than the ones indicated in the procedure during M-MDS operation.

Selection of Procedure for Immobilizer System-Related Parts Programming

1. Verify that the ROOM fuse, EGI fuse, STEERING LOCK fuse are equipped.
2. Select the applicable programming procedure from the service content of the immobilizer system-related parts.

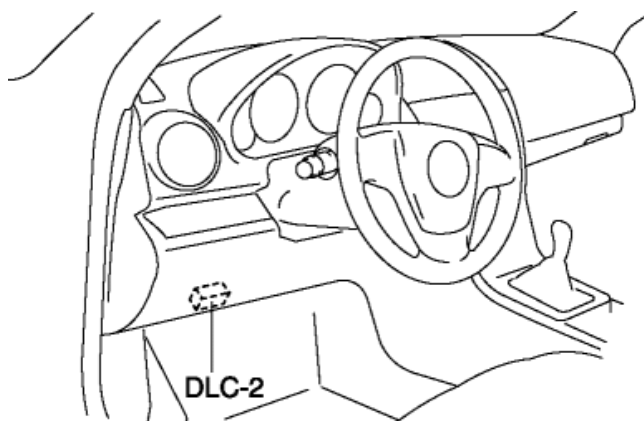
Immobilizer System-Related Parts Service and Programming Procedure Table

No.	Service		Programming procedure
1	Additional key programming	Have one valid key or valid advanced key	(See No.1 Additional Key Programming Procedure (Using the M-MDS) .)
2	Programming due to PCM replacement		(See No.2 Programming Procedure Due to PCM Replacement .)
3	Programming due to steering lock unit replacement		(See No.3 Programming Procedure Due to Steering Lock Unit Replacement .)
4	Programming due to keyless control module replacement		(See No.4 Programming Procedure Due to Keyless Control Module Replacement .)
5	Programming due to simultaneous replacement of immobilizer system-related parts • PCM • Keyless control module • Steering lock unit		(See No.5 Programming Procedure Due to Simultaneous Replacement of Immobilizer System-related Parts (PCM, Keyless Control Module, and Steering Lock Unit) .)
6	Key replacement		(See No.6 Programming/ Clearing Procedure of Auxiliary Key .)
7	Programming due to coil antenna replacement		Programming of immobilizer system-related parts is not necessary
8	Programming after keyless receiver replacement		Programming of immobilizer system-related parts is not necessary

M-MDS Connecting Procedure

NOTE:

- Do not place the M-MDS in the vehicle while programming the immobilizer system.
1. Fully lower the door glass.
 2. Connect the M-MDS (IDS) to the DLC-2.



3. Place the M-MDS (IDS) outside the vehicle.

CAUTION:

- Cover the vehicle body with a clean rag so as not to damage the vehicle body with the cable.

No.1 Additional Key Programming Procedure (Using the M-MDS)

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

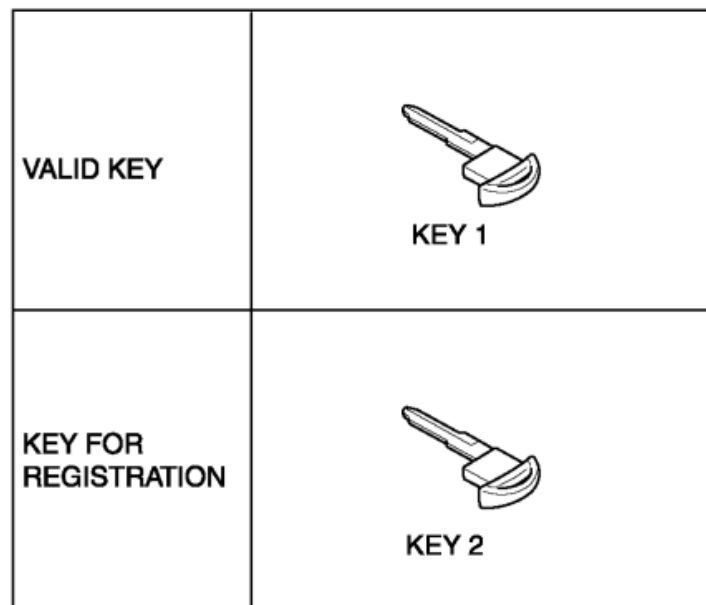
Conditions

- There is only one valid key.

NOTE:

- If a key ID number cannot be programmed, verify the number of programmed keys using the M-MDS.
- If eight keys have already been programmed and it is necessary to program other keys, the previously programmed key ID numbers must first be cleared.

Procedure



Step	Procedure	Action after procedure
1	VERIFY THAT KEY 1 ARE VALID • Start the engine using key 1. CAUTION: • Do not place the advanced key in the vehicle when starting the engine with key 1. • Verify that the security light illuminates for approx. 3 s, and then turns off. • Switch the ignition off.	Go to the next step.
2	PERFORM ADDITIONAL KEY PROGRAMMING	Change the key

	- Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure) - Insert key 1 into the key slot and depress the clutch. NOTE: - The keyless indicator light (green) illuminates for approx. 5 s, then turns off. - After verifying that the keyless indicator light (green) has illuminated, release the clutch within approx. 5 s and switch the ignition from off→ACC→ON. - Pull out key 1 from the key slot and insert key 2 into the slot. NOTE: - When key 1 is pulled out of the key slot, the advanced key system warning alarm sounds and the keyless indicator light (red) begins flashing, however continue with the procedure. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC): - Select the "Body" - Select the "Security" - Select the "PATS Functions" - Then, select an item from the screen menu. item - Program Additional Ignition Key - Perform the security access according to the directions on the M-MDS screen. NOTE: - After executing the above menu, "This operation is successful" is displayed. This indicates that the programming of the key that currently has the ignition switched on is completed. - If an additional key is to be programmed, continue to perform the procedure according to the directions on the M-MDS screen. To finish the key programming, go to the next step.	Yes and repeat Step 2.
		No Go to the next step.
3	CLOSE THE M-MDS - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off	Go to the next step.
4	VERIFY THAT ANY KEY IS PROGRAMMED Verify that the engine can be started with the programmed key. NOTE: When verifying that the engine starts, wait at least approx. 5 s or more before starting the engine using the next key.	Procedure is completed

No.2 Programming Procedure Due to PCM Replacement

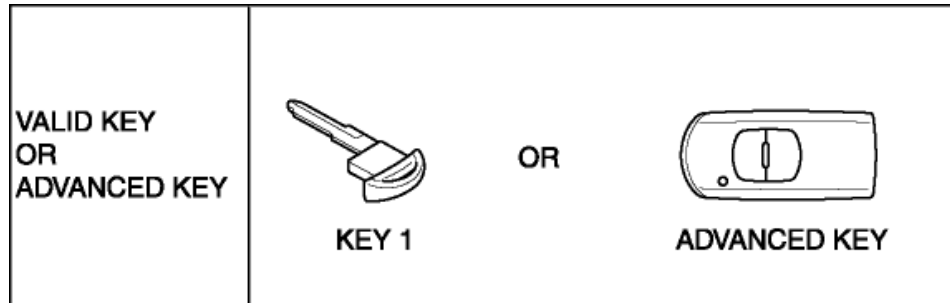
CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

Conditions

- Prepare a valid key or an advanced key that can start the engine.

Procedure



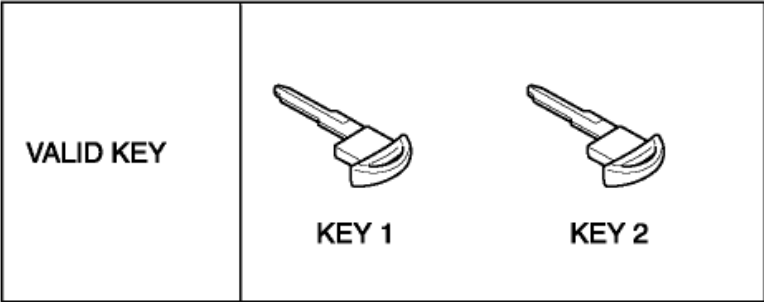
Step	Procedure	Action after procedure
1	REPLACE PCM Refer to PCM REMOVAL/INSTALLATION to perform PCM replacement and configuration. (See PCM REMOVAL/ INSTALLATION [MZR 2.5] .) (See PCM REMOVAL/ INSTALLATION [MZI 3.7 V6] .) (See PCM CONFIGURATION [MZR 2.5] .) (See PCM CONFIGURATION [MZI 3.7 V6] .)	Go to the next step.
2	PERFORM PARAMETER RESET • Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) • Insert a valid key into the key slot and depress the clutch pedal. Or, bring the valid advanced key into the vehicle and depress the clutch pedal. • After verifying that the keyless indicator light (green) has illuminated, release the clutch within approx. 5 s and switch the ignition from off→ACC→ON. NOTE: • Although the security light remains illuminated and DTC 23 is displayed after approx. 1 min, continue to perform the procedure as indicated. • After the vehicle is identified, select the following items from the initial screen of the M-MDS. ▪ When using the IDS (laptop PC): ▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu.	Go to the next step.

	item - Parameter Reset - Perform the security access according to the directions on the M-MDS screen. - Select the replaced parts "PCM" according to the directions on the M-MDS screen. CAUTION: - At this time, do not select the other parts from the M-MDS menu. - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off. - Switch the ignition on. - Verify that the security light illuminates for approx. 3 s, and then turns off. - Switch the ignition off.	
3	VERIFY THAT THE KEY IS PROGRAMMED TO THE PCM - Verify that the engine can be started with all the keys. - Can the engine be started?	Yes Procedure is completed
		No Perform the corresponding DTC inspection to repair the malfunctioning part.

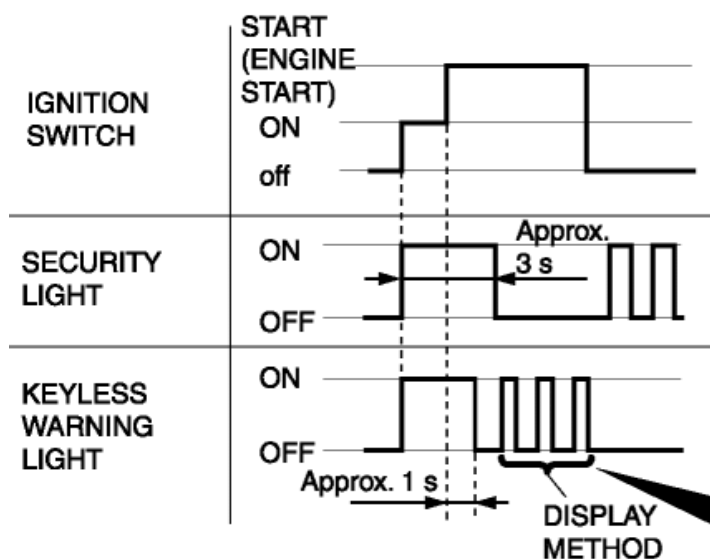
No.3 Programming Procedure Due to Steering Lock Unit Replacement

- CAUTION:
- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.
- NOTE:
- Since two or more keys need to be programmed to start the engine, program two or more keys after the replacement.
- Conditions
- Have two or more keys to be programmed after the replacement.

Procedure



Step	Procedure	Action after procedure
1	Replace the steering lock unit Replace the steering lock unit. (See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)(See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)	Go to the next step.
2	Connect the M-MDS (IDS) • Connect the M-MDS (IDS) to the DLC-2. • Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle), and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: • The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. • Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated.	Go to the next step.
3	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering lock unit programming" from the M-MDS screen. • Bring the programmed advanced key into the vehicle. • Complete the security access procedure and the steering lock unit programming according to the directions on the M-MDS screen. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
4	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished. • Start the engine using key 1. • Verify that the security light and keyless warning light operate as shown in the following figure. • Switch the ignition off and remove key 1.	Go to the next step.



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

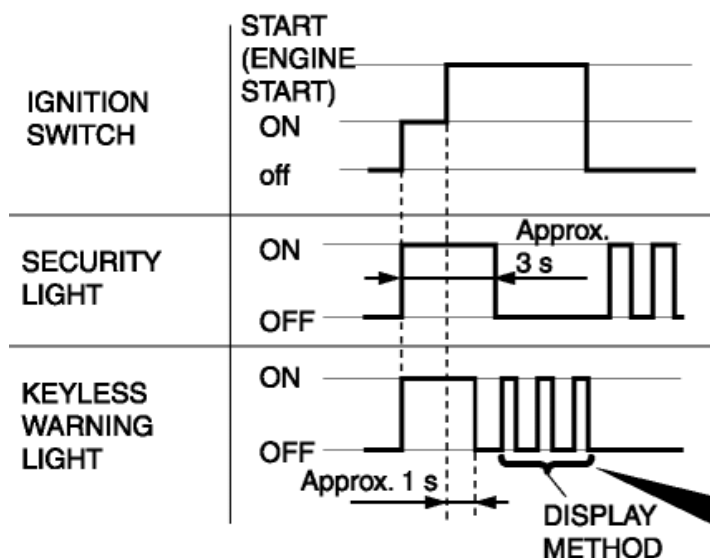
5

VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 5 using each programmed key.

No Go to the next step.



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

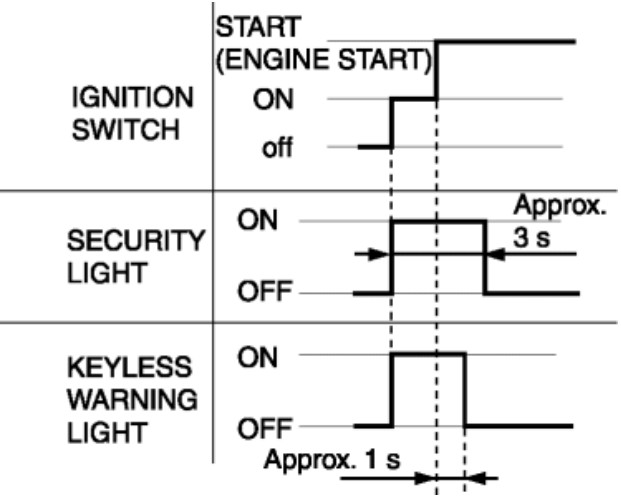
a : Approx. 0.3 s
b : Approx. 0.9 s

6

VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.



Procedure is completed

No.4 Programming Procedure Due to Keyless Control Module Replacement

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

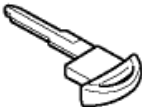
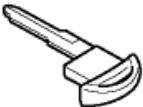
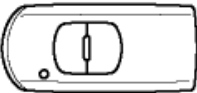
NOTE:

- Before beginning the procedure, verify that the customer has turned in all of the advanced keys and keys for the vehicle.
- The engine cannot be started unless an advanced key and two or more keys are programmed after the replacement.

Conditions

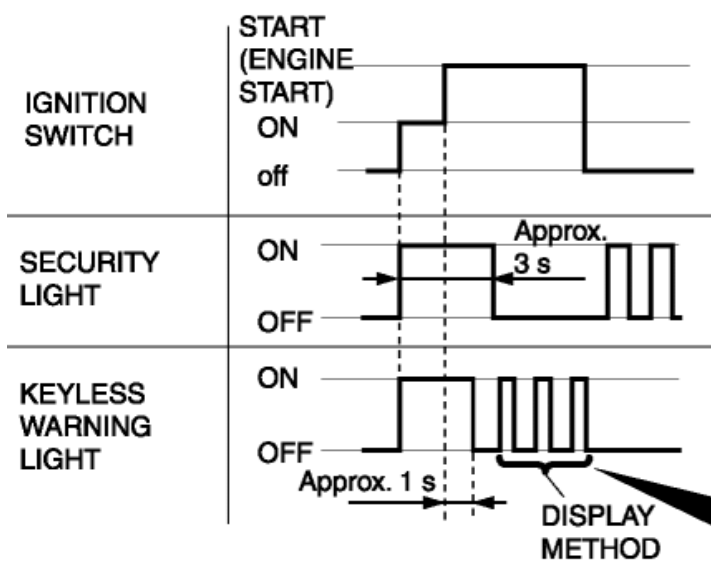
- Have two or more keys to be programmed after the replacement.
- Have one or more advanced keys to be programmed after the replacement.

Procedure

VALID KEY	 
KEY FOR REGISTRATION	

Step	Procedure	Action after procedure
1	REPLACE KEYLESS CONTROL MODULE Refer to keyless control module removal/installation for the keyless control module replacement and configuration. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) (See KEYLESS CONTROL MODULE CONFIGURATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].)	Go to the next step.
2	PERFORM PARAMETER RESET - Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) - Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle), and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: - The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. - The security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated. NOTE: - Although the security light starts flashing and DTC 15 is displayed after approx. 1 min, this does not indicate an improper procedure. Continue to perform the procedure as indicated. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC):	Go to the next step.

	▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu. item • Parameter Reset • Perform the security access according to the directions on the M-MDS screen. • Select the replaced parts "RKE" according to the directions on the M-MDS screen. CAUTION: • At this time, do not select the other parts from the M-MDS menu.	
3	CLEAR IGNITION KEY ID NUMBERS • Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. • Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING • Program two keys according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
5	PERFORM ADVANCED KEY PROGRAMMING • Select "Program Additional Ignition Key" from the M-MDS screen menu. • Program the advanced key according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
6	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering Lock Unit Programming" from the M-MDS screen menu. • Complete the steering lock unit programming according to the directions on the M-MDS. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
7	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished. • Start the engine using key 1. • Verify that the security light and keyless warning light operate as shown in the following figure. • Switch the ignition off and remove key 1.	



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

Go to the next step.

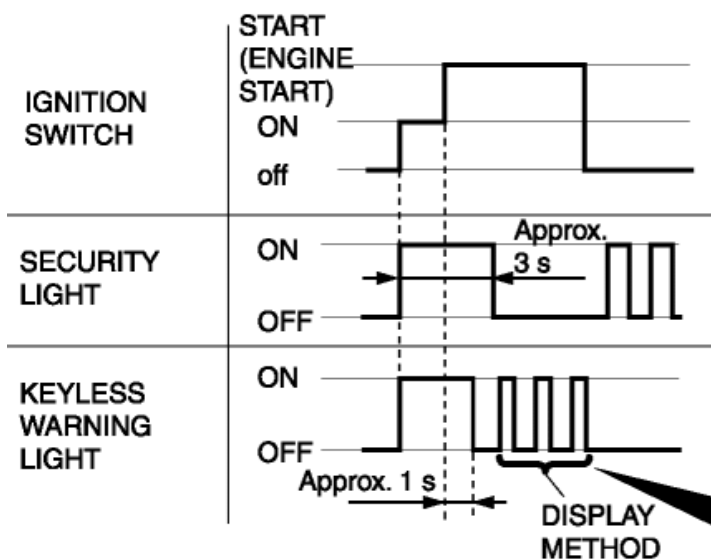
8

VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 8 using each programmed key.

No Go to the next step.



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

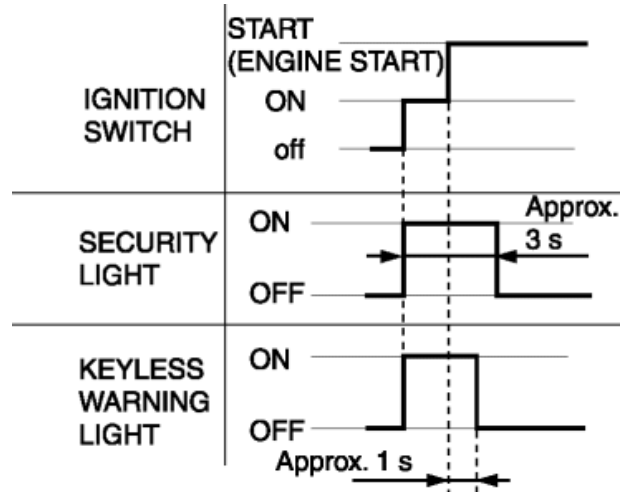
a : Approx. 0.3 s
b : Approx. 0.9 s

9

VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.



Procedure is completed

No.5 Programming Procedure Due to Simultaneous Replacement of Immobilizer System-related Parts (PCM, Keyless Control Module, and Steering Lock Unit)

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

NOTE:

- If the keyless control module is replaced, complete the configuration before performing the following procedure.
- When replacing the keyless control module or the steering lock, remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle) and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen.

CAUTION:

- The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated.
- Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated.

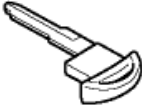
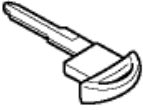
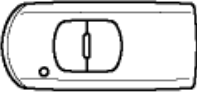
CAUTION:

M-MDS menu

- (1): Parameter Reset
- (2): Ignition Key Code Erase and Program
- (3): Program Additional Advanced Key
- (4): Steering Lock Unit Programming

Replacement part	M-MDS execution menu/sequence	Conditions
Keyless control module and PCM	1→2→3→4	• Have two or more keys to be programmed after the replacement. • Have one or more advanced keys to be programmed after the replacement.
Keyless control module and steering lock unit		
Keyless control module, PCM, and steering lock unit		
PCM and steering lock unit	1→4	Have two or more keys to be programmed after the replacement.

Procedure

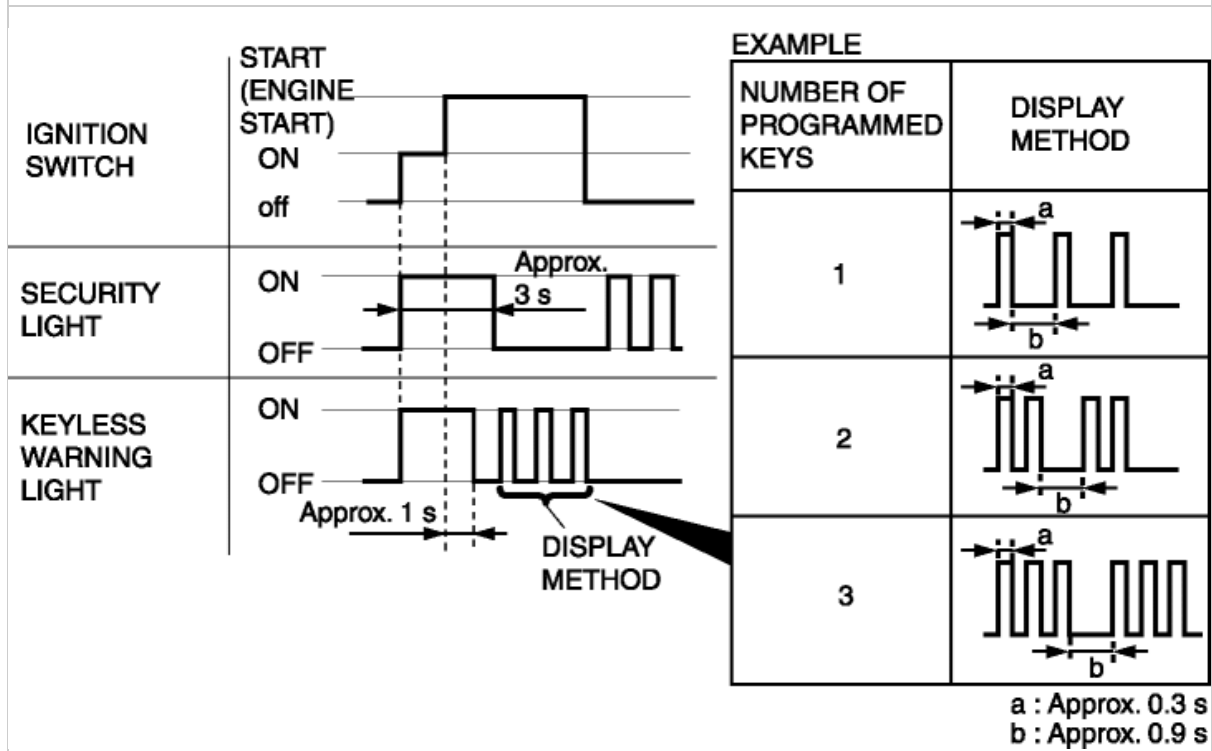
VALID KEY	 KEY 1  KEY 2
KEY FOR REGISTRATION	

Step	Procedure	Action after procedure
1	REPLACE UNITS OR PARTS Replace the unit or parts.	Go to the next step.
2	PERFORM PARAMETER RESET • Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) • Switch the ignition off using key 1. NOTE: • Although the security light flashes or illuminates and DTC 15 or 23 is displayed after approx. 1 min, continue to perform the procedure. • After the vehicle is identified, select the following items from the initial screen of the M-MDS.	

	▪ When using the IDS (laptop PC): ▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu. items • Parameter Reset • Perform the security access according to the directions on the M-MDS screen. • Select the replaced parts according to the directions on the M-MDS screen. ▪ If the PCM is replaced: Select "PCM". ▪ If the keyless control module is replaced: Select" RKE". CAUTION: • At this time, do not select the other parts from the M-MDS menu.	Go to the next step.
3	CLEAR IGNITION KEY ID NUMBERS • Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. • Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING • Program two keys according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
5	PERFORM ADVANCED KEY PROGRAMMING • Select "Program Additional Advanced Key" from the M-MDS screen menu. • Program the advanced key according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
6	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering Lock Unit Programming" from the M-MDS screen menu. • Complete the steering lock unit programming according to the directions on the M-MDS. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
7	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished.	

Start the engine using key 1.

- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 1.



Go to the next step.

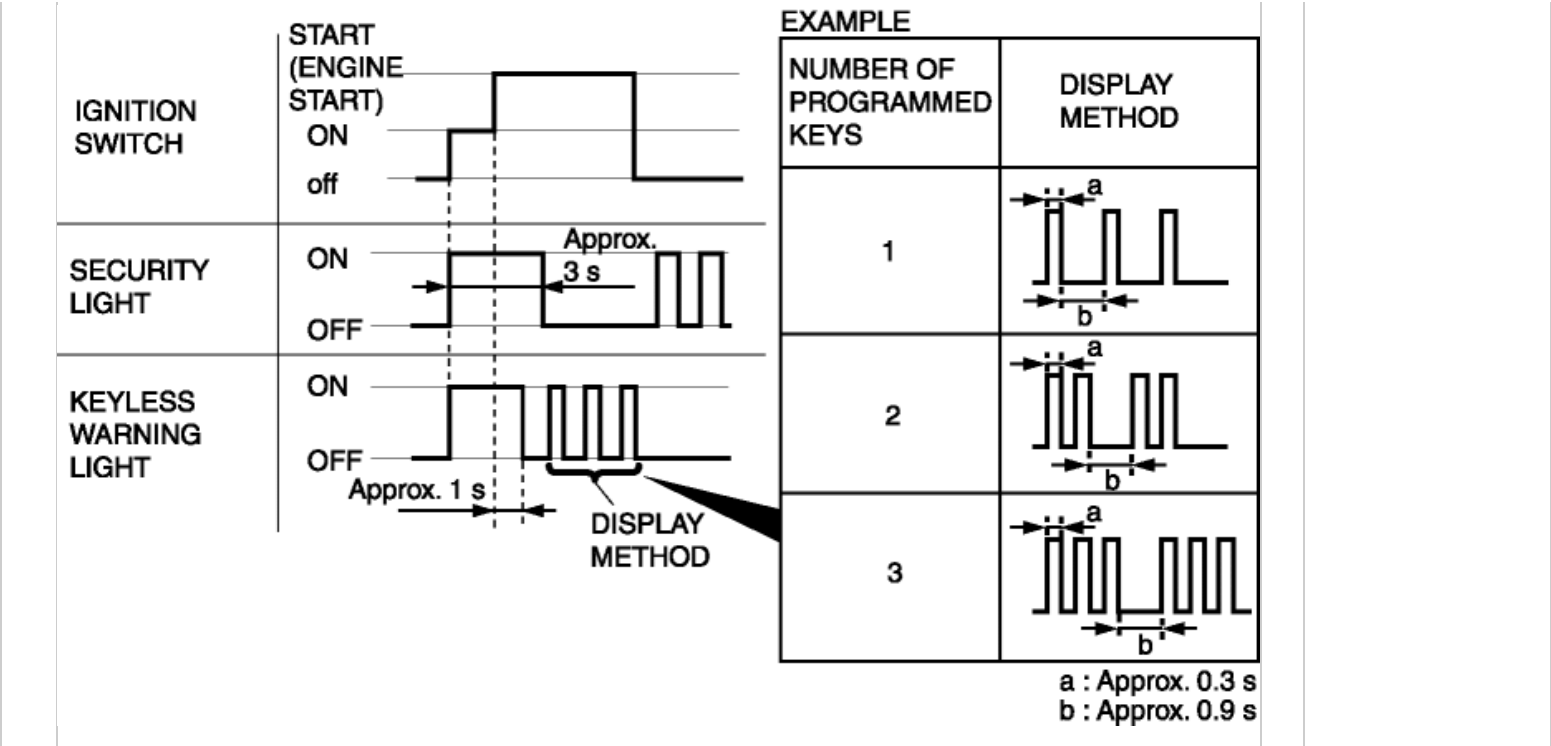
8

VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Repeat Step 8 using
Yes each programmed
key.

No Go to the next step.



9

VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.
- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.

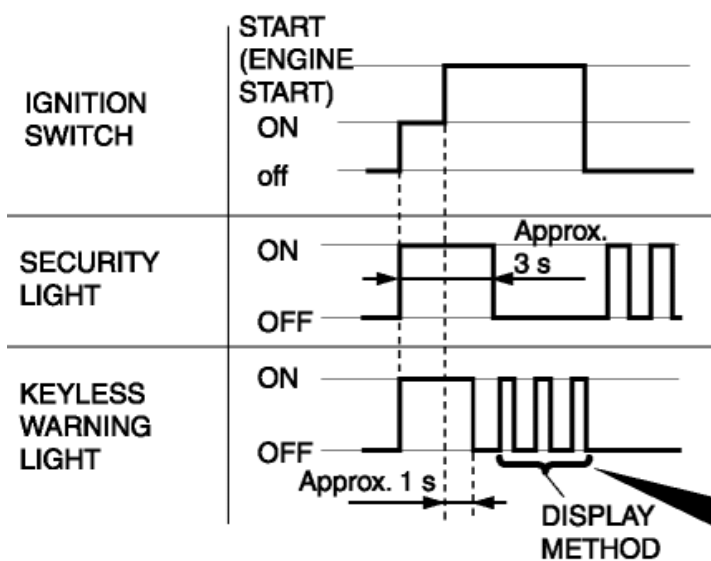
Procedure is completed

No.6 Programming/ Clearing Procedure of Auxiliary Key

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

Step	Procedure	Action after procedure
1	Replace the key.	Go to the next step.
2	PROGRAM/ CLEAR THE AUXILIARY KEY - Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle) and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: - The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. - Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC): - Select the "Body" - Select the "Security" - Select the "PATS Functions" - Perform the security access according to the directions on the M-MDS screen.	Go to the next step.
3	CLEAR IGNITION KEY ID NUMBERS - Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. - Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING - Program two keys according to the directions on the M-MDS. - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off. - Disconnect the M-MDS from the DLC-2.	Go to the next step.
5	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: - By starting the engine, the immobilizer system is established and key programming is finished. - Start the engine using key 1. - Verify that the security light and keyless warning light operate as shown in the following figure. - Switch the ignition off and remove key 1.	



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

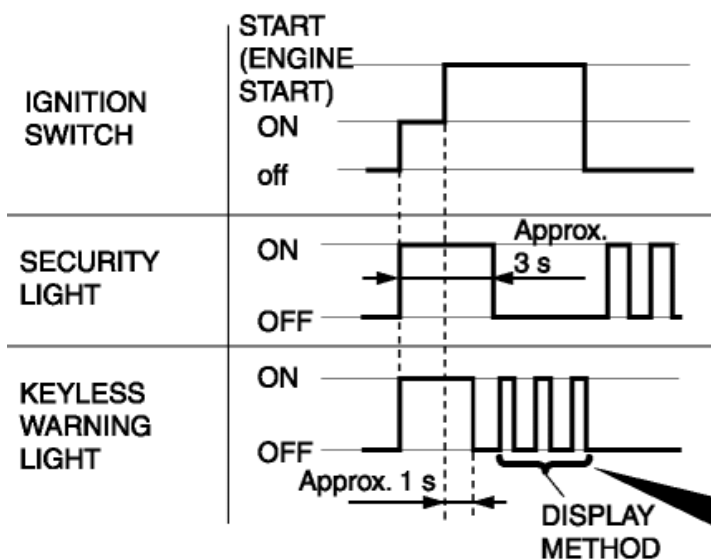
Go to the next step.

6 VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 6 using each programmed key.

No Go to the next step.



EXAMPLE

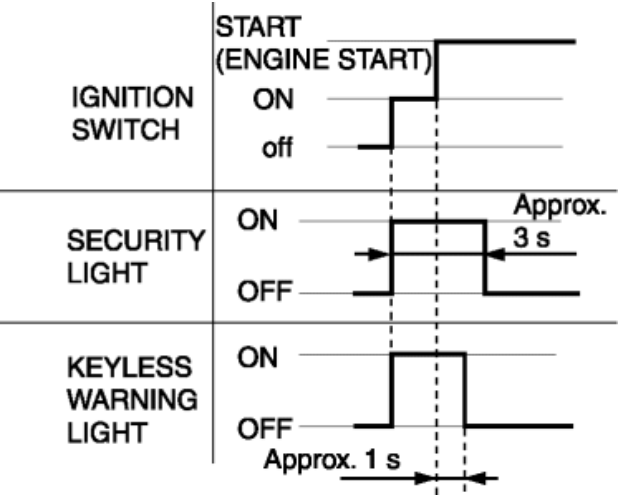
NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

7 VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition to off.



Procedure is completed

2012 - Mazda6 - Body and Accessories

IMMOBILIZER SYSTEM-RELATED PARTS PROGRAMMING [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]

NOTE:

- For a key that can start the engine, or no advanced key, the M-MDS can be used to force the ignition to switch to IG ON.

Foreword

- When replacing immobilizer system-related parts or programming an additional key, program the immobilizer system-related parts so that the system operates normally. For immobilizer system-related parts programming, select the programming procedures according to the service. (See [Selection of Procedure for Immobilizer System-Related Parts Programming](#).)

CAUTION:

- The engine cannot be started if any step or procedure for each service operation is skipped. Perform all procedures in the order of the steps.
- If any metallic or magnetic object is near the key, communication between the key and the vehicle may be obstructed, resulting in a failure to program the immobilizer system-related parts. Remove any metallic or magnetic objects, such as key holders, from the key when programming immobilizer system-related parts.
- If any of the following devices are inside the vehicle, programming of immobilizer system-related parts may fail. Do not bring any of the following devices or similar products inside the vehicle when programming immobilizer system-related parts.
 - Advanced key
 - M-MDS
 - Personal computer
 - Devices that can send/receive radio waves
- If the engine is started during immobilizer system-related parts programming, the programming mode cancels. Therefore, do not start the engine unless indicated in the procedure. Repeat the procedure from the beginning if the engine is started during the immobilizer system-related parts programming.
- If an advanced key is near the vehicle during immobilizer system-related parts programming, it may be programmed mistakenly. Keep advanced keys 1 m away from the vehicle unless indicated in the procedure.

NOTE:

- The "Valid key" or "Valid advanced key" referred to in this manual indicates the key that can start the engine.
- Two or more key ID numbers must be programmed for the engine to start.
- A maximum of eight key ID numbers can be programmed for one vehicle.
- The number of programmed key ID numbers can be verified using the M-MDS.
- Do not select any screen menu other than the ones indicated in the procedure during M-MDS operation.

Selection of Procedure for Immobilizer System-Related Parts Programming

1. Verify that the ROOM fuse, EGI fuse, STEERING LOCK fuse are equipped.
2. Select the applicable programming procedure from the service content of the immobilizer system-related parts.

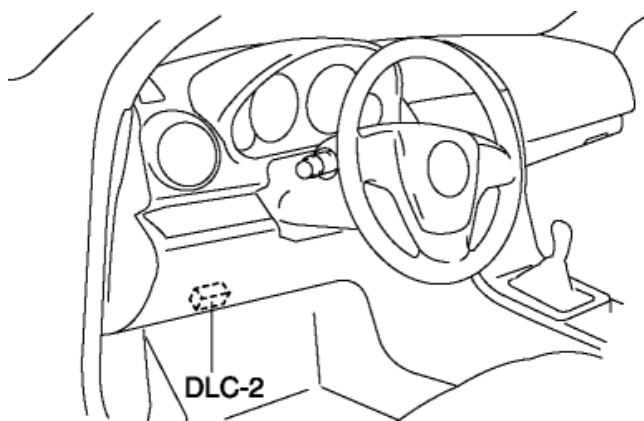
Immobilizer System-Related Parts Service and Programming Procedure Table

No.	Service		Programming procedure
1	Additional key programming	Have one valid key or valid advanced key	(See No.1 Additional Key Programming Procedure (Using the M-MDS) .)
2	Programming due to PCM replacement		(See No.2 Programming Procedure Due to PCM Replacement .)
3	Programming due to steering lock unit replacement		(See No.3 Programming Procedure Due to Steering Lock Unit Replacement .)
4	Programming due to keyless control module replacement		(See No.4 Programming Procedure Due to Keyless Control Module Replacement .)
5	Programming due to simultaneous replacement of immobilizer system-related parts • PCM • Keyless control module • Steering lock unit		(See No.5 Programming Procedure Due to Simultaneous Replacement of Immobilizer System-related Parts (PCM, Keyless Control Module, and Steering Lock Unit) .)
6	Key replacement		(See No.6 Programming/ Clearing Procedure of Auxiliary Key .)
7	Programming due to coil antenna replacement		Programming of immobilizer system-related parts is not necessary
8	Programming after keyless receiver replacement		Programming of immobilizer system-related parts is not necessary

M-MDS Connecting Procedure

NOTE:

- Do not place the M-MDS in the vehicle while programming the immobilizer system.
1. Fully lower the door glass.
 2. Connect the M-MDS (IDS) to the DLC-2.



3. Place the M-MDS (IDS) outside the vehicle.

CAUTION:

- Cover the vehicle body with a clean rag so as not to damage the vehicle body with the cable.

No.1 Additional Key Programming Procedure (Using the M-MDS)

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

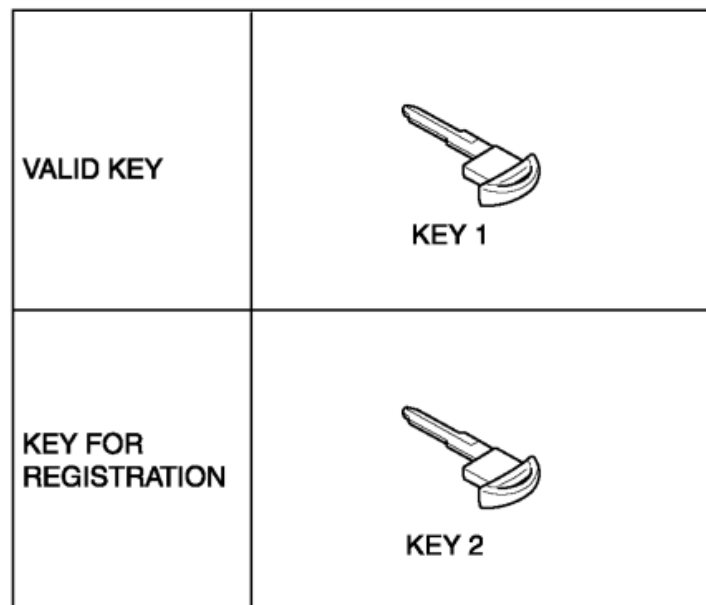
Conditions

- There is only one valid key.

NOTE:

- If a key ID number cannot be programmed, verify the number of programmed keys using the M-MDS.
- If eight keys have already been programmed and it is necessary to program other keys, the previously programmed key ID numbers must first be cleared.

Procedure



Step	Procedure	Action after procedure
1	VERIFY THAT KEY 1 ARE VALID • Start the engine using key 1. CAUTION: • Do not place the advanced key in the vehicle when starting the engine with key 1. • Verify that the security light illuminates for approx. 3 s, and then turns off. • Switch the ignition off.	Go to the next step.
2	PERFORM ADDITIONAL KEY PROGRAMMING	Change the key

	- Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure) - Insert key 1 into the key slot and depress the clutch. NOTE: - The keyless indicator light (green) illuminates for approx. 5 s, then turns off. - After verifying that the keyless indicator light (green) has illuminated, release the clutch within approx. 5 s and switch the ignition from off→ACC→ON. - Pull out key 1 from the key slot and insert key 2 into the slot. NOTE: - When key 1 is pulled out of the key slot, the advanced key system warning alarm sounds and the keyless indicator light (red) begins flashing, however continue with the procedure. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC): - Select the "Body" - Select the "Security" - Select the "PATS Functions" - Then, select an item from the screen menu. item - Program Additional Ignition Key - Perform the security access according to the directions on the M-MDS screen. NOTE: - After executing the above menu, "This operation is successful" is displayed. This indicates that the programming of the key that currently has the ignition switched on is completed. - If an additional key is to be programmed, continue to perform the procedure according to the directions on the M-MDS screen. To finish the key programming, go to the next step.	Yes and repeat Step 2.
		No Go to the next step.
3	CLOSE THE M-MDS - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off	Go to the next step.
4	VERIFY THAT ANY KEY IS PROGRAMMED Verify that the engine can be started with the programmed key. NOTE: When verifying that the engine starts, wait at least approx. 5 s or more before starting the engine using the next key.	Procedure is completed

No.2 Programming Procedure Due to PCM Replacement

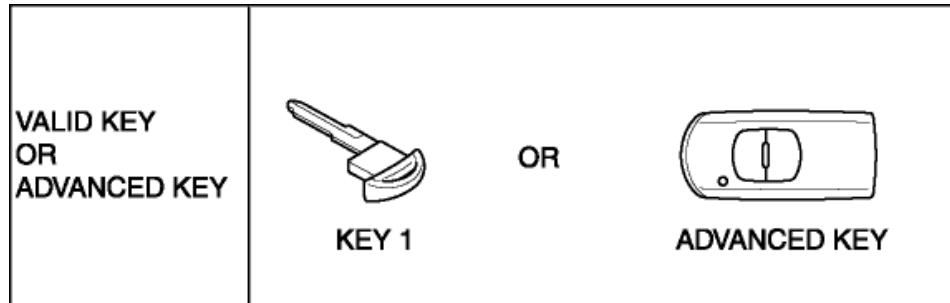
CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

Conditions

- Prepare a valid key or an advanced key that can start the engine.

Procedure



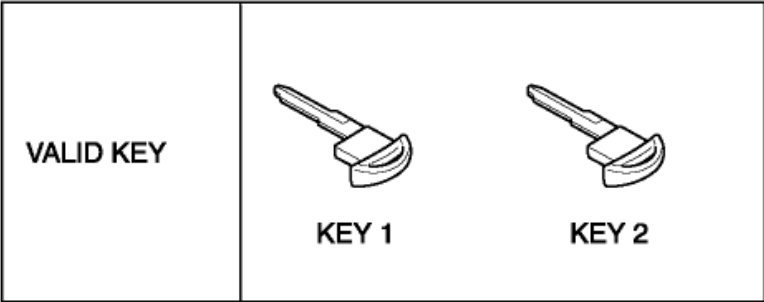
Step	Procedure	Action after procedure
1	REPLACE PCM Refer to PCM REMOVAL/INSTALLATION to perform PCM replacement and configuration. (See PCM REMOVAL/ INSTALLATION [MZR 2.5] .) (See PCM REMOVAL/ INSTALLATION [MZI 3.7 V6] .) (See PCM CONFIGURATION [MZR 2.5] .) (See PCM CONFIGURATION [MZI 3.7 V6] .)	Go to the next step.
2	PERFORM PARAMETER RESET • Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) • Insert a valid key into the key slot and depress the clutch pedal. Or, bring the valid advanced key into the vehicle and depress the clutch pedal. • After verifying that the keyless indicator light (green) has illuminated, release the clutch within approx. 5 s and switch the ignition from off→ACC→ON. NOTE: • Although the security light remains illuminated and DTC 23 is displayed after approx. 1 min, continue to perform the procedure as indicated. • After the vehicle is identified, select the following items from the initial screen of the M-MDS. ▪ When using the IDS (laptop PC): ▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu.	Go to the next step.

	item - Parameter Reset - Perform the security access according to the directions on the M-MDS screen. - Select the replaced parts "PCM" according to the directions on the M-MDS screen. CAUTION: - At this time, do not select the other parts from the M-MDS menu. - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off. - Switch the ignition on. - Verify that the security light illuminates for approx. 3 s, and then turns off. - Switch the ignition off.	
3	VERIFY THAT THE KEY IS PROGRAMMED TO THE PCM - Verify that the engine can be started with all the keys. - Can the engine be started?	Yes Procedure is completed
		No Perform the corresponding DTC inspection to repair the malfunctioning part.

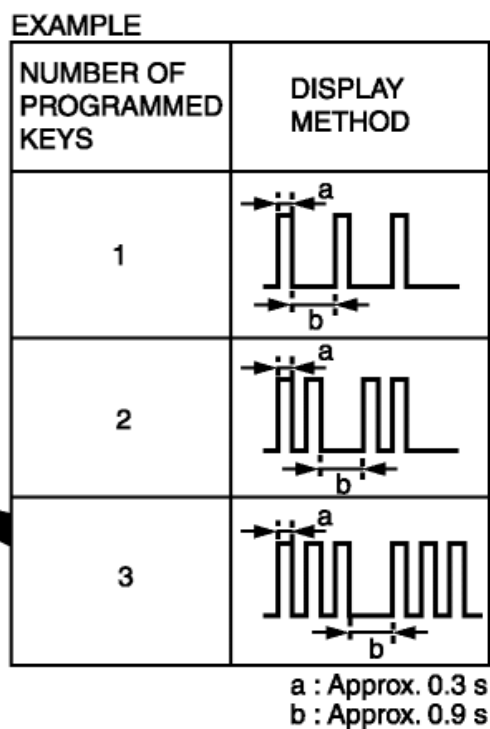
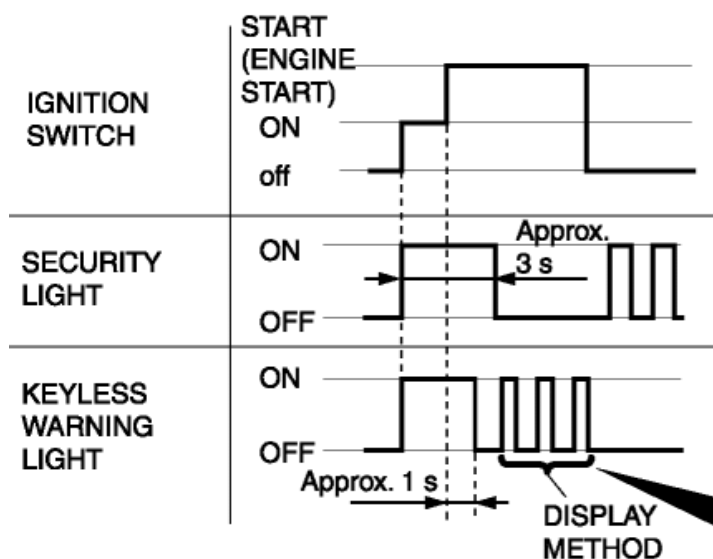
No.3 Programming Procedure Due to Steering Lock Unit Replacement

- CAUTION:
- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.
- NOTE:
- Since two or more keys need to be programmed to start the engine, program two or more keys after the replacement.
- Conditions
- Have two or more keys to be programmed after the replacement.

Procedure



Step	Procedure	Action after procedure
1	Replace the steering lock unit Replace the steering lock unit. (See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITHOUT ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)(See STEERING WHEEL AND COLUMN REMOVAL/ INSTALLATION [WITH ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .)	Go to the next step.
2	Connect the M-MDS (IDS) • Connect the M-MDS (IDS) to the DLC-2. • Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle), and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: • The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. • Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated.	Go to the next step.
3	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering lock unit programming" from the M-MDS screen. • Bring the programmed advanced key into the vehicle. • Complete the security access procedure and the steering lock unit programming according to the directions on the M-MDS screen. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM]) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
4	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished. • Start the engine using key 1. • Verify that the security light and keyless warning light operate as shown in the following figure. • Switch the ignition off and remove key 1.	Go to the next step.

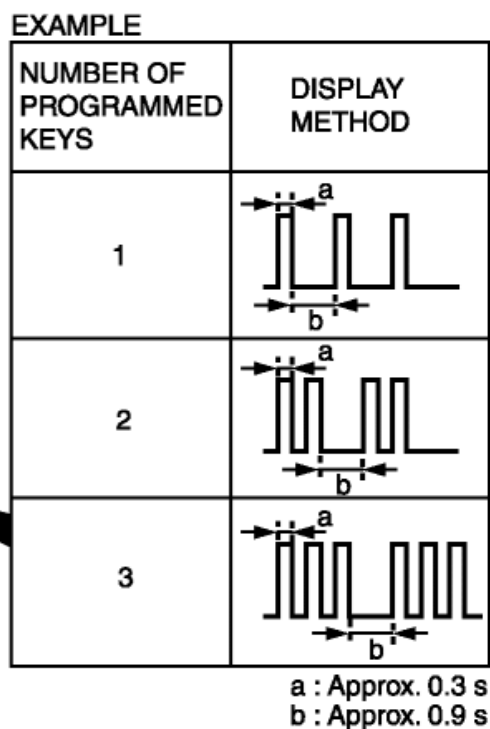
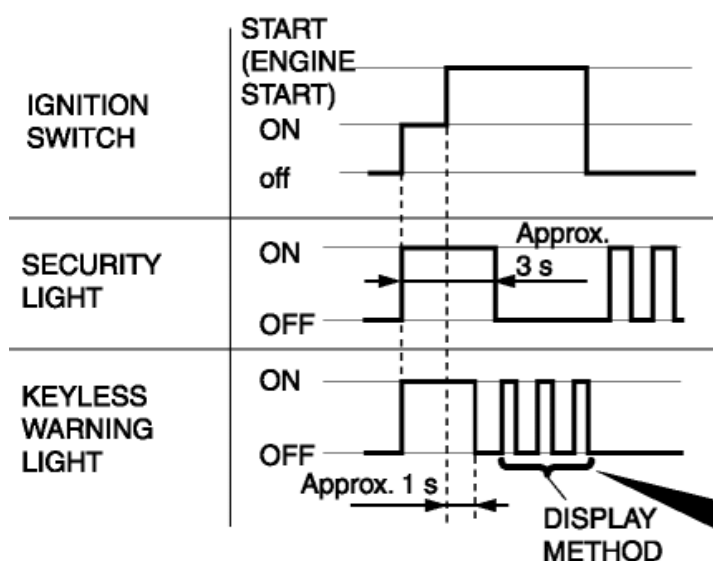


5 VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 5 using each programmed key.

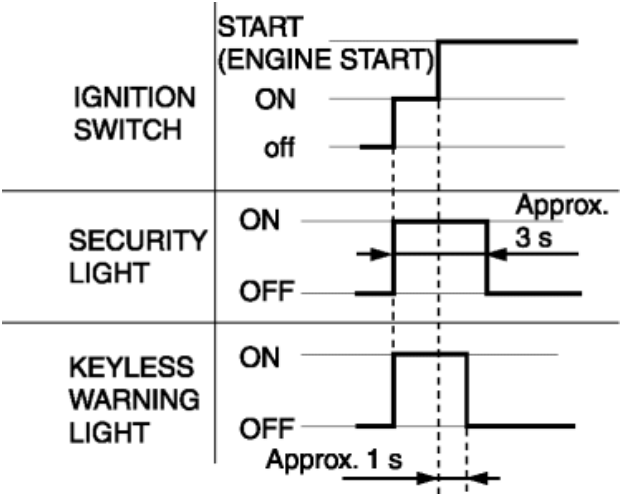
No Go to the next step.



6 VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.



Procedure is completed

No.4 Programming Procedure Due to Keyless Control Module Replacement

CAUTION:

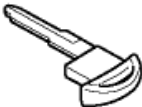
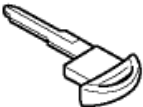
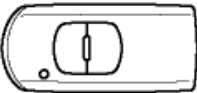
- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

NOTE:

- Before beginning the procedure, verify that the customer has turned in all of the advanced keys and keys for the vehicle.
- The engine cannot be started unless an advanced key and two or more keys are programmed after the replacement.

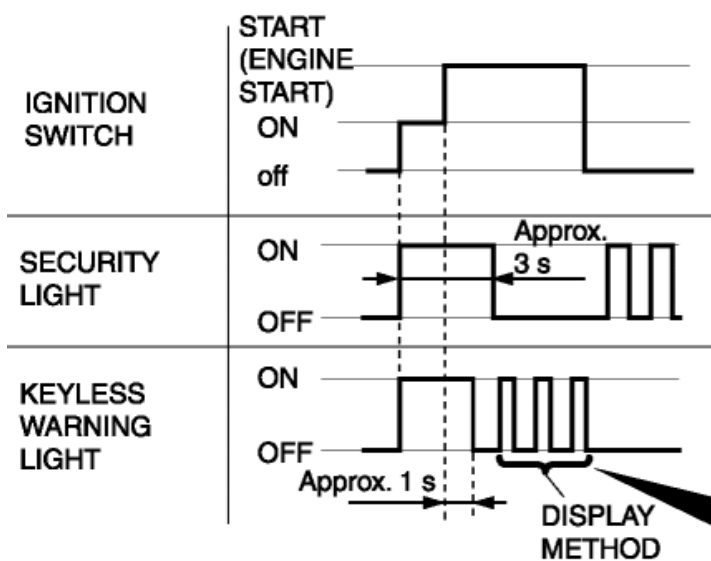
Conditions

- Have two or more keys to be programmed after the replacement.
- Have one or more advanced keys to be programmed after the replacement.

VALID KEY	 
KEY FOR REGISTRATION	

Step	Procedure	Action after procedure
1	REPLACE KEYLESS CONTROL MODULE Refer to keyless control module removal/installation for the keyless control module replacement and configuration. (See KEYLESS CONTROL MODULE REMOVAL/ INSTALLATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) (See KEYLESS CONTROL MODULE CONFIGURATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].)	Go to the next step.
2	PERFORM PARAMETER RESET - Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) - Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle), and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: - The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. - The security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated. NOTE: - Although the security light starts flashing and DTC 15 is displayed after approx. 1 min, this does not indicate an improper procedure. Continue to perform the procedure as indicated. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC):	Go to the next step.

	▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu. item • Parameter Reset • Perform the security access according to the directions on the M-MDS screen. • Select the replaced parts "RKE" according to the directions on the M-MDS screen. CAUTION: • At this time, do not select the other parts from the M-MDS menu.	
3	CLEAR IGNITION KEY ID NUMBERS • Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. • Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING • Program two keys according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
5	PERFORM ADVANCED KEY PROGRAMMING • Select "Program Additional Ignition Key" from the M-MDS screen menu. • Program the advanced key according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
6	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering Lock Unit Programming" from the M-MDS screen menu. • Complete the steering lock unit programming according to the directions on the M-MDS. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM].) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
7	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished. • Start the engine using key 1. • Verify that the security light and keyless warning light operate as shown in the following figure. • Switch the ignition off and remove key 1.	



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

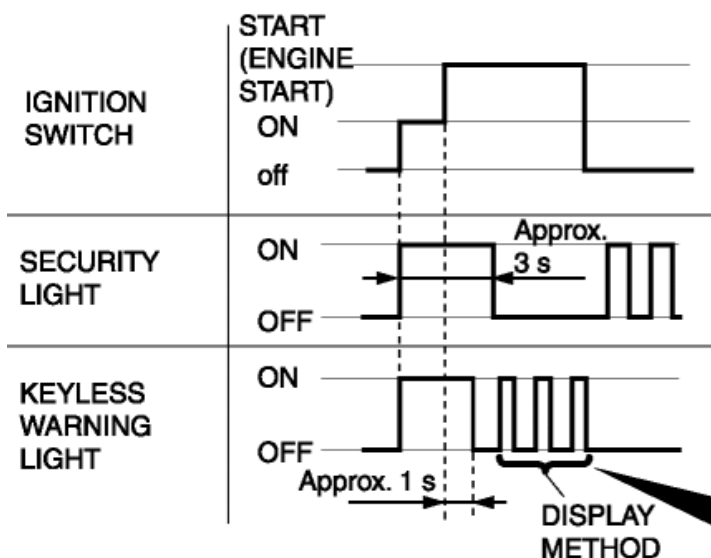
Go to the next step.

8 VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 8 using each programmed key.

No Go to the next step.



EXAMPLE

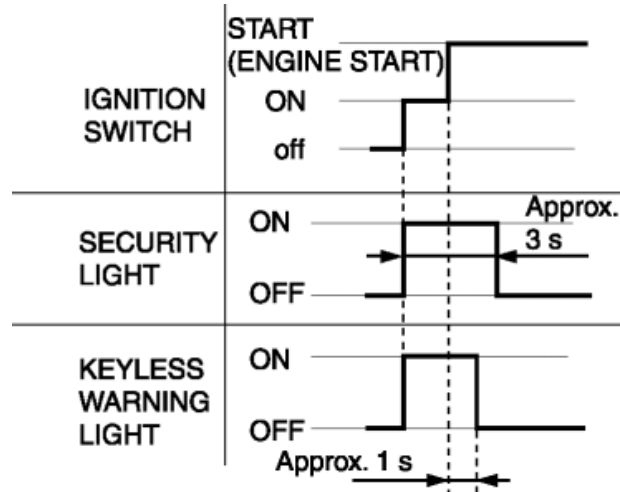
NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

9 VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.



Procedure is completed

No.5 Programming Procedure Due to Simultaneous Replacement of Immobilizer System-related Parts (PCM, Keyless Control Module, and Steering Lock Unit)

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

NOTE:

- If the keyless control module is replaced, complete the configuration before performing the following procedure.
- When replacing the keyless control module or the steering lock, remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle) and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen.

CAUTION:

- The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated.
- Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated.

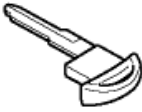
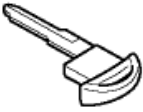
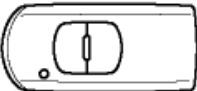
CAUTION:

M-MDS menu

- (1): Parameter Reset
- (2): Ignition Key Code Erase and Program
- (3): Program Additional Advanced Key
- (4): Steering Lock Unit Programming

Replacement part	M-MDS execution menu/sequence	Conditions
Keyless control module and PCM	1→2→3→4	• Have two or more keys to be programmed after the replacement. • Have one or more advanced keys to be programmed after the replacement.
Keyless control module and steering lock unit		
Keyless control module, PCM, and steering lock unit		
PCM and steering lock unit	1→4	Have two or more keys to be programmed after the replacement.

Procedure

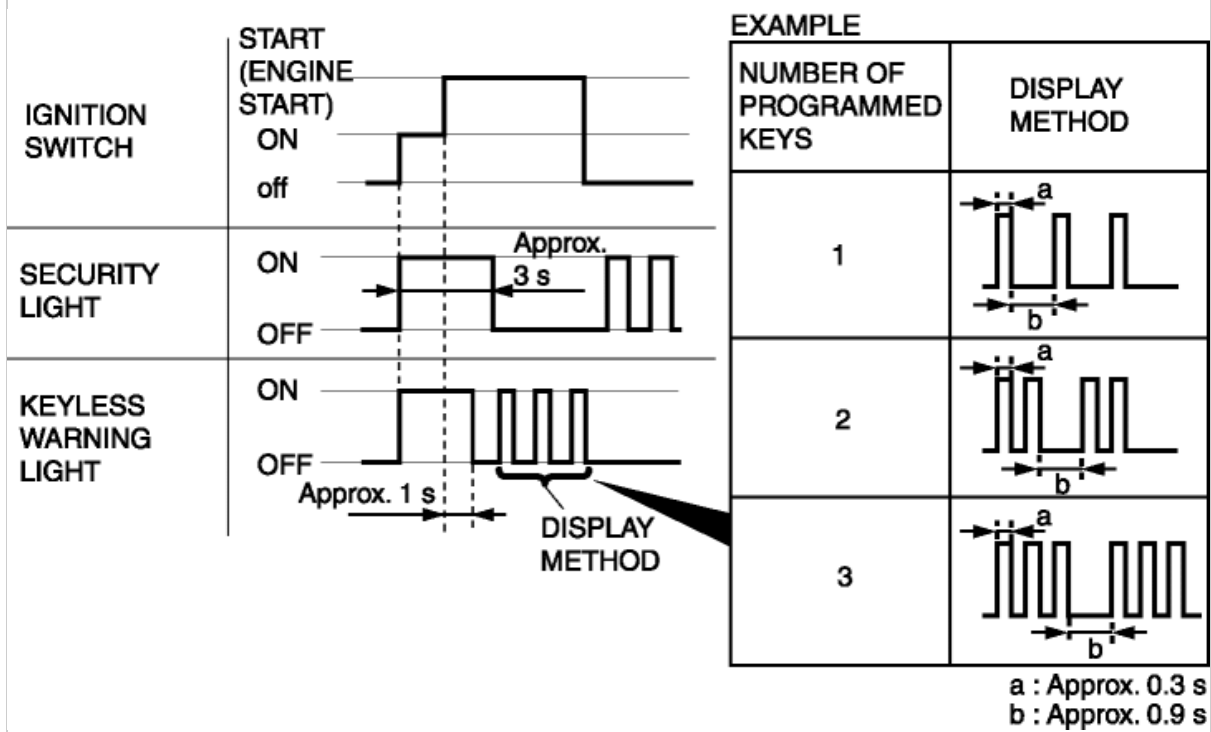
VALID KEY	 KEY 1  KEY 2
KEY FOR REGISTRATION	

Step	Procedure	Action after procedure
1	REPLACE UNITS OR PARTS Replace the unit or parts.	Go to the next step.
2	PERFORM PARAMETER RESET • Connect the M-MDS (IDS) to the DLC-2. (See M-MDS Connecting Procedure.) • Switch the ignition off using key 1. NOTE: • Although the security light flashes or illuminates and DTC 15 or 23 is displayed after approx. 1 min, continue to perform the procedure. • After the vehicle is identified, select the following items from the initial screen of the M-MDS.	

	▪ When using the IDS (laptop PC): ▪ Select the "Body" ▪ Select the "Security" ▪ Select the "PATS Functions" • Then, select an item from the screen menu. items • Parameter Reset • Perform the security access according to the directions on the M-MDS screen. • Select the replaced parts according to the directions on the M-MDS screen. ▪ If the PCM is replaced: Select "PCM". ▪ If the keyless control module is replaced: Select" RKE". CAUTION: • At this time, do not select the other parts from the M-MDS menu.	Go to the next step.
3	CLEAR IGNITION KEY ID NUMBERS • Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. • Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING • Program two keys according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
5	PERFORM ADVANCED KEY PROGRAMMING • Select "Program Additional Advanced Key" from the M-MDS screen menu. • Program the advanced key according to the directions on the M-MDS. • Verify that the PATS function menu is displayed again on the M-MDS screen.	Go to the next step.
6	PERFORM STEERING LOCK UNIT PROGRAMMING • Select "Steering Lock Unit Programming" from the M-MDS screen menu. • Complete the steering lock unit programming according to the directions on the M-MDS. (See STEERING LOCK UNIT ID CODE REGISTRATION [ADVANCED KEYLESS ENTRY AND PUSH BUTTON START SYSTEM] .) • After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". • Switch the ignition off. • Disconnect the M-MDS from the DLC-2. • Remove the programmed card key from the vehicle.	Go to the next step.
7	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: • By starting the engine, the immobilizer system is established and key programming is finished.	

Start the engine using key 1.

- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 1.



Go to the next step.

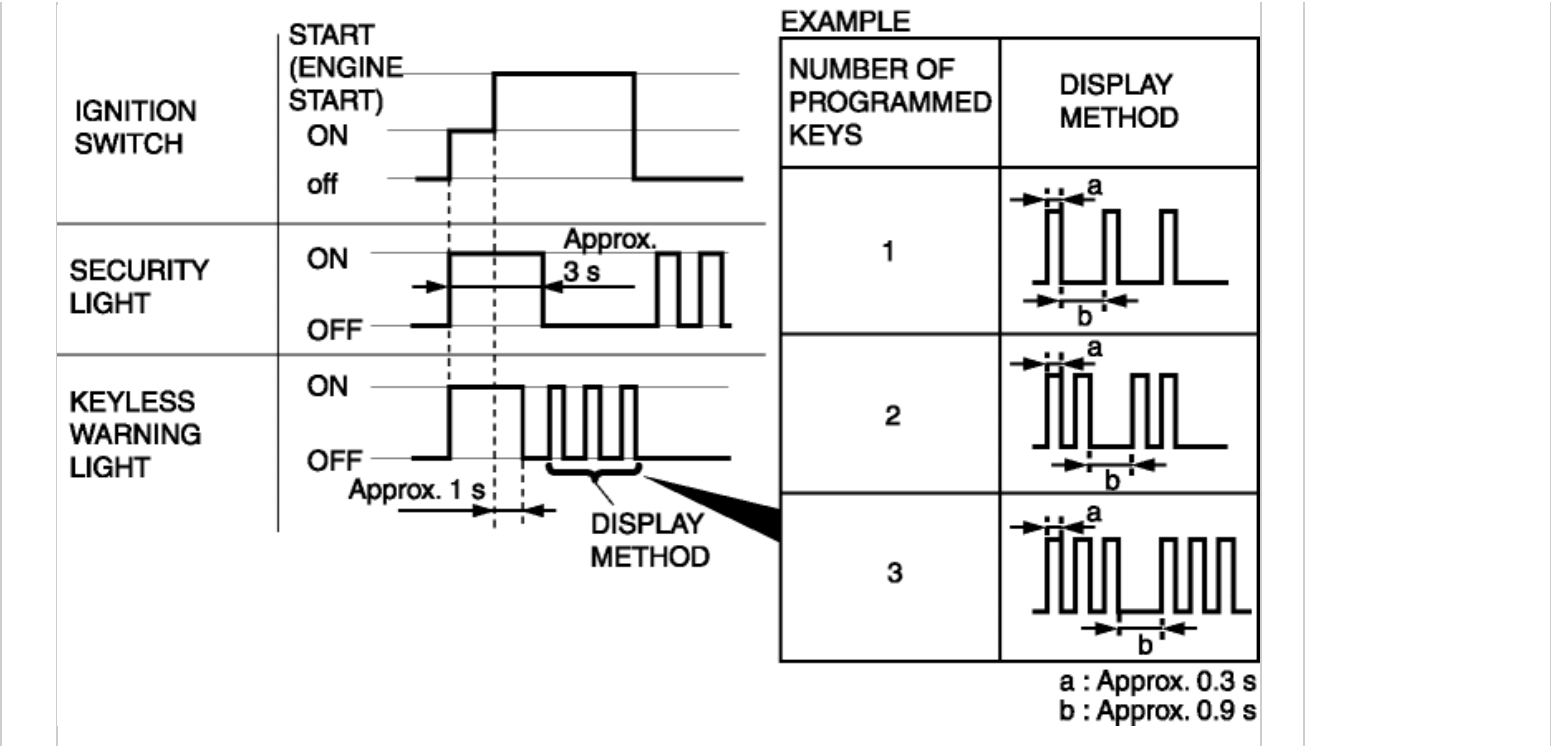
8

VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Repeat Step 8 using
Yes each programmed
key.

No Go to the next step.



9

VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.
- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition off.

IGNITION SWITCH	START (ENGINE START)	
	ON	
	off	
SECURITY LIGHT	ON	
	OFF	
KEYLESS WARNING LIGHT	ON	
	OFF	

Approx. 3 s

Approx. 1 s

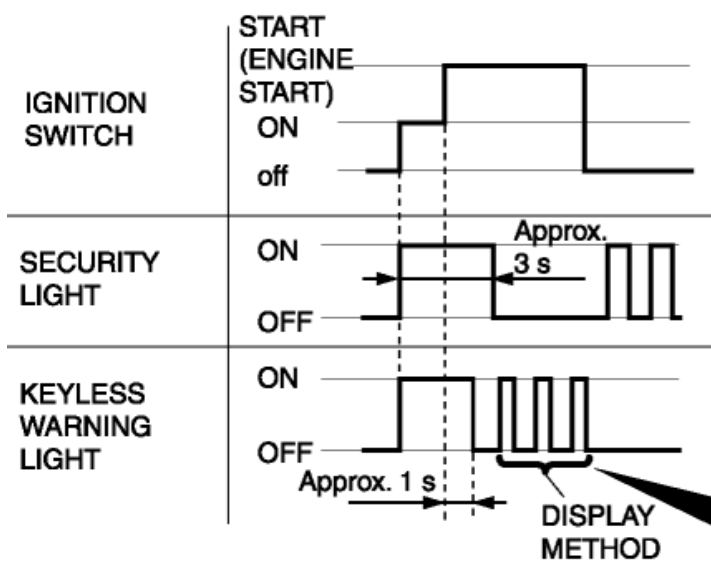
Procedure is completed

No.6 Programming/ Clearing Procedure of Auxiliary Key

CAUTION:

- The engine cannot be started if any step or procedure is skipped. Perform all procedures in the order of the steps.

Step	Procedure	Action after procedure
1	Replace the key.	Go to the next step.
2	PROGRAM/ CLEAR THE AUXILIARY KEY - Remove the valid keys or valid advanced keys from the vehicle (keep them 1 m or more from the vehicle) and switch the ignition on according to the directions on the M-MDS screen. Select, "There is no programmed ignition key and programmed advanced key" from the M-MDS screen. CAUTION: - The engine cannot be started if the ignition is switched ON by selecting "Special Service Mode", however, this does not indicate a malfunction. Continue to perform the procedure as indicated. - Although the security light or the keyless warning light (red) illuminates or flashes, this does not indicate an improper procedure. Continue to perform the procedure as indicated. - After the vehicle is identified, select the following items from the initial screen of the M-MDS. - When using the IDS (laptop PC): - Select the "Body" - Select the "Security" - Select the "PATS Functions" - Perform the security access according to the directions on the M-MDS screen.	Go to the next step.
3	CLEAR IGNITION KEY ID NUMBERS - Select "Ignition Key Code Erase and Program" from the M-MDS screen menu. - Clear the ignition key code according to the directions on the M-MDS.	Go to the next step.
4	PERFORM IGNITION KEY ID NUMBER PROGRAMMING - Program two keys according to the directions on the M-MDS. - After verifying that the PATS function menu is displayed again on the M-MDS screen, select "Finish (this menu)". - Switch the ignition off. - Disconnect the M-MDS from the DLC-2.	Go to the next step.
5	ESTABLISH THE IMMOBILIZER SYSTEM WITH KEY 1 NOTE: - By starting the engine, the immobilizer system is established and key programming is finished. - Start the engine using key 1. - Verify that the security light and keyless warning light operate as shown in the following figure. - Switch the ignition off and remove key 1.	



EXAMPLE

NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

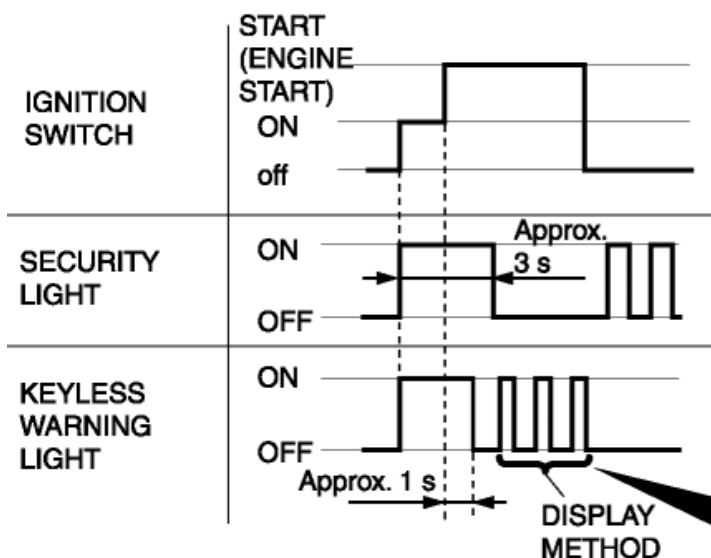
Go to the next step.

6 VERIFY THAT ANY KEY IS PROGRAMMED

- Start the engine using key 2.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- Switch the ignition off and remove key 2.
- Are there other keys to be programmed?

Yes Repeat Step 6 using each programmed key.

No Go to the next step.



EXAMPLE

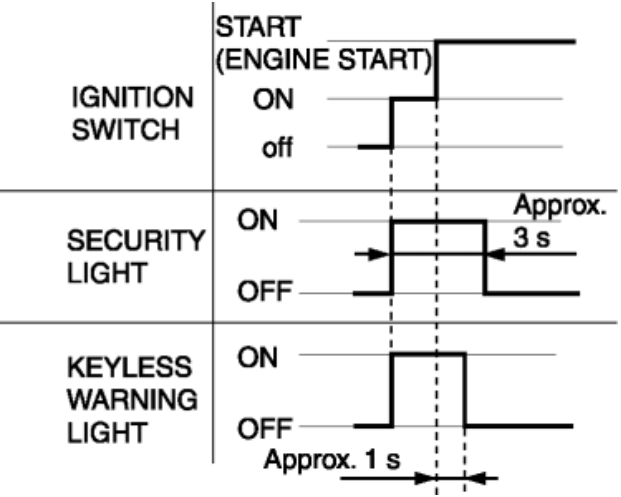
NUMBER OF PROGRAMMED KEYS	DISPLAY METHOD
1	
2	
3	

a : Approx. 0.3 s
b : Approx. 0.9 s

7 VERIFY THAT ANY ADVANCED KEY IS PROGRAMMED

- Bring the programmed advanced key into the vehicle.

- Close all doors.
- Remove the key from the key slot and place it on the front passenger's seat.
- Start the engine using the advanced key.
- Verify that the security light and keyless warning light operate as shown in the following figure.
- After verifying that the keyless warning light turns off, switch the ignition to off.



Procedure is completed