

# Your Ultimate Source for OEM Repair Manuals

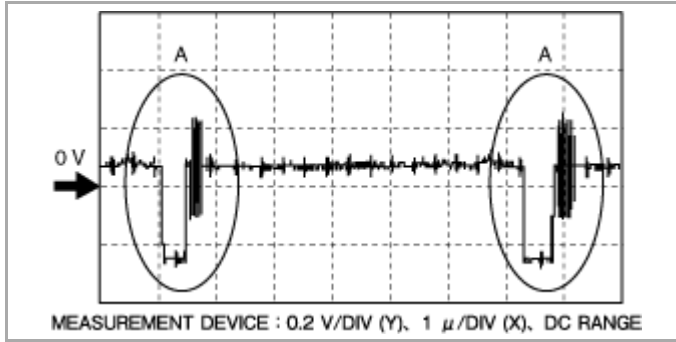
FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

## 2024 Mazda CX-90 Service and Repair Manual

[Go to manual page](#)

## Inspection Using an Oscilloscope (Reference)

- Oscilloscope setting: 2 V/DIV (Y), 1 ms/DIV (X), DC range



ac5wz00009889

Sample

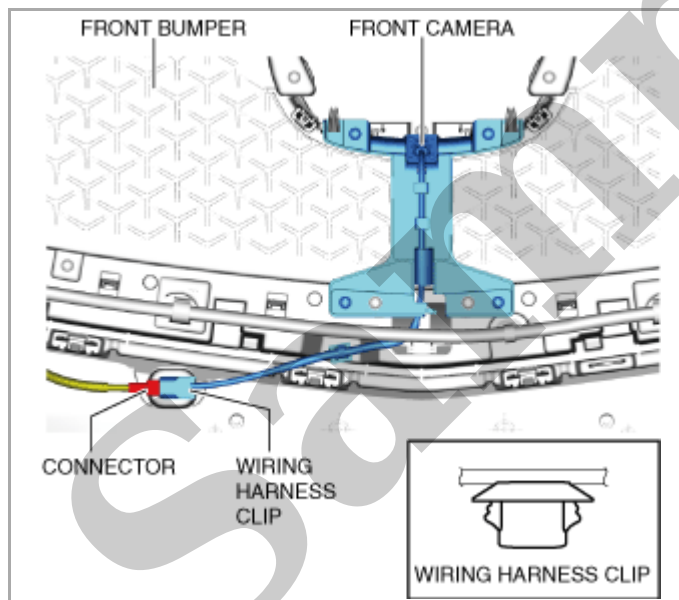
# FRONT CAMERA REMOVAL/INSTALLATION

SM2900022

id15200000970

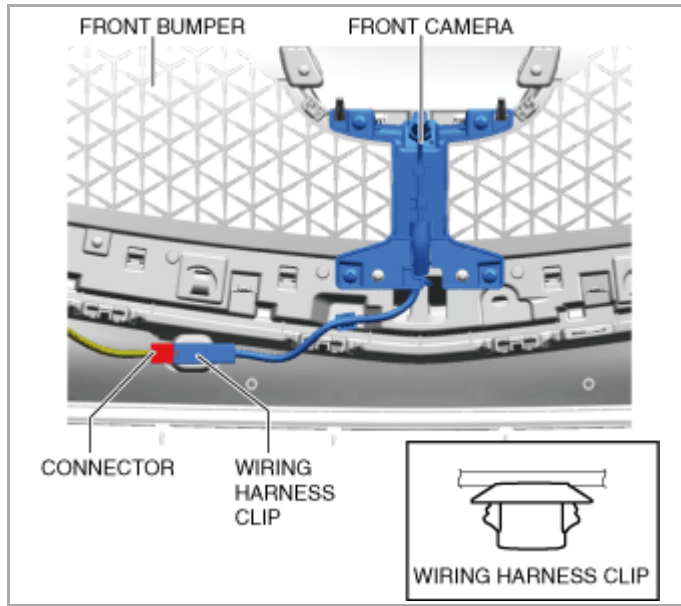
## Type-A

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
2. Remove the seal board upper. (See [SEAL BOARD UPPER REMOVAL/INSTALLATION.](#))
3. Remove the front bumper. (See [FRONT BUMPER REMOVAL/INSTALLATION.](#))
4. Disconnect the connector.



ac5uuw00011271

5. Remove the front wiring harness clip.
6. Insert a tape-wrapped flathead screwdriver into the position shown in the figure.



ac5uuw00011272

5. Remove the front wiring harness clip.

6. Insert a tape-wrapped flathead screwdriver into the position shown in the figure.

Sample

# SIDE CAMERA REMOVAL/INSTALLATION

SM2900023

id15200000980

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))

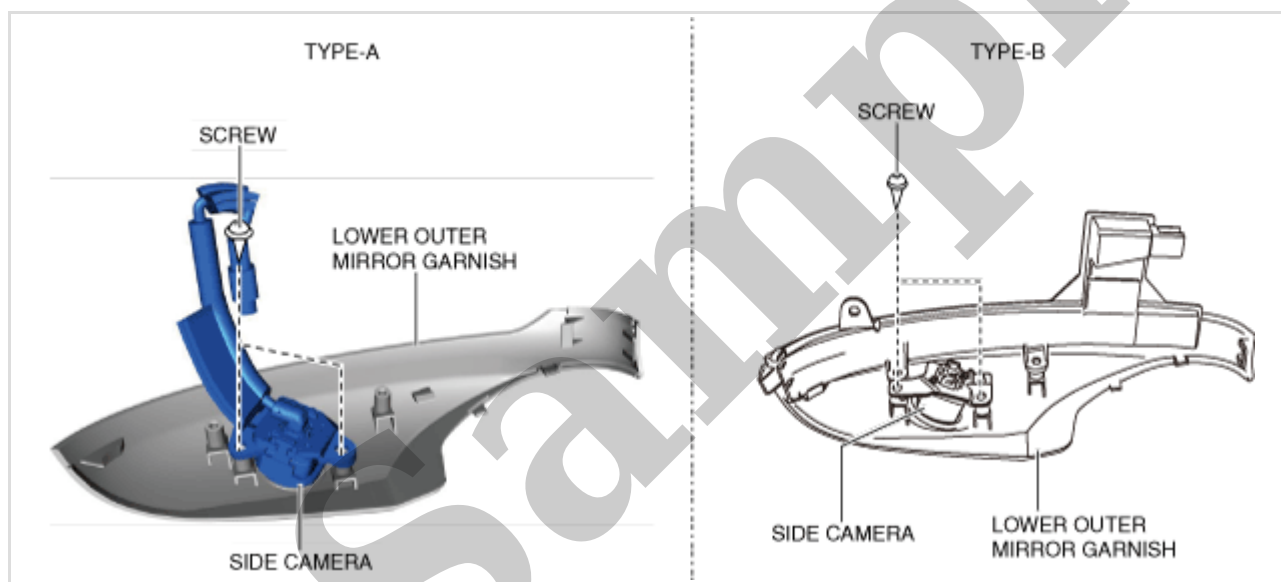
2. Remove the following parts:

(1) Outer mirror glass (See [OUTER MIRROR GLASS REMOVAL.](#)) (See [OUTER MIRROR GLASS INSTALLATION.](#))

(2) Outer mirror garnish (See [OUTER MIRROR GARNISH REMOVAL/INSTALLATION.](#))

(3) Lower outer mirror garnish (See [OUTER MIRROR GARNISH REMOVAL/INSTALLATION.](#))

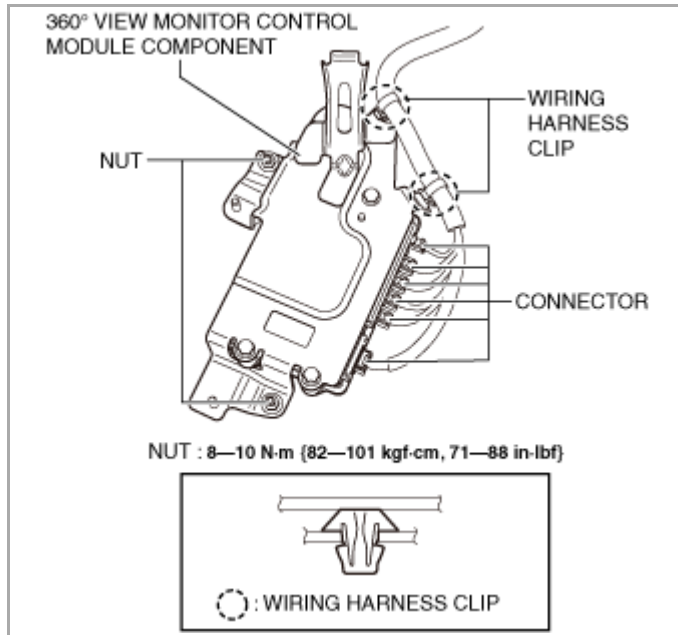
3. Remove the screws.



4. Remove the side camera.

5. Install in the reverse order of removal.

6. Perform side camera aiming. (See [360°VIEW MONITOR SYSTEM AIMING.](#))



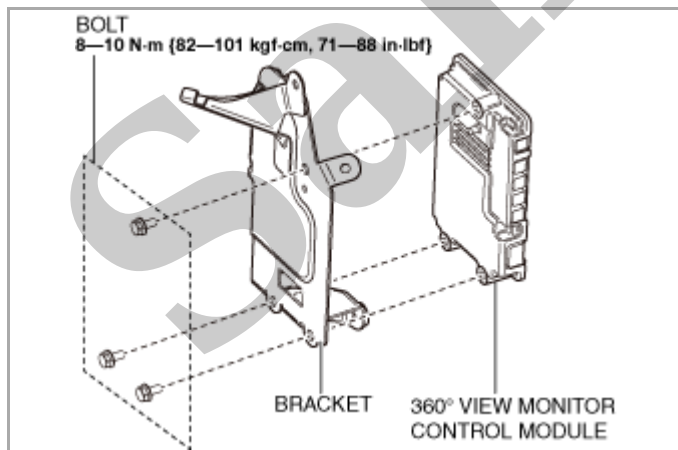
ac5uuw00011826

8. Remove the wiring harness clips.

9. Remove the nuts.

10. Remove the 360° view monitor control module component.

11. Remove the bolts.



ac9uuw00011324

12. Remove the 360° view monitor control module.

13. Install in the reverse order of removal.


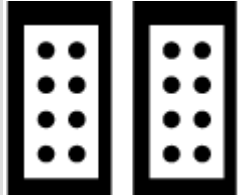
14. If the 360° view monitor control module is replaced, perform the following procedure.

# 360°VIEW MONITOR SYSTEM AIMING

SM2900026

id15200001020

## Special service tool (SST)

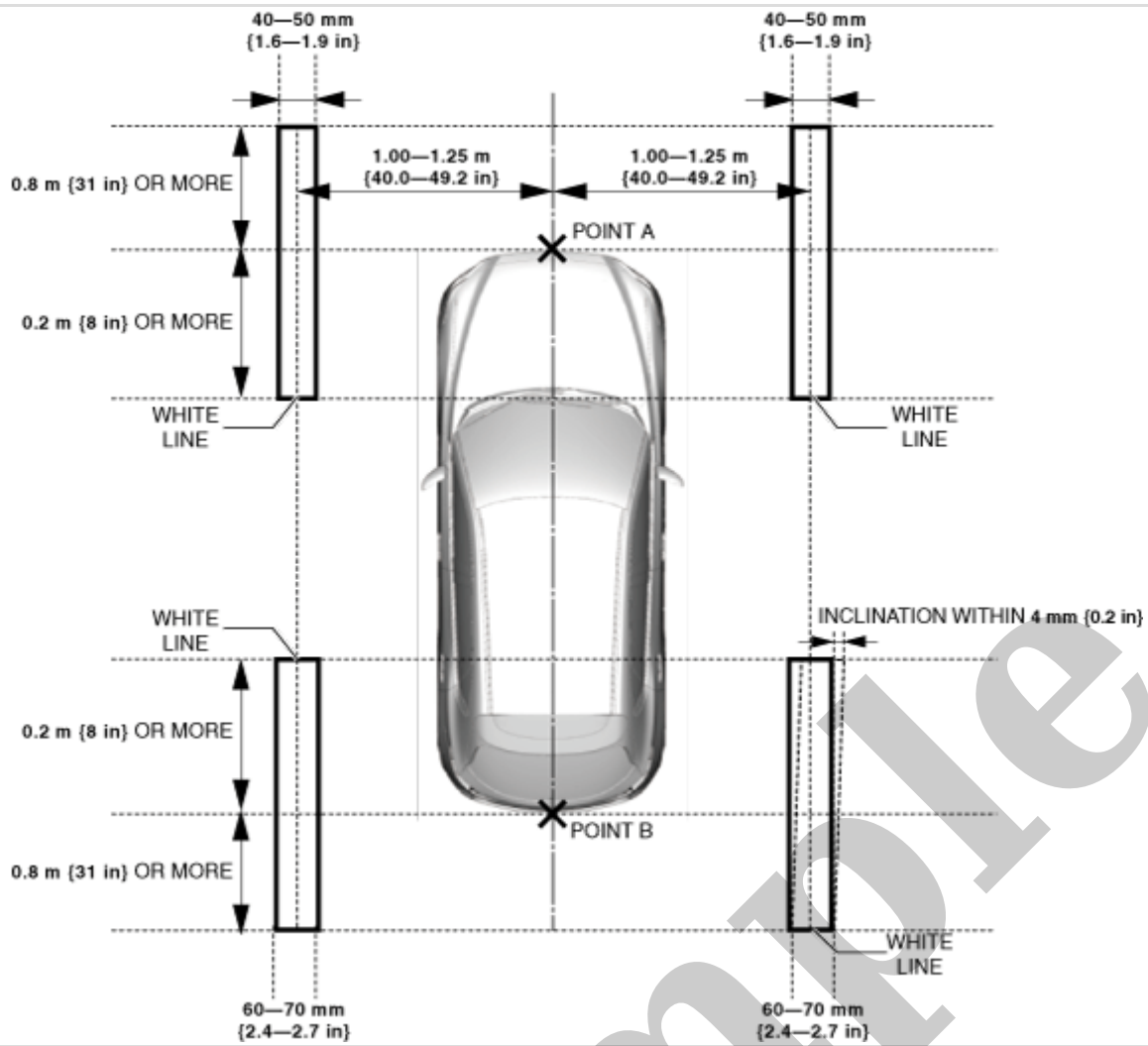
49 L067 006 Plumb bob		49 JP04 001 Target marker	
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## Preparation Before Servicing

1. Empty the vehicle by having all occupants leave the vehicle and remove all the cargo except for the spare tire, jack and tools equipped on the vehicle.
2. Adjust the air pressure of each tire to the specified value. (See **WHEEL AND TIRE SPECIFICATION**.)
3. Move the vehicle to level ground.

## Caution

- To assure that the 360° view monitor system aiming is performed correctly, perform the aiming under the following conditions.
  - Perform aiming in location where vehicle and target marker can be placed on same level (with difference within 2 degrees in both lateral and longitudinal directions) surface
  - Do not move vehicle during adjustment
  - Do not shake vehicle during adjustment (opening door, getting into vehicle)
  - Lens surface of 4 cameras is clean
  - Supply voltage to 360° view monitor control module: 9.5 to 15.5 V
  - Ambient temperature: -30 to 60 °C {-22 to 140 °F}

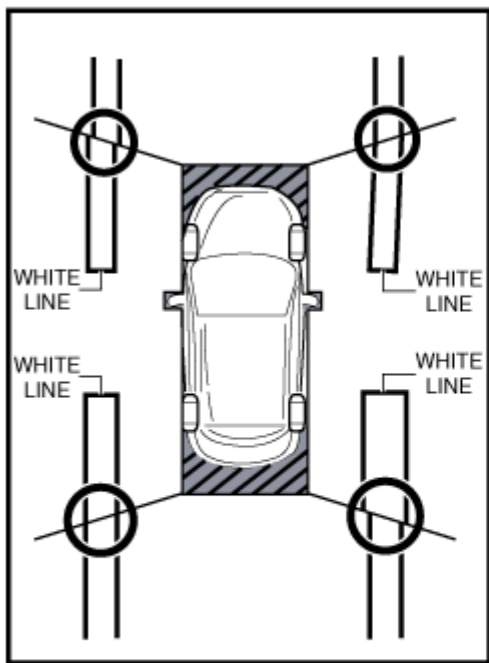


ac5wz00011925

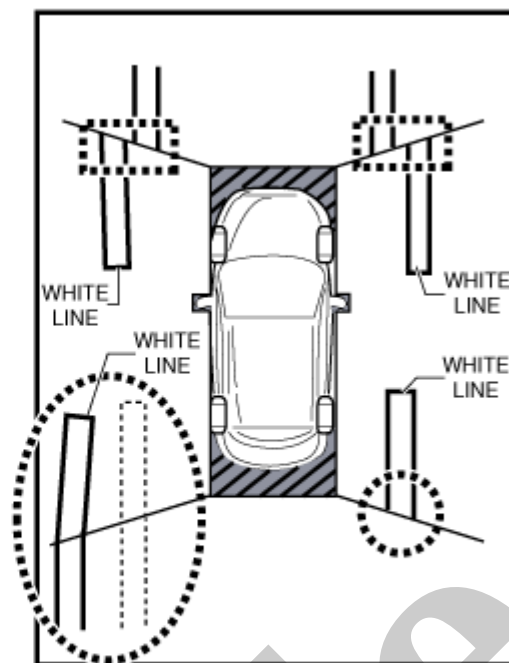
If the front camera is verified



Sample





NO BREAKS IN WHITE LINE



 : BREAKS IN WHITE LINE  
 : WHITE LINE NOT DETECTED, POSITION DEVIATED GREATLY, WHITE LINE SEAM LEANS LARGELY TO ONE SIDE

ac5wz00011927

- If the projected vehicle path indication obscures the white lines, turn off the projected vehicle path indication.
- If there are no breaks in the seams of the white lines, finish the 360° view monitor system aiming.
- If there are breaks in the seams of the white lines, perform the 360° view monitor system aiming procedure. (See [360° View Monitor System Aiming Procedure Selection](#).)
- Verify the white line positions in the following cases.
  - White lines cannot be found
  - White line positions have deviated
  - Seams of white lines lean largely to one side
    - If there is no problem with the positions of the white lines, perform the 360° view monitor system aiming. (See [360° View Monitor System Aiming Procedure Selection](#).)

### 360° View Monitor System Aiming (Batch Aiming) Procedure

1. Position the SSTs at the positions shown in the figure.

Step	Inspection	Action	
3	<b>VERIFY DTCs</b> <ul style="list-style-type: none"> <li>Perform the DTC inspection. (See <b>DTC INSPECTION [360°VIEW MONITOR CONTROL MODULE (TYPE-A)]</b>.) (See <b>DTC INSPECTION [360°VIEW MONITOR CONTROL MODULE (TYPE-B)]</b>.)</li> <li>Is a DTC displayed?</li> </ul>	Yes	Go to the applicable DTC inspection. (See <b>DTC TABLE [360°VIEW MONITOR CONTROL MODULE (TYPE-A)]</b> .) (See <b>DTC TABLE [360°VIEW MONITOR CONTROL MODULE (TYPE-B)]</b> .)
		No	If the 360° view monitor system aiming is not completed correctly after performing the 360° view monitor system aiming again, replace the 360° view monitor control module. (See <b>360°VIEW MONITOR CONTROL MODULE REMOVAL/INSTALLATION</b> .)

#### Error code 11/12/13/15/16/17/18/19/1A/FF

Step	Inspection	Action	
1	<b>PERFORM 360° VIEW MONITOR SYSTEM AIMING</b> <ul style="list-style-type: none"> <li>Perform the 360° view monitor system aiming.</li> <li>Was the 360° view monitor system aiming procedure completed correctly?</li> </ul>	Yes	The 360° view monitor system aiming is completed. Perform the 360° view monitor system screen display verification procedure. (See <b>360° View Monitor System Screen Display Verification Procedure</b> .)
		No	<b>If error code 11/12/13/15/16/17/18/19/1A/FF is displayed</b> <ul style="list-style-type: none"> <li>Go to the next step.</li> </ul> <b>If code other than error code 11/12/13/15/16/17/18/19/1A/FF is displayed</b> <ul style="list-style-type: none"> <li>Go to the procedure for the displayed error code.</li> </ul>
2	<b>VERIFY DTCs</b> <ul style="list-style-type: none"> <li>Perform the DTC inspection. (See <b>DTC INSPECTION [360°VIEW MONITOR CONTROL MODULE (TYPE-A)]</b>.) (See <b>DTC INSPECTION [360°VIEW MONITOR CONTROL MODULE (TYPE-B)]</b>.)</li> <li>Is a DTC displayed?</li> </ul>	Yes	Go to the applicable DTC inspection. (See <b>DTC TABLE [360°VIEW MONITOR CONTROL MODULE (TYPE-A)]</b> .) (See <b>DTC TABLE [360°VIEW MONITOR CONTROL MODULE (TYPE-B)]</b> .)
		No	If the 360° view monitor system aiming is not completed correctly after performing the 360° view monitor system aiming again, replace the 360° view monitor control module. (See <b>360°VIEW MONITOR CONTROL MODULE REMOVAL/INSTALLATION</b> .)

#### Error code 14

Step	Inspection	Action	
1	<b>VERIFY POWER OUTER MIRROR FOLD/UNFOLD CONDITION</b> <ul style="list-style-type: none"> <li>Are the power outer mirrors unfolded?</li> </ul>	Yes	Go to the next step.
		No	Unfold the power outer mirrors, then go to the next step.