GENUINE Remote engine start

INSTALLATION INSTRUCTIONS

Thank you for purchasing a genuine Mazda accessory.

Before removal and installation, be sure to thoroughly read these instructions.

Please read the contents of this booklet in order to properly install and use the Remote engine start. Your safety depends on it.

Keep these instructions with your vehicle records for future reference.

- There are several **AWARNING** and **ACAUTION** sections in this booklet concerning safely when installing or removing the Remote engine start. Always read and follow them in order to prevent injuries, accidents, and possible damage to the vehicle.
 - ⚠ WARNING: Indicates a situation in which serious injury or death could result if the warning is ignored.
 - ⚠ CAUTION: Indicates a situation in which bodily injury or damage to the vehicle could result if the caution is ignored.
- For areas indicating the tightening torque in this instruction manual, tighten to the specified torque using a torque wrench. For areas in which the tightening torque is indicated inside parentheses (), the tightening torque is indicated as a reference value, however tightening using a torque wrench is not
- Do not modify the Remote engine start.
- Do not install the Remote engine start in any way other than described in the following instructions.
- If in any doubt, please ask your Mazda dealer to install the accessory in order to prevent errors in installation.
- If you have any questions about the use of the accessory, ask your Mazda dealer for proper advice before using it.
- Mazda and its suppliers are not responsible for injuries, accidents, and damage to persons and property that arise from the failure of the dealer or installer to follow these instructions.
- To ensure safety and reliability of the work, installation, removal and disposal work must carried out by an Authorized Mazda Dealership.
- Be careful not to lose removed parts, and be sure that they are kept free from scratches, grease or other dirt.

PART NAME: Remote engine start

VEHICLE: MAZDA6

PART NUMBER: C930 V7 620 (CONTROLLER KIT) **GJR9 V7 630 (HARNESS KIT)**

[KD53 V7 629 (Hood Switch)]

NOTE -

To the dealer

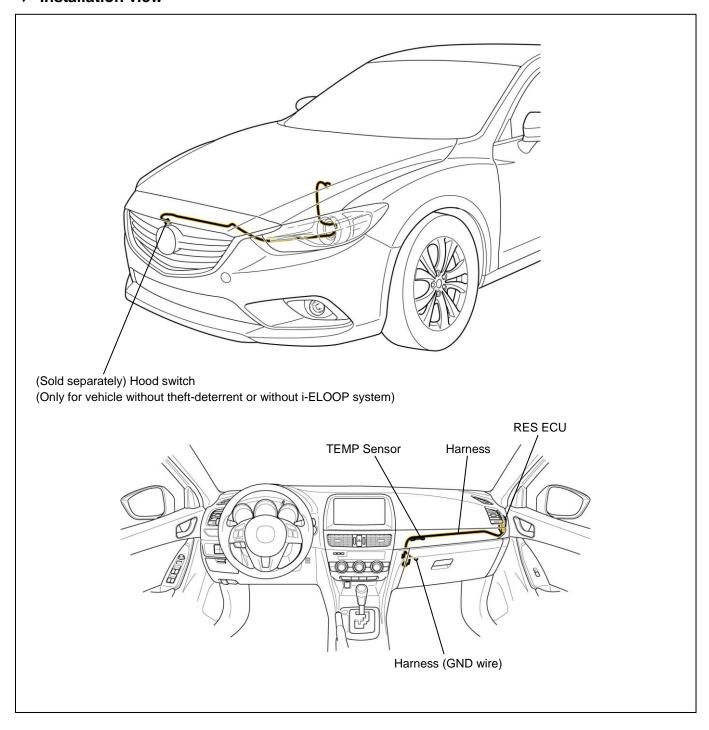
Please turn over these instructions to the customer after installation.

To the customer

- Keep these instructions after installation. The instructions may be necessary for installing other optional parts or removal of this accessory.
- Should the vehicle or this accessory be resold, always leave these instructions with it for the next owner.
- When the remote engine start is removed, clear the remote engine start information programmed to the vehicle by following the clearing procedure for the advanced key in the workshop manual. In addition, after clearing, the advanced key has to be programmed again.

1. PARTS

▼ Installation view



▼ Parts list

Note

• Verify that the kit includes all the following parts and that the parts are not dirty, scratched, or damaged.

• CONTOROLLER KIT (Part No. C930 V7 620)

Part	Part name	Qty.	Part	Part name	Qty.	Part	Part name	Qty.
	Remote Start Transmitter (C930 V7 621)	1		RES ECU	1		TEMP Sensor	1
	Double-sided adhesive tape	1		Owner's manual	1			

HARNESS KIT (Part No. GJR9 V7 630)

Part	Part name	Qty.	Part	Part name	Qty.	Part	Part name	Qty.
	Harness	1		★ Mount base	2		Urethane tape	1
	★ Electro tap	1		Tie wrap (White) [L=200mm]	4		★ Tie wrap(Black) 【L=200mm】	8
	Installation instructions	1		Installation inspection sheet	1			

^{★:} Parts marked with a star mark are only used on vehicles without theft-deterrent or without i-ELOOP system.

(Sold separately) * The following parts are also necessary for installation.

Note

• These parts are not necessary for vehicles with the theft-deterrent or with i-ELOOP system because the hood switch is already equipped.

☐ Hood Switch (Part No. KD53 V7 629)

Part	Part name	Qty.	Part	Part name	Qty.
	Hood switch	1		Screw	1

2. BEFORE INSTALLATION

REQUIRED TOOLS

☆Socket wrench **☆**Torque wrench ☆Tape-wrapped flathead screwdriver ☆Phillips screwdriver ☆Nipper ☆Pliers ☆Scale ☆Electrical vinyl tape **☆Soft clean cloth** ☆Scissors ☆Mat ☆IPA (Isopropyl alcohol) ☆Primer (3M Promoter-4298)

$^{ ext{!}}$ warning

When the negative battery cable is connected during operation, it may cause electric shock or other personal injuries. Disconnect the negative battery cable before removal/installation.	When connecting/disconnecting connectors, grasp the connectors, not the wires. Otherwise a short, an accident from poor contact or fire may occur.	Do not pull the harness with excessive force. Doing so can cause a breakage or a short-related accident, as well as an electrical short or fire.	Secure the harness with the band (part included) so it doesn't dangle. If not, it may cause a short, accident, or fire.



/!\ CAUTION

Using improper tools may cause damage and or broken parts. Use the correct tool for the job.	Wrap protective tape around screwdrivers and fastener remover tools to prevent scratching the vehicle.	may interfere with other parts	Put the removed parts and the parts in the kit on the protective sheet to prevent scratches.
SX SO			

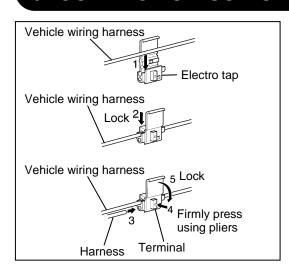
⚠ WARNING

When removing/installing the parts, park the vehicle on level ground and apply the side brake securely. Be sure to turn the ignition switch off, otherwise the vehicle can move, causing personal injury or vehicle damage.

Note -

- When the negative battery cable is removed, the clock, radio, trip meters and other memories will be erased. Before performing work, record the content of the memory.
- Refer to the Workshop Manual for removal and installation of vehicle parts. Not following the procedures for removal/installation in the Workshop Manual could result in an accident or vehicle malfunction.

3. CONNECTION USING ELECTRO-TAP



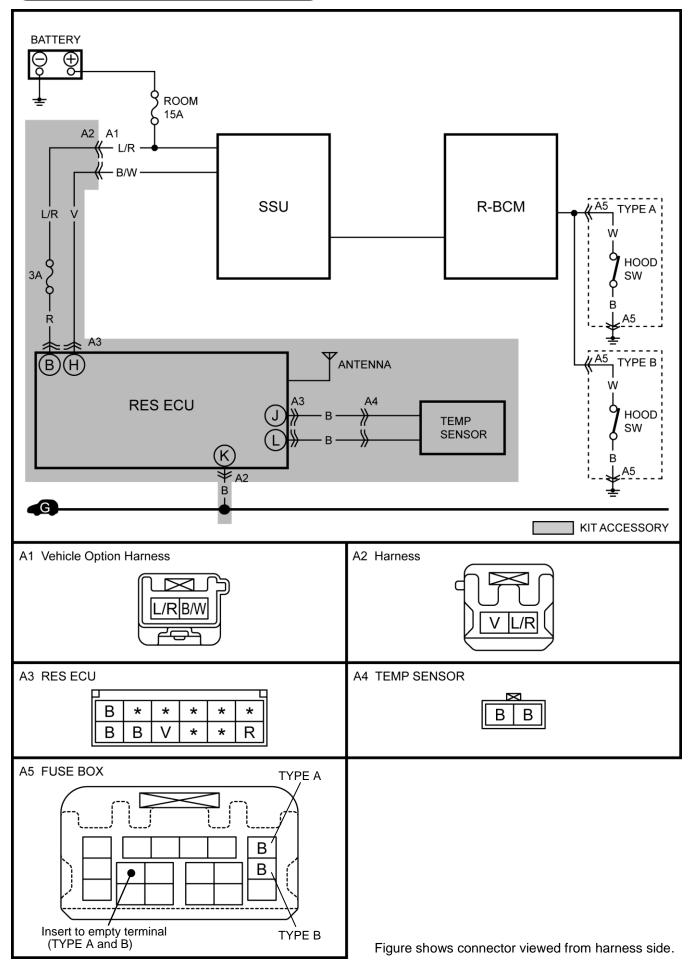
Branch connection procedure using electro tap

- 1. Insert the vehicle wiring harness into the electro tap.
- 2. Fold the electro tap as shown in the figure and lock it.

⚠ CAUTION -

- Firmly engage the lock part until a click sound is heard.
- 3. Insert the harness to the end of the electro tap.
- 4. Firmly press the electro tap terminal using pliers.
- 5. Fold the electro tap in the direction of the arrow shown in the figure and lock it.

4. CONNECTION DIAGRAM



5. PART REMOVAL

- 🗘 CAUTION -

Be careful not to damage or lose any parts removed from the vehicle since they will be reused.

Negative battery cable disconnection

- 1. Set the selector lever to P range.
- 2. Disconnect the negative battery cable and wrap tape around it to insulate.

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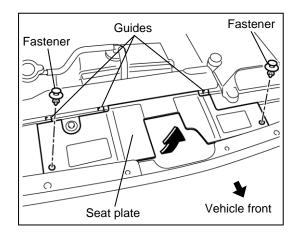
 When the negative battery cable is connected during operation, it may cause electric shock or other personal injuries. Disconnect the negative battery cable before removal/installation.

Tightening torque: 4.0 - 6.0 N⋅m

■ Parts ① to ④ are only for vehicles without theftdeterrent or without i-ELOOP system

1 Seat plate removal

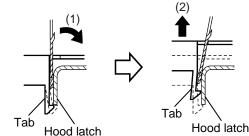
- 1. Remove the fasteners (2 locations).
- 2. Lift up the seat plate in the direction of the arrow to detach the guides (3 locations), and remove the seat plate.



Flathead screwdriver

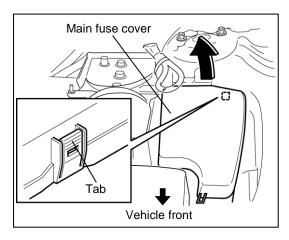






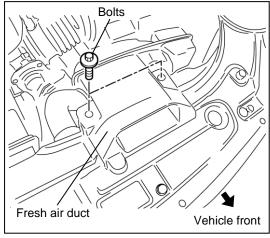
② Hood latch protector removal

- 1. Insert a tape-wrapped flathead screwdriver into the position shown in the figure.
- 2. Move the tape-wrapped flathead screwdriver in the direction of arrow (1) shown in the figure to press the hood latch protector tab, and lift the tab up in the direction of arrow (2) and detach its tab from the hood latch.
- 3. Detach all the hood latch protector tabs from the hood latch and remove the hood latch protector.



3 Main fuse cover removal

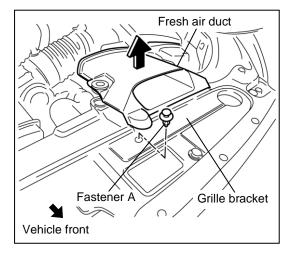
1. Detach the main fuse cover tab (1 location), and lift the rear part of the main fuse cover to remove it.



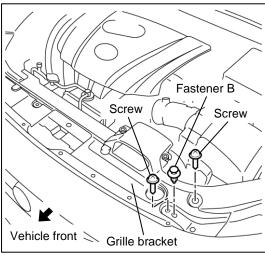
4 Bolt and fastener removal

1. Remove the fresh air duct bolts (2 locations).

Bolt tightening torque: 7.8 - 10.8 N·m

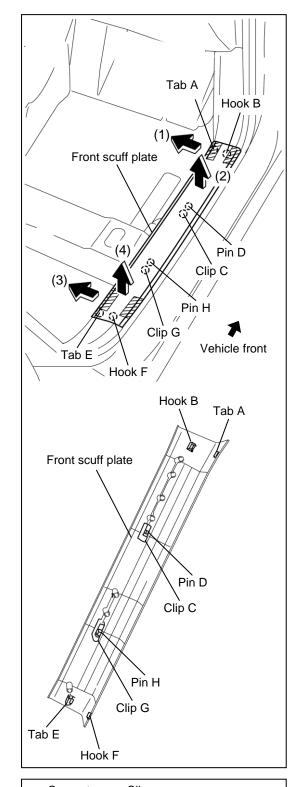


2. Remove the grille bracket fastener A (1 location).



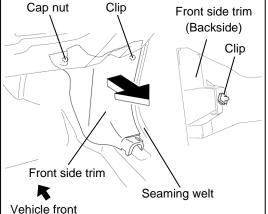
3. Remove the grille bracket fastener B (1 location) and screws (2 locations).

Screw tightening torque: 4.0 - 9.8 N·m



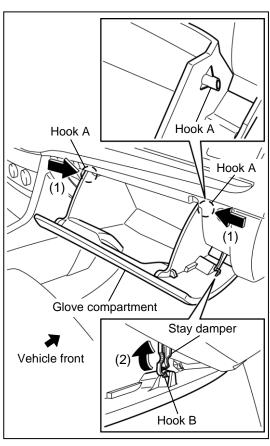


- 1. Take the shaded area shown in the figure, detach tab A while pulling the front scuff plate in the direction of the arrow (1) shown in the figure, then detach the hook B, clip C, and pin D while pulling in the direction of the arrow (2).
- 2. Take the shaded area shown in the figure, detach tab E while pulling the front scuff plate in the direction of the arrow (3) shown in the figure, then detach the hook F, clip G and pin H while pulling in the direction of the arrow (4).



Front side trim (Passenger's side) removal

- 1. Partially peel back the seaming welt.
- 2. Remove the cap nut (1 location).
- 3. Pull the front side trim in the direction of the arrow shown in the figure and remove it while detaching the clip (1 location).

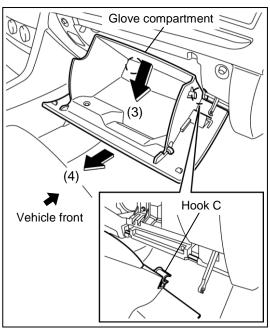


Glove compartment removal

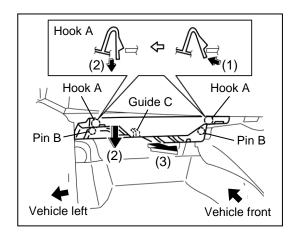
- 1. Push the glove compartment in the direction of the arrow (1) and hooks A (2 locations).
- 2. Pull the stay damper in the direction of the arrow (2) shown in the figure and remove the hook B (1 location).

⚠ CAUTION

 If the glove compartment is closed without being joined to the stay damper, the stay damper may be damaged.
 Verify that the stay damper is joined to the glove compartment before closeing the glove compartment.



- 3. Pull down the glove compartment in the direction of the arrow (3).
- 4. Pull the glove compartment in the direction of the arrow (4) and remove it while detaching hooks C (2 locations).

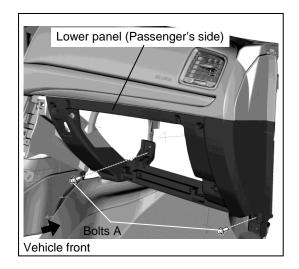


Dashboard under cover removal

- 1. Detach hooks A (2 locations) in the direction of arrow (1) shown in the figure.
- 2. Pull the dashboard under cover in the direction of arrow (2) while detaching pins B (2 locations).
- Remove the dashboard under cover in the direction of the arrow (3) shown in the figure while detaching the guide C (1 location).
- 4. Remove the dashboard under cover.

- $\hat{oldsymbol{oldsymbol{igle}}}$ caution -

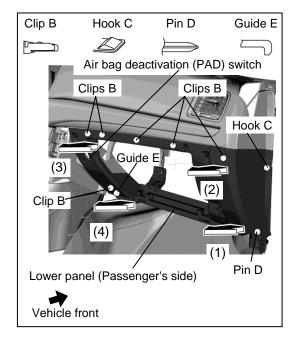
 Be careful not to damage guide C when removing hooks A and pins B. If the dashboard under cover is pulled forcibly downward, it could damage guide C.



Lower panel (Passenger's side) removal

1. Remove bolts A (2 locations).

Bolt tightening torque : 2.0 - 6.0 N·m

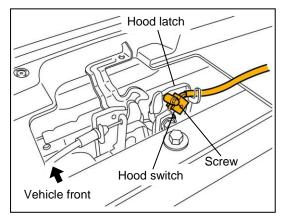


- 2. Disconnect the passenger air bag deactivation (PAD) switch connector. (with passenger air bag deactivation (PAD) switch)
- 3. Pull the passenger's side lower panel in the direction of the arrow in the order of (1), (2), (3), (4) and remove it while detaching clips B (2 locations), hook C (1 location), pin D (1 location) and guide E (1 location).

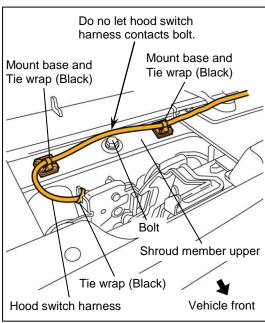
6. HOOD SWITCH INSTALLATION

Note -

• This procedure is not necessary for vehicles with the theft deterrent or with i-ELOOP system because the hood switch is already installed.



1. Install the hood switch to the hood latch and secure it using a screw (1 location).



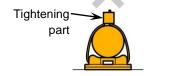
- 2. Hook the hood switch harness to the hood latch and secure it using a tie wrap (Black) at one location.
- 3. Install tie wraps (Black) to the mount bases and temporarily tighten the hood switch harness at two locations.

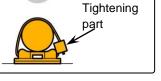
⚠ CAUTION

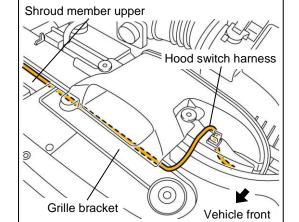
- Do not tighten the tie wrap (Black) so much that the hood switch harness cannot move.
- 4. Peel back the tape backings on the back of the mount bases and affix the mount bases on the shroud member upper at two locations with the hood switch harness routed as shown in the figure.

⚠ CAUTION -

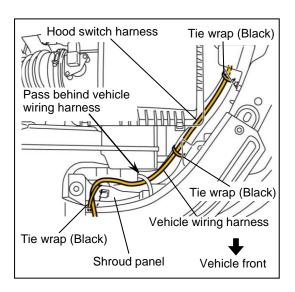
 Place the tightening part of the tie wrap (Black) downward and secure. Otherwise, it may not be possible to re-install the seat plate.







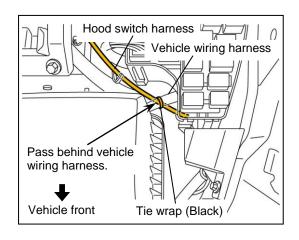
5. Pass the hood switch harness between the grille bracket and the shroud member upper.



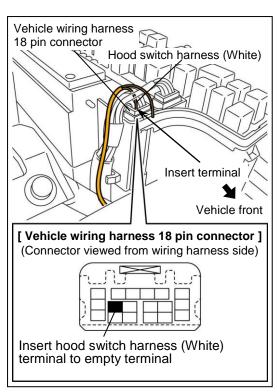
- 6. Secure the hood switch harness to the shroud panel using tie wraps (Black).
- 7. Route the hood switch harness along the vehicle wiring harness and secure it using a tie wraps (Black) at one location.

⚠ CAUTION -

 Secure the hood switch harness on the vehicle wiring harness so that the hood switch harness does not contact the vehicle edge.



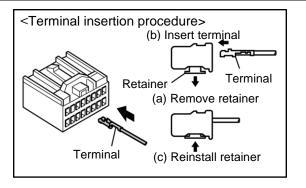
8. Route the hood switch harness along the vehicle wiring harness and secure it using a tie wrap (Black) at one location.

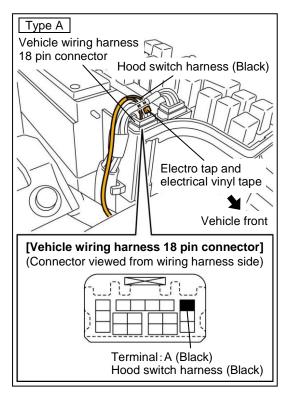


Insert the hood switch harness (White) terminal to the empty terminal of the vehicle wiring harness 18 pin connector (terminal N).

- 🗥 CAUTION

- When connecting a terminal to a connector, always refer to the following <Terminal insertion procedure>.
- Connect the harness terminal to the specified signal line because a system or vehicle malfunction may occur if it is connected incorrectly.





Vehicles with wiring harness terminal A (Black) shown in figure (Type A)

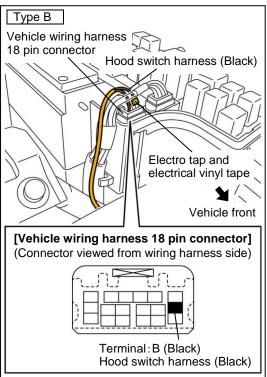
10. Branch connect the hood switch harness (Black) to the vehicle wiring harness 18 pin connector (terminal A (Black)) using an electro tap, and wrap the electro tap using electrical vinyl tape.

⚠ CAUTION -

- Connect the electro tap to the specified signal line because a system or vehicle malfunction may occur if it is connected incorrectly.
- For branch connection procedure using electro tap, refer to [3. CONNECTION USING ELECTRO TAP] on page 4.

Note

• If there is no vehicle wiring harness (Black) in the specified position, do not perform Step 10, go to Step 11.

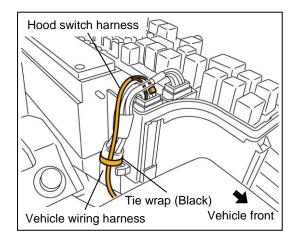


Vehicles with wiring harness terminal B (Black) shown in figure (Type B)

11. Branch connect the hood switch harness (Black) to the vehicle wiring harness 18 pin connector (terminal B (Black)) using an electro tap, and wrap the electro tap using electrical vinyl tape.

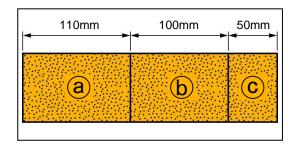
⚠ CAUTION

- Connect the electro tap to the specified signal line because a system or vehicle malfunction may occur if it is connected incorrectly.
- For branch connection procedure using electro tap, refer to [3. CONNECTION USING ELECTRO TAP] on page 4.

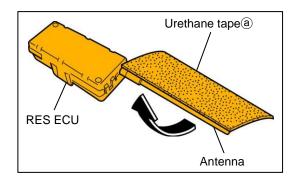


12. Route the hood switch harness along the vehicle wiring harness and secure it using a tie wrap (Black) at one location.

7. REMOTE ENGINE START INSTALLATION



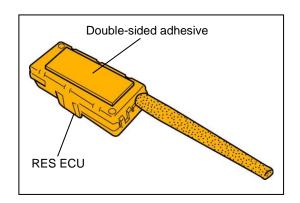
1. Cut 1 piece of urethane tape to the dimensions shown in the figure.



2. Wrap urethane tape around the RES ECU.

- 🗥 CAUTION -

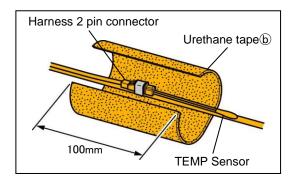
Because the antenna is retractable, it may cause noise.
 Wrap urethane tape from the end of the RES ECU to the end of the antenna.



3. Degrease the RES ECU using primer, and affix double-sided adhesive tape.

⚠ CAUTION -

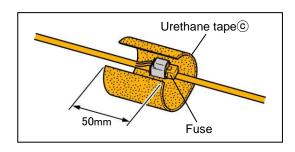
- Use 3M Promoter-4298 for primer.
- When degreasing using primer, only apply primer to the degreased area to prevent other parts from becoming discolored.
- After degreasing using primer, let it dry for 1 min. or more.
- Affix double-sided adhesive tape firmly.



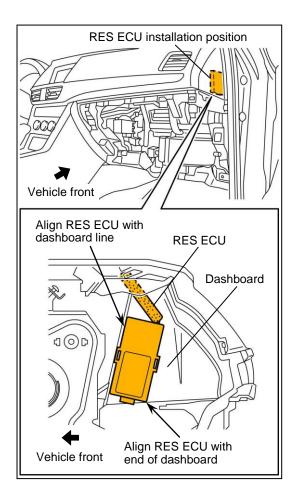
- 4. Connect the TEMP sensor to the harness 2 pin connector.
- 5. Wrap the wiring harness and the TEMP sensor using the urethane tape **(b)**.

⚠ CAUTION -

• Do not wrap urethane tape around the sensor part of the TEMP sensor. The sensitivity of the sensor may be affected if it is wrapped.



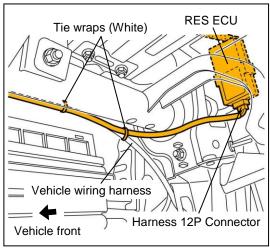
6. Wrap the fuse of the wiring harness using the urethane tape ©.



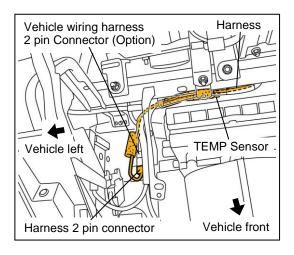
7. Degrease the RES ECU installation position at the upper back of the glove compartment (dashboard) using primer, and affix double-sided adhesive tape of the RES ECU.

⚠ CAUTION

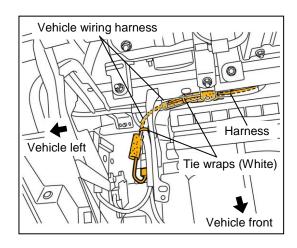
- Use 3M Promoter-4298 for primer.
- When degreasing using primer, only apply primer to the degreased area to prevent other parts from becoming discolored.
- After degreasing using primer, let it dry for 1 min. or more.
- Affix double-sided adhesive tape firmly.



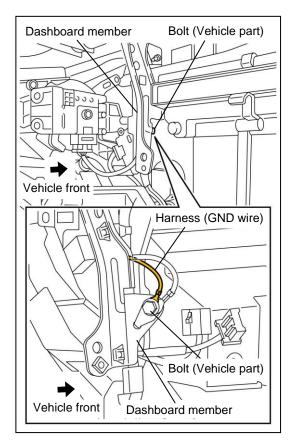
- 8. Connect the harness 12 pin connector to the RES ECU.
- Secure the harness to the vehicle wiring harness using a tie wraps (White).



10. Connect the harness 2 pin connector to the vehicle wiring harness 2 pin Connector (Option).



11. Secure the harness to the vehicle wiring harness using a tie wraps (White).

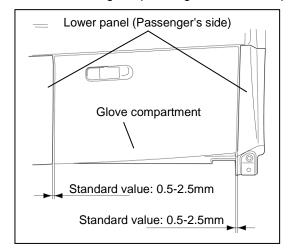


12. Tighten the dashboard member bolt (vehicle part) together with the harness (GND wire) which is routed below the glove compartment.

Bolt tightening torque : 8.8−12.7 N·m

8. REINSTALLATION / INSPECTION

- 1. Reinstall parts in the reverse order of the installation procedure in 【PARTS REMOVAL】.
- 2. After installing the passenger's side lower panel and glove compartment, measure the clearance, and verify that



the measurement value is within the specification shown in the figure.

⚠ CAUTION -

• If the measurement value is not within the specification after measuring the clearance between the passenger's side lower panel and glove compartment, adjust the passenger's side lower panel to the proper position.

- 3. Refer to "Required servicing after disconnecting/connecting negative battery cable" in the vehicle workshop manual or the owner's manual to restore the vehicle functions.
- 4. Perform reinstallation and inspection of the vehicle parts.
- 5. Register the controller (= RES ECU) with reference to the attached sheets "GENUINE REMOTE ENGINE START [Parts No. C930 V7 620] Registration Procedure Of the Controller".

Date	,	,		
VIN.				
Approved		Checked	Person in charge	

INSTALLATION INSPECTION SHEET

MAZDA6

Remote engine start

C930 V7 620 (CONTROLLER KIT) **GJR9 V7 630 (HARNESS KIT)** KD53 V7 629 (HOOD SWITCH)

Perform the following inspections

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- Before starting the engine, make sure there are no persons in front of or behind the vehicle, or around the engine compartment. Otherwise a serious accident could result by the vehicle suddenly moving.
- Do not start the engine in a place such as a garage or other location with poor air ventilation. Otherwise, poisoning or asphyxiation could result from accumulation of exhaust gas.
- Always set the wheel blocks on level ground before performing the verification.

1.	Inspect	ion it	tems	after	instal	lation

1. lı	nspection items after installation	Check
•	Verify the fitting between the vehicle part and the installed part, and inspect for damage or dirt.	
		Check
•	When connecting connectors, verify the connection again to prevent poor connection or mis-connection. (Insert two times.)	

2. Vehicle parts reinstallation

Inspection Parts	Inspection Items	Inspection	Check
Negative battery cable	Torque check	Are the battery cables securely tightened to the terminals?	
Ground	Torque check	Is the ground bolt tightened to the proper torque?	
Function restore procedure after removal/installation of battery	Operation	Have the vehicle's functions been restored by referring to "Required servicing after disconnecting/connecting negative battery cable", in the vehicle workshop manual or the owner's manual?	

3. Installation of accessory, operation check

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Inspection Parts	Inspection Items	Inspection	Check
RES ECU	Registration	Has the controller been registered by referring to "GENUINE REMOTE ENGINE START [Parts No. C930 V7 620] Registration Procedure Of the Controller"* Note?	

Continues on backside

Inspection Parts	Inspection Items	Inspection	Check
Remote Start Transmitter	Operation check	2. Perform the vehicle condition check using the remote controller, and verify if the "Engine stop" mark is indicated in the answer back display and if the error indication "t" is displayed.	
Remote Start Transmitter	Operation check	 3. With all of the following conditions met, start the engine using the remote controller and verify that the engine starts. Parking brake is applied Shift lever is in the P position Key is in the vehicle Brake pedal and accelerator pedal are not depressed Push button start is not pressed All of the doors, the bonnet, and the hood are closed and locked. 	
Remote Start Transmitter	Operation check	4. Stop the engine using the remote controller and verify that the engine stops.	

X Troubleshooting note

If a malfunction is verified in the above, refer to the "Troubleshooting manual" *Note issued by Mazda, and perform troubleshooting.

*Note): Refer to "Troubleshooting manual" on the vehicle accessory Web.