#### GE

# **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.

# **⚠ WARNING**

- 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 necessary.
- 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: MAZDA CX-5

PART NUMBER: C930 V7 620 (CONTOROLLER KIT)

KD33 V7 630 (HARNESS KIT)

[KD53 V7 629 (Hood Switch)]

#### NOTE -

#### To the dealer

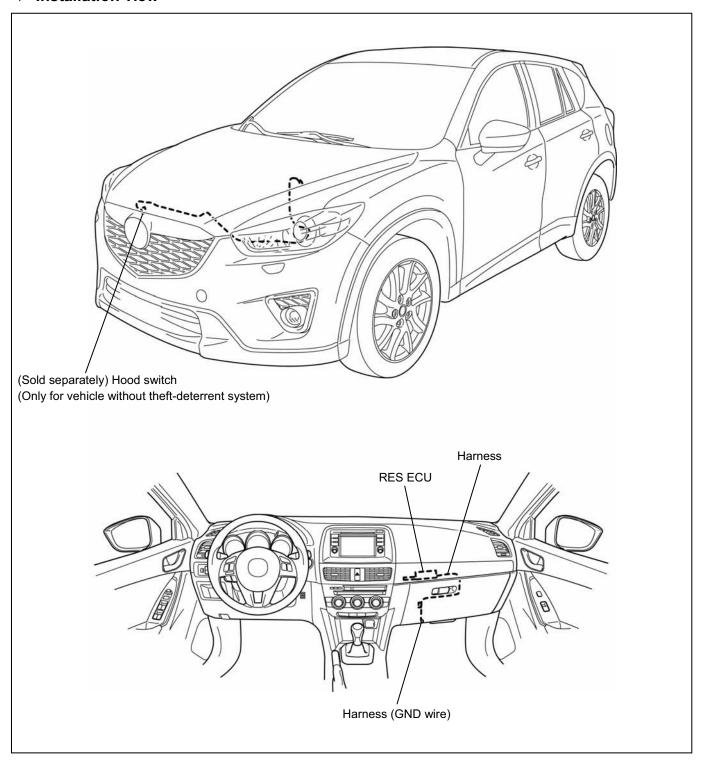
Please turn over these instructions to the customer after installation.

#### 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. KD33 V7 630)

Part	Part name	Qty.	Part	Part name	Qty.	Part	Part name	Qty.
	Harness	1		★ Mount base	3		Urethane tape	1
	★ Electro tap	1		Tie wrap (White) [L=200mm]	5		★ Tie wrap(Black) [L=200mm]	8
	Installation instructions	1		Installation inspection sheet	1			

<sup>★:</sup> Parts marked with a star mark are only used on vehicles without theft-deterrent system.

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

#### Note -

• These parts are not necessary for vehicles with the theft-deterrent 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

☆Screwdriver (Flathead) ☆Pliers ☆Masking tape ☆IPA (Isopropyl alcohol)

☆Screwdriver (Phillips) ☆Electrical vinyl tape ☆Socket wrench☆Fastener remover ☆Mat ☆Primer (3M Promoter-4298) ☆Nipper



#### $^{!}ackslash$ 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.	



# riangle 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.	
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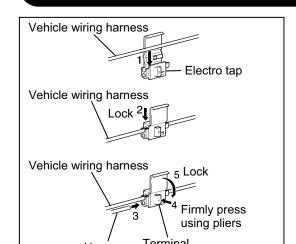


When removing/installing the parts, park the vehicle on level ground and apply the side brake securely. Be sure to turn the ignition switch off, otherwise the vehicle can move, causing personal injury or vehicle damage.

#### - 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.

- 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

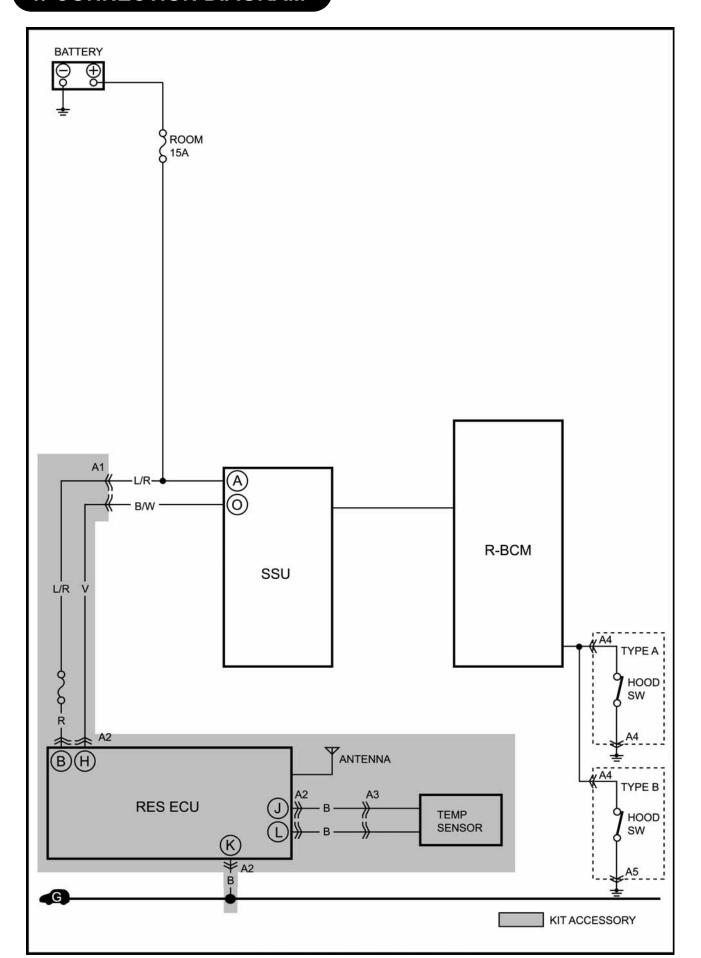
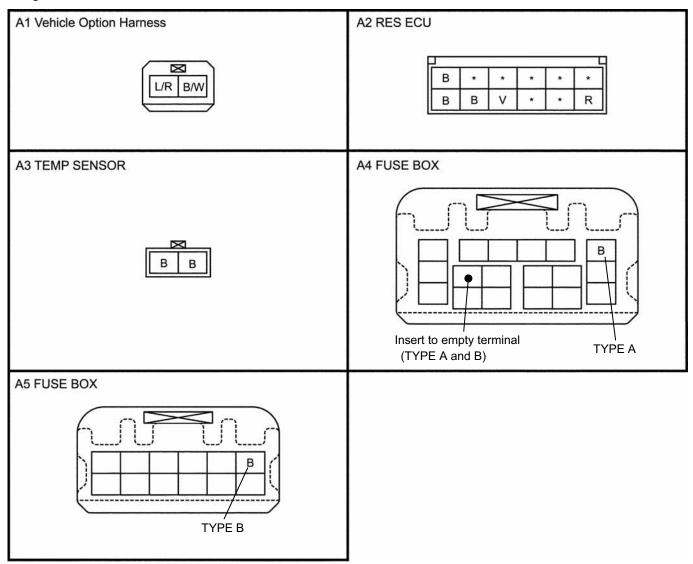


Figure shows connector viewed from harness side.



# 5. PART REMOVAL

#### - 🗥 CAUTION :

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

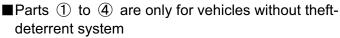
#### **Negative battery cable disconnection**

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

#### - $oldsymbol{\Lambda}$ warning -

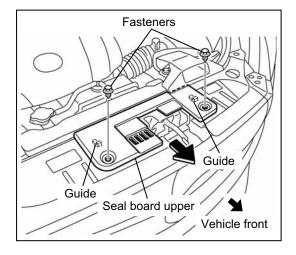
· When the negative battery cable is connected during operation, it may cause electric shock or other personal injuries. Disconnect the negative battery cable before removal/installation.

Tightening torque: 4.0-5.0 N⋅m



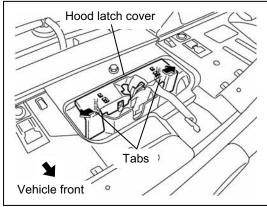
#### Seal board upper removal

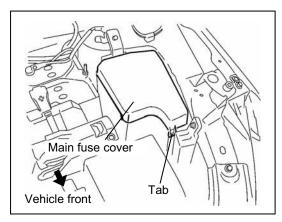
- 1. Remove the fasteners (2 locations).
- 2. Slide the seal board upper in the direction of the arrow to detach the guides (2 locations) and remove the seal board upper.



# ② Hood latch cover removal

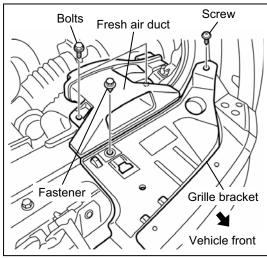
1. Lift the hood latch cover in the direction of the arrow and remove the hood latch cover avoiding the tabs (2 locations).





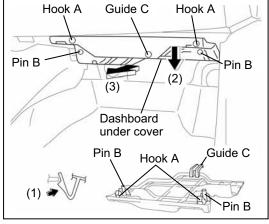
#### ③ Main fuse cover removal

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



#### 4 Fastener, screw and bolt removal

- 1. Remove the grille bracket fastener (1 location) and screw (1 location).
- 2. Remove the fresh air duct bolts (2 locations).

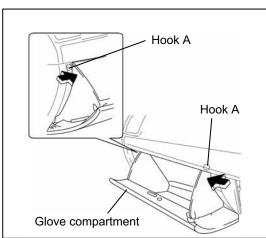


#### Dashboard under cover removal

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

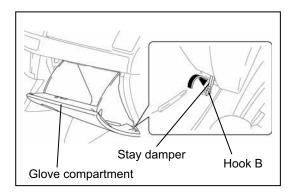
#### ⚠ CAUTION -

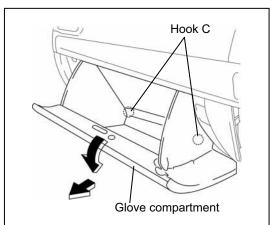
 If the hook A and pin B is removed forcefully, guide C may be damaged. Carefully remove the hook A and pin B so as not to damage guide C.



#### Glove compartment removal

1. Push the glove compartment in the direction of the arrow and remove the hook A.





2. Pull the stay damper in the direction of the arrow shown in the figure and remove the hook B.

#### **⚠** CAUTION —

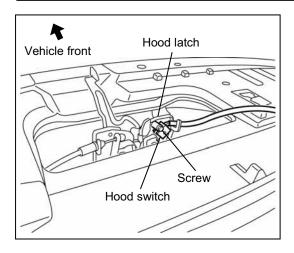
• If the glove compartment is closed without being joined to the stay damper, the stay damper may be damaged. Verify that the stay damper is joined to the glove compartment before closing the glove compartment.

3. Pull the glove compartment in the direction of the arrow and remove it while detaching the hook C.

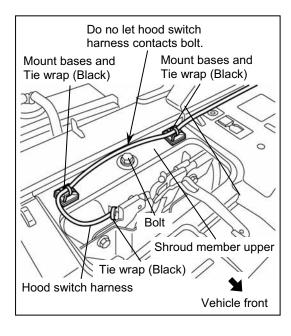
# 6. HOOD SWITCH INSTALLATION

#### Note

 This procedure is not necessary for vehicles with the theft deterrent system because the hood switch is already installed.



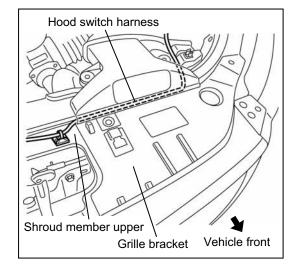
1. Install the hood switch to the hood latch and secure it using a screw (1 location).



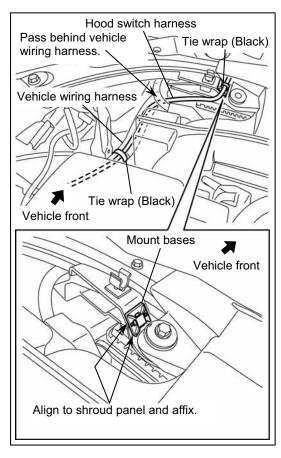
- 2. Hook the hood switch harness to the hood latch and secure it using a tie wrap (Black) at one location.
- 3. Install tie wraps (Black) to the mount bases and temporarily tighten the hood switch harness at two locations.

#### **⚠** 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.



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



6. Install a tie wrap (Black) to the mount bases and tighten the hood switch harness at one location.

#### ⚠ CAUTION -

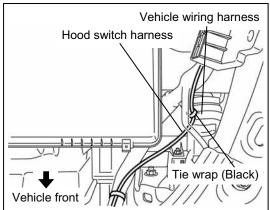
- Do not tighten the tie wrap (Black) so much that the hood switch harness cannot move.
- 7. Peel back the tape backing on the back of the mount base and affix the mount base on the shroud panel at one location with the hood switch harness routed as shown in the figure.

#### **⚠** CAUTION

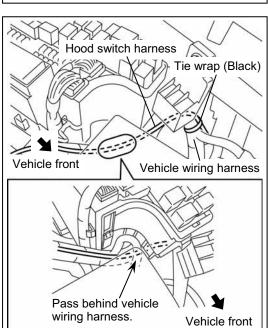
- Affix the mount base to the specified position to prevent the mount base from peeling.
- 8. Route the hood switch harness along the vehicle wiring harness and secure it using a tie wrap (Black) at one location.

#### **⚠** CAUTION -

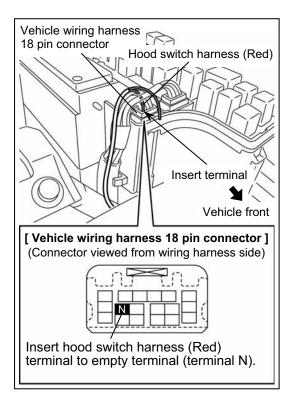
 Secure the hood switch harness on the vehicle wiring harness so that the hood switch harness does not contact the vehicle edge.



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



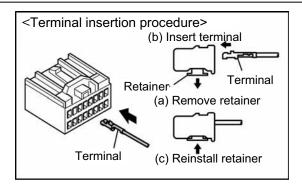
10. Route the hood switch harness along the vehicle wiring harness and secure it using a tie wrap (Black) at one location.

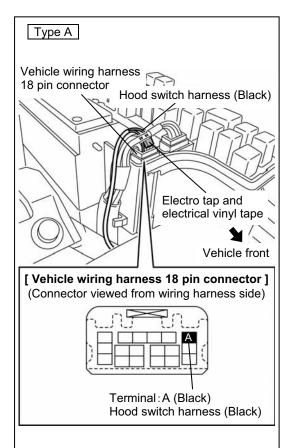


 Insert the hood switch harness (Red) terminal to the empty terminal of the vehicle wiring harness 18 pin connector (terminal N).

#### **⚠** 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.



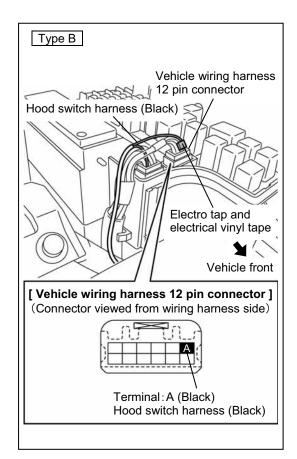


#### Note

- If there is no vehicle wiring harness (Black) in the specified position, do not perform Step 12 and go to Step 13
- 12. 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

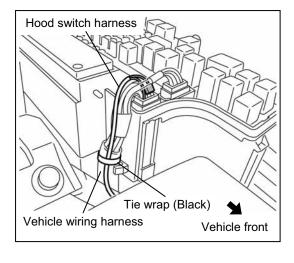
- Connect the electro tap to the specified signal line because a system or vehicle malfunction may occur if it is connected incorrectly.
- For branch connection procedure using electro tap, refer to [3. CONNECTION USING ELECTRO TAP] on page 4.



13. Branch connect the hood switch harness (Black) to the vehicle wiring harness 12 pin connector (terminal A (Black)) using an electro tap, and wrap the electro tap using electrical vinyl tape.

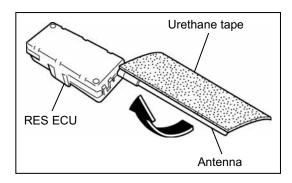
#### **⚠** CAUTION -

- 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.



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

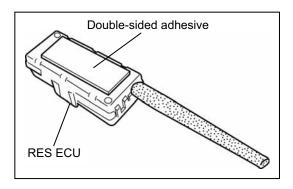
# 7. REMOTE ENGINE START INSTALLATION



1. Wrap urethane tape around the RES ECU.

#### **⚠** CAUTION -

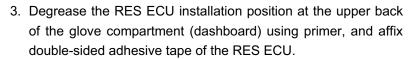
- Because the antenna is retractable, it may cause noise.
   Wrap urethane tape from the end of the RES ECU to the end of the antenna.
- Cut urethane tape to the length from the end of the RES ECU to the end of the antenna and use.



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

#### **⚠** CAUTION -

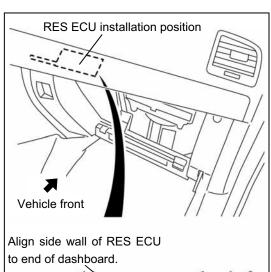
- Use 3M Promoter-4298 for primer.
- When degreasing using primer, only apply primer to the degreased area to prevent other parts from becoming discolored.
- After degreasing using primer, let it dry for 1 min. or more.
- Affix double-sided adhesive tape firmly.

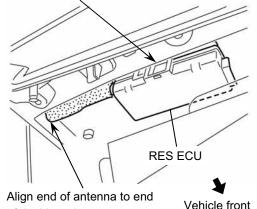




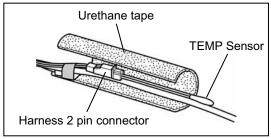
#### **⚠** CAUTION

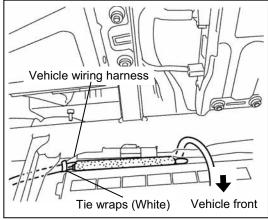
- Use 3M Promoter-4298 for primer.
- When degreasing using primer, only apply primer to the degreased area to prevent other parts from becoming discolored.
- After degreasing using primer, let it dry for 1 min. or more.
- Affix double-sided adhesive tape firmly.

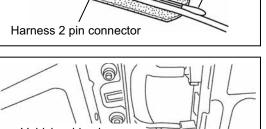




of dashboard.



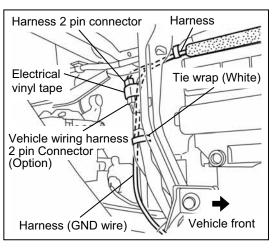




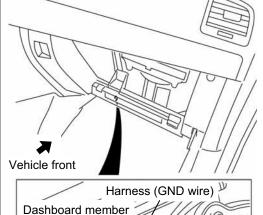
- 4. Connect the TEMP sensor to the harness 2 pin connector.
- 5. Wrap remaining urethan tape in Step1 to the harness and the TEMP sensor.

#### **⚠** 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. Secure the harness to the vehicle wiring harness using a tie wrap (White).



- 7. Connect the harness 2 pin connector to the vehicle wiring harness 2 pin Connector (Option).
- 8. Secure the harness 2 pin connector to the vehicle wiring harness using electrical vinyl tape, and secure the harness (GND wire) using a tie wrap (White) at one location.

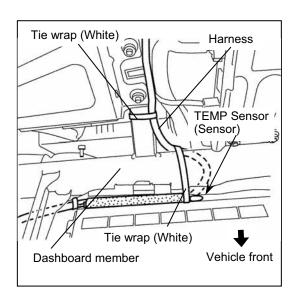


Bolt (Vehicle part) > Vehicle front

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

#### **Tightening torque:**

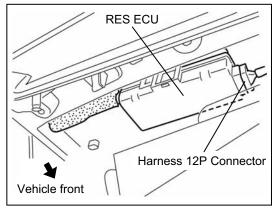
Bolt: 8.8-12.7 N·m



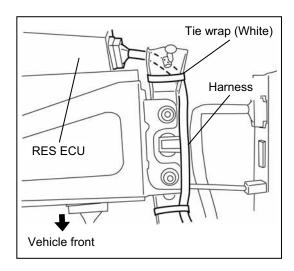
10. Route the harness and secure it to the dashboard member using tie wraps (White) at two locations.

#### **⚠** CAUTION -

 Secure the tie wrap (White) at the base of the sensor part because the sensitivity of the TEMP sensor may be affected if it is secured at the sensor part.



11. Connect the harness 12 pin connector to the RES ECU.



12. Route the harness and secure it to the dashboard member using a tie wrap (White).

# 8. OPERATION CHECK

1. After verifying the harness routing, connect the negative battery cable.

#### · / CAUTION —

#### [Power window auto function]

If the battery is disconnected, the automatic full open/close feature of the power window is disabled.

This feature can be recovered by the following procedure.

- \* For the power window with the automatic function, perform the all the initial settings.
- 1. Turn the ignition switch to the ON position.
- 2. Hold down the power window switch until the window is fully open.
- 3. Pull up the power window switch to close the window and continue to pull it up for about two seconds after it is fully closed
- 4. If the feature does not function even after the ignition switch is turned off, contact an Authorized Mazda Dealer.

#### **[TPMS system]**

• If the battery is disconnected, the TPMS (Tire Pressure Monitoring System) initial setting is reset and the system may not operate normally.

This feature can be recovered by the following procedure.

- 1. Adjust the tire pressure (verify tire pressure using label on body side with driver's door open).
- 2. Turn the ignition switch to the ON position.
- 3. Press the TPMS (SET) switch (long-press it until TPMS warning light in meter flashes two times and a beep sounds one time).
- 4. Switch the ignition off.
- 5. If the TPMS warning light illuminates or flashes even though the above procedure has been performed, contact an Authorized Mazda Dealer.
- 2. 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".
- 3. Perform the Vehicle status check with the remote control (= Remote Start Transmitter), and verify the "Stop" mark is appeared and Error display " t " is not appeared on the LCD monitor of it when it receives a response from the vehicle.
- 4. Perform the Engine start operation with the remote control, and verify the vehicle engine is started.
- 5. If Steps 2 to 4 cannot be completed successfully, refer to the "Troubleshooting manual" issued by Mazda. \*The troubleshooting manual is posted on the site for servicing personnel.

# INSTALLATION INSPECTION SHEET

<b>MAZDA</b>
CX-5

# Remote engine start

C930 V7 620 (CONTOROLLER KIT)
KD33 V7 630 (HARNESS KIT)
KD53 V7 629 (HOOD SWITCH)

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•	Install removed vehicle	parts in the reverse order of "VEHICLE PARTS REMOVAL".
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	Check
<ul> <li>Make sure that the vehicle parts are clean before reinstalling. Clean any dirty parts.</li> <li>Verify that the connectors are securely connected.</li> </ul>	

#### B. Inspection after installation

• Inspect the installed / reinstalled parts for the following items.

		Ins	pection Items (	(O)	
Inspection Parts	Clearance/Fit	Scratches/ Dirt/ Harness interference	Installation/ Tightening/ Engagement	Operation check	Adjustment
Remote engine start	0	0	0	0	0
Glove compartment	0	0	0		
Dashboard under cover	0	0	0		
Fastener, screw and bolt	0	0	0		
Main fuse cover <b>※</b>	0	0	0		
Hood latch cover <b>※</b>	0	0	0		
Seal board upper※	0	0	0		
Negative battery cable	0	0	0		
Windows fully open and close automatically				0	
TPMS				0	

**<sup>※</sup>** : Only for vehicles without theft-deterrent system

#### C. Important check items

• Inspect the installed / reinstalled parts for the following items.

No.	Item	Check
4	Are the battery cables securely tightened to the terminals?	
1	Tightening torque: 4.0-5.0 N·m	
2	Is the ground bolt tightened to the proper torque?  Tightening torque: 8.8−12.7 N⋅m	

Installation inspection sheet

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Date	,	,					
VIN.							
Approved		Checked		Person in charge			

The term of validity for this sheet: 3 Years