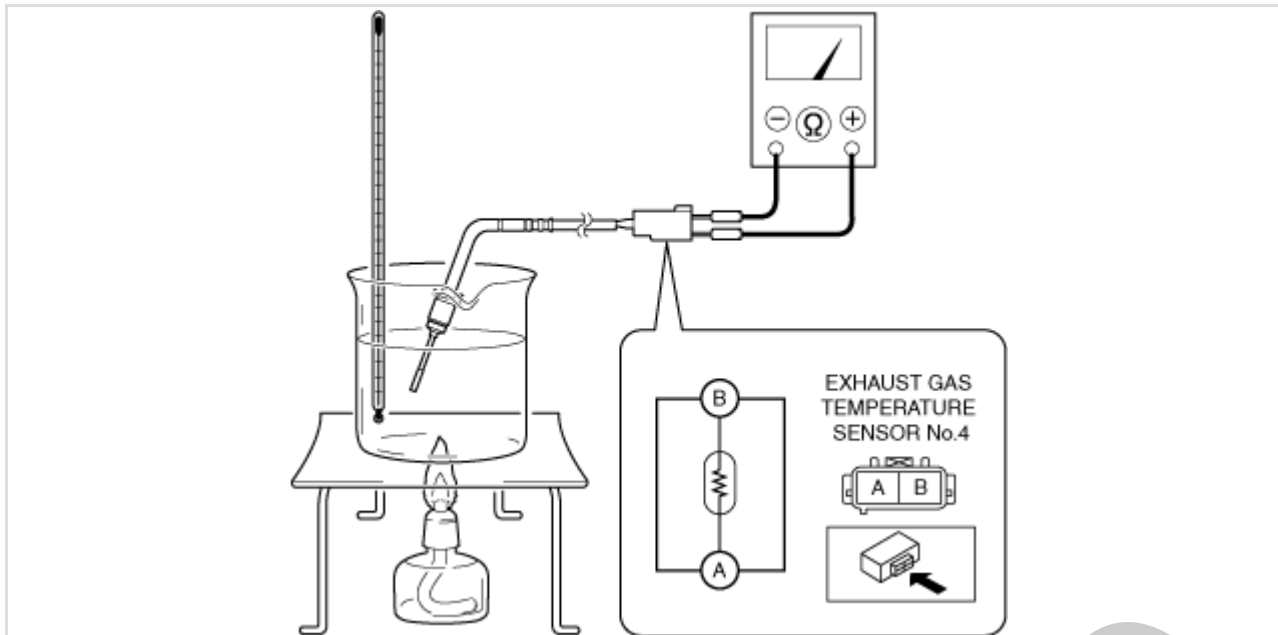


Your Ultimate Source for OEM Repair Manuals

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.

2010 MAZDA CX-7 OEM Service and Repair Workshop Manual

[Go to manual page](#)



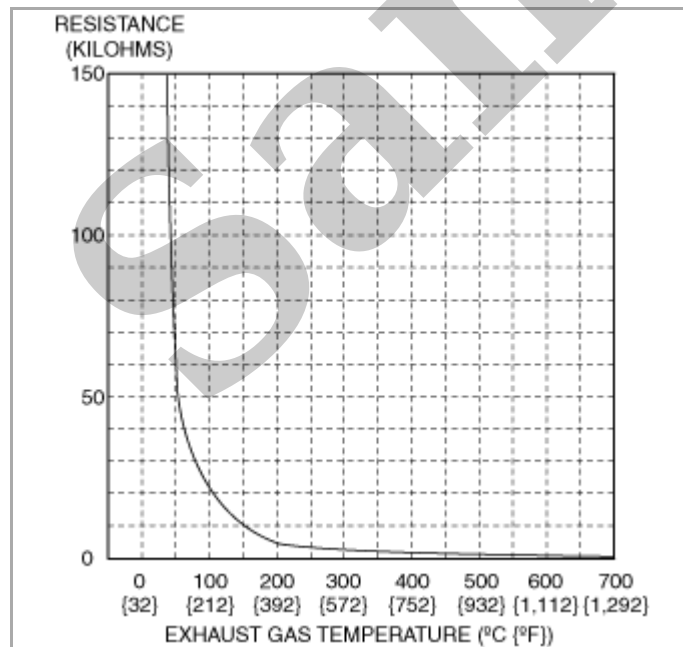
ac5uuw00008503

- If not as specified, replace the exhaust gas temperature sensor No.4. (See [EXHAUST GAS TEMPERATURE SENSOR REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\]](#).)

Resistance

Water temperature (°C {°F})	Resistance (Kilohms)
50 {122}	Approx. 53.27

Specification (Reference)



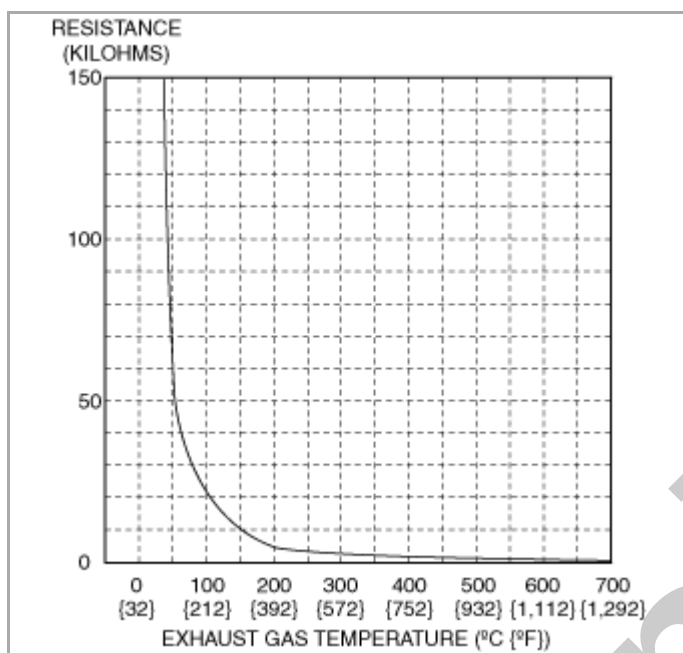
ac5uuw00008501

Exhaust Gas Temperature Sensor No.5

Warning

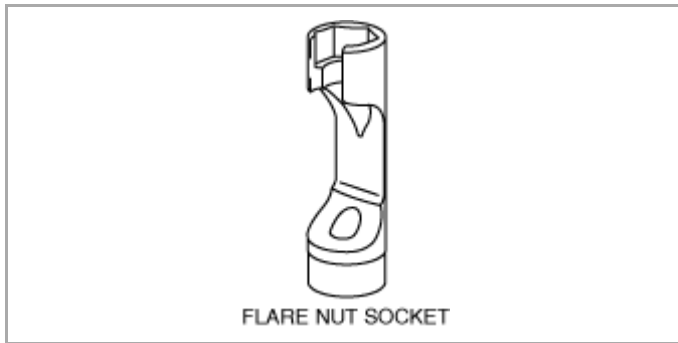
Ambient temperature (°C {°F})	Resistance (Kilohms)
50 {122}	42-68

Specification (Reference)



ac5uuw00008501

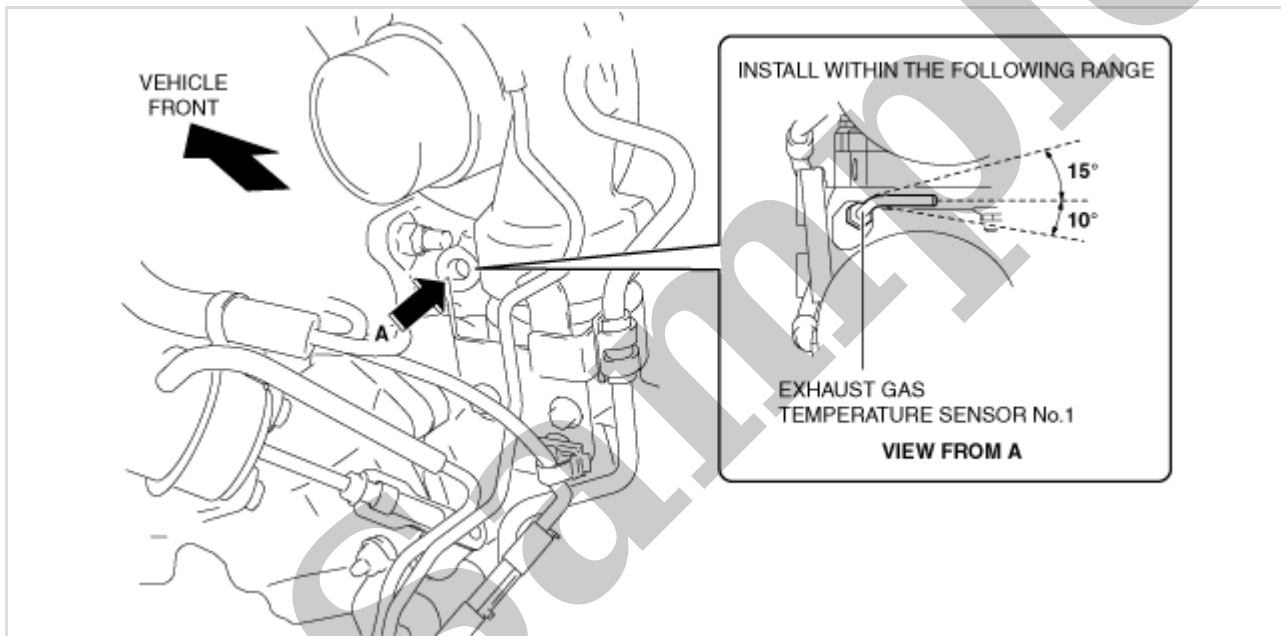
Sample



10. Install in the reverse order of removal.

Exhaust gas temperature sensor No.1 installation note

1. Install the exhaust gas temperature sensor No.1 shown in the figure.



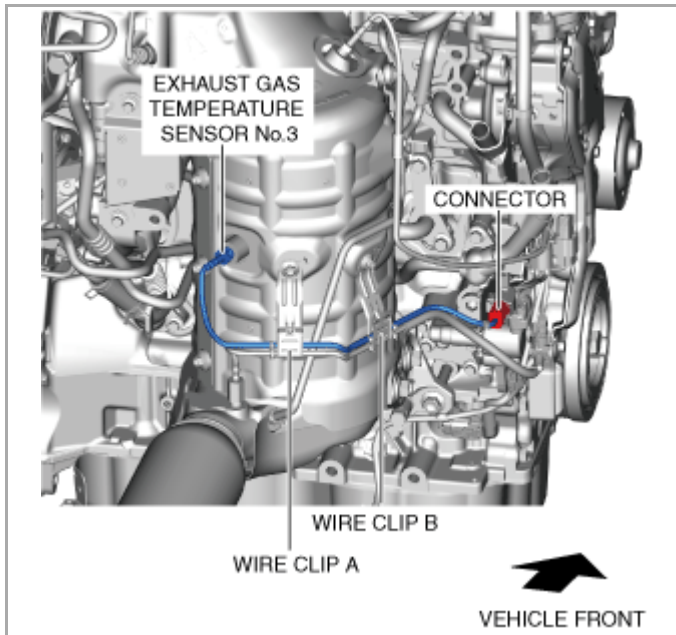
Exhaust Gas Temperature Sensor No.2

Warning

- A hot engine and exhaust system can cause severe burns. Turn off the engine and wait until they are cool before removing the exhaust system.

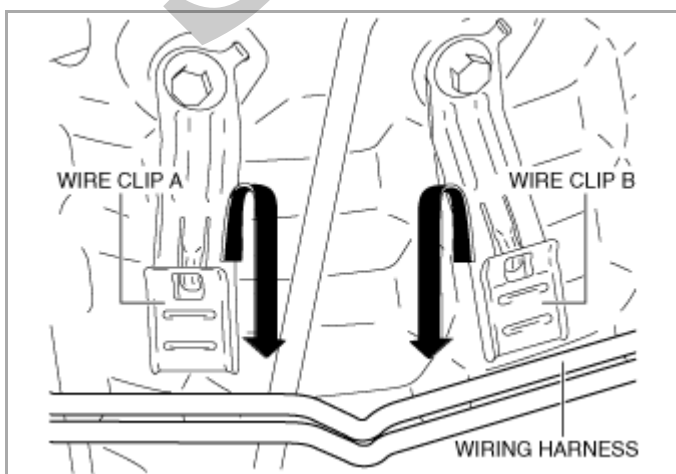
Caution

- Do not allow flammable objects such as the taping for bundling wiring harness to come into contact with the catalytic converter.
- Perform exhaust gas temperature sensor removal/installation only when inspection or replacement is required, such as when DTCs for the sensor are displayed, because it may cause exhaust gas leaks.
- If removal or installation/removal is performed, always verify that there is no exhaust gas leak after reinstallation.



ac5uuw00008522

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
2. Lift up the vehicle.
3. Remove the front under cover No.2. (See [FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.](#))
4. Remove the front splash shield (RH). (See [SPLASH SHIELD REMOVAL/INSTALLATION.](#))
5. Remove the Insulator. (2WD) (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
6. Disconnect the exhaust gas temperature sensor No.3 connector.
7. Remove the wiring harness from the wire clip A and B. (See [Assembly of wiring harness to wire clip note.](#))



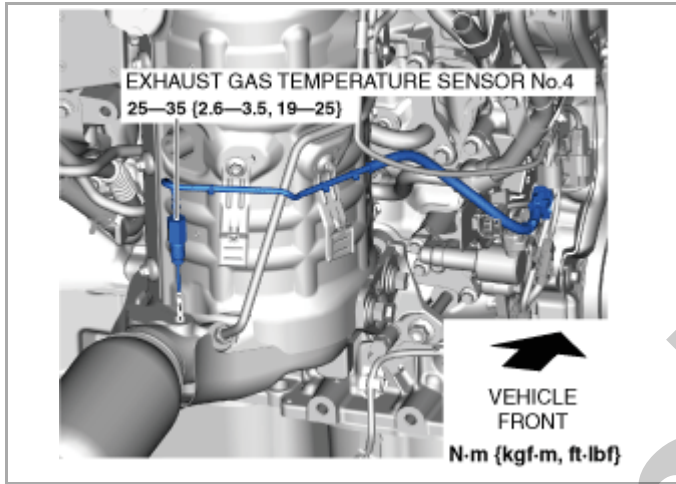
ac5uuw00008523

8. Remove the exhaust gas temperature sensor No.3.

7. Loosen the nuts (center bearing support) of the propeller shaft. (AWD) (See [PROPELLER SHAFT REMOVAL/INSTALLATION.](#))

8. Disconnect the propeller shaft on the front side and set the propeller shaft onto the front crossmember. (AWD) (See [PROPELLER SHAFT REMOVAL/INSTALLATION.](#))

9. Remove the exhaust gas temperature sensor No.4.

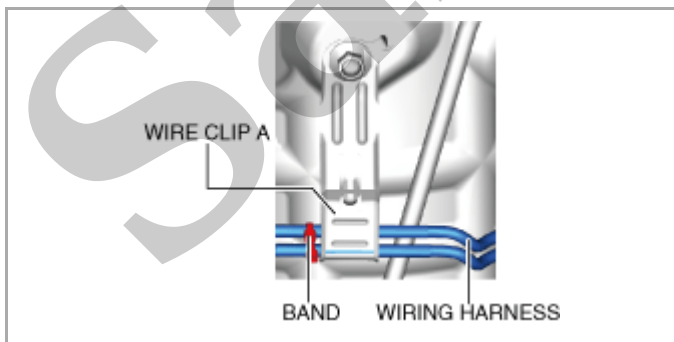


ac5uuw00008528

10. Install in the reverse order of removal.

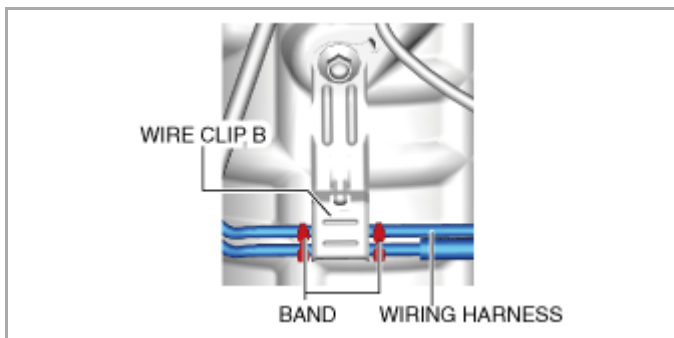
Assembly of wiring harness to wire clip note

- Secure the wiring harness to the wire clip A so that the band on the wiring harness is positioned to the left side of the wire clip A.

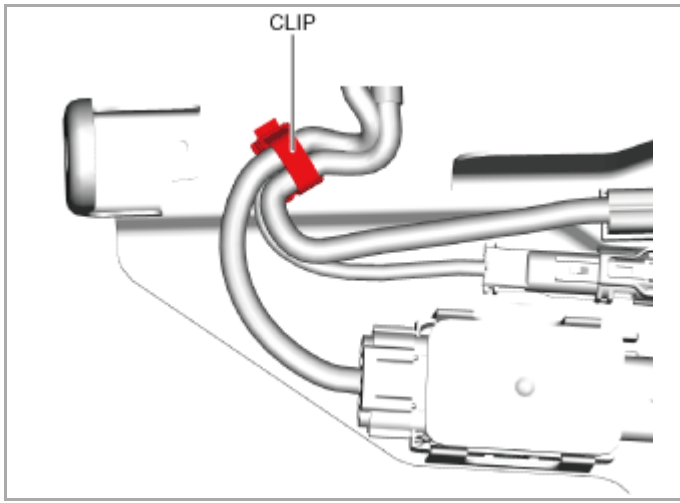


ac5uuw00008525

- Secure the wiring harness to the wire clip B so that the band on the wiring harness is positioned to the both sides of the wire clip B.

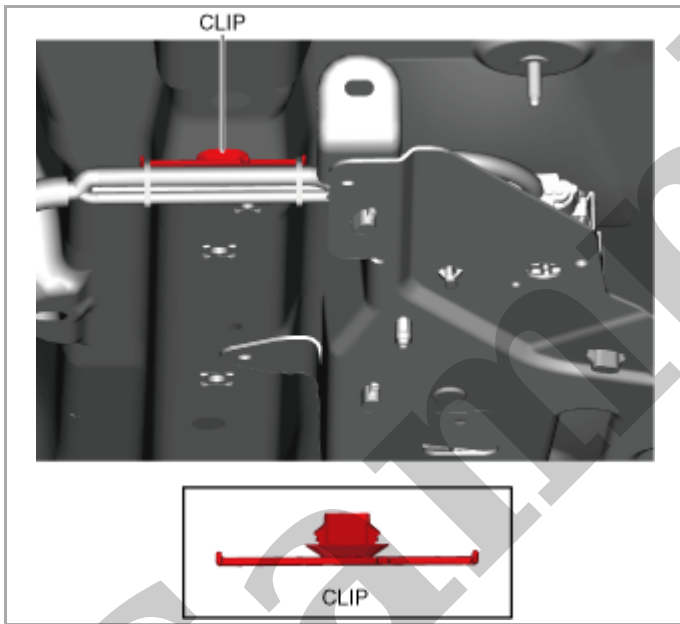


ac5uuw00008526



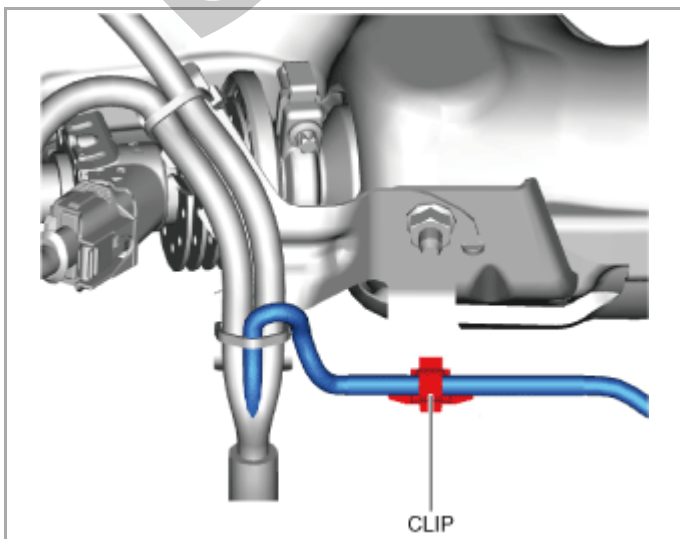
ac5uuw00008533

14.Remove the clip.



ac5uuw00008534

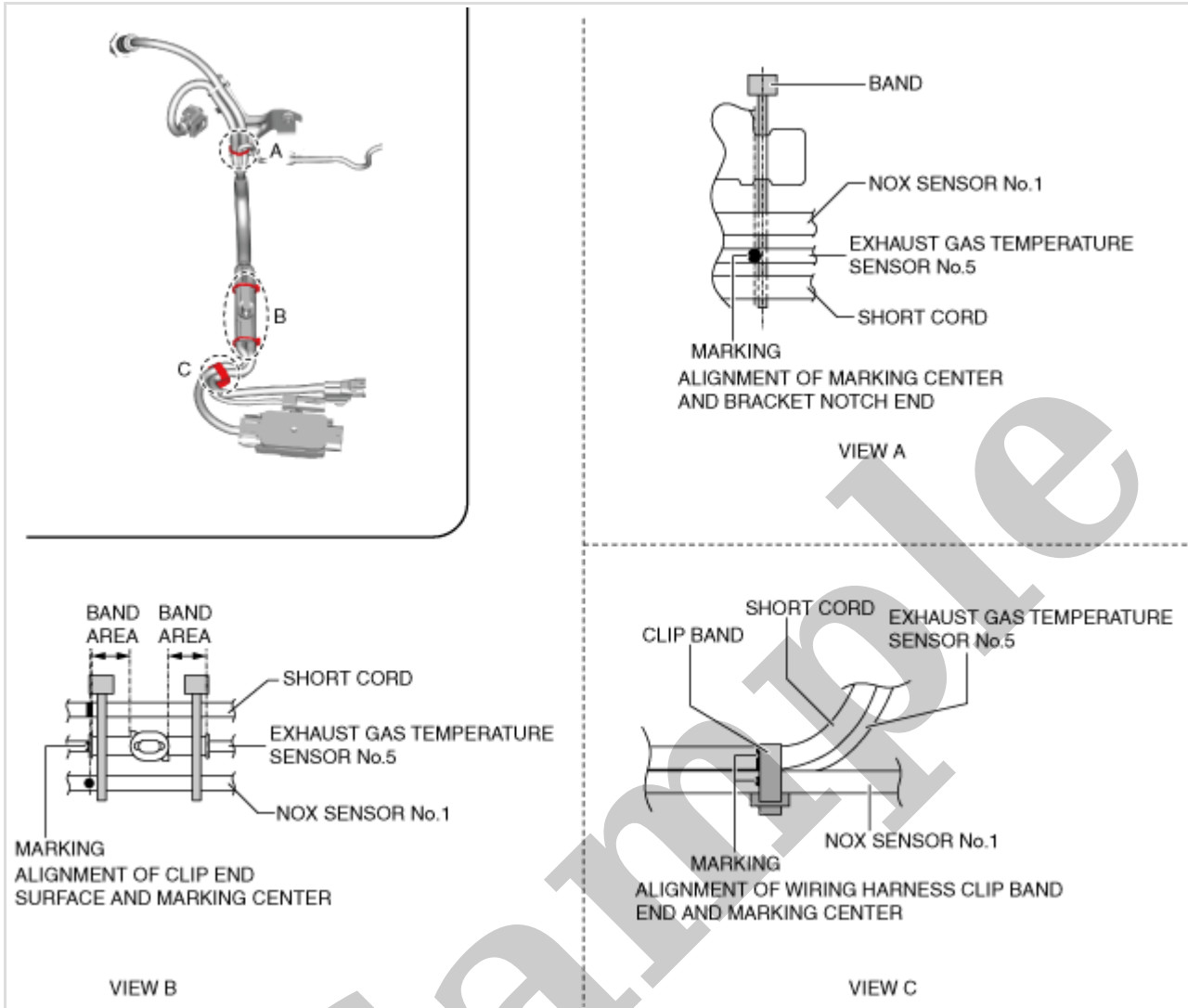
15.Remove the clip.



ac5uuw00008535

1. Install bands as shown in the figure.

2WD



ac5uuw00008542

AWD

EGR TEMPERATURE SENSOR INSPECTION [SKYACTIV-D 2.2]

SM2897855

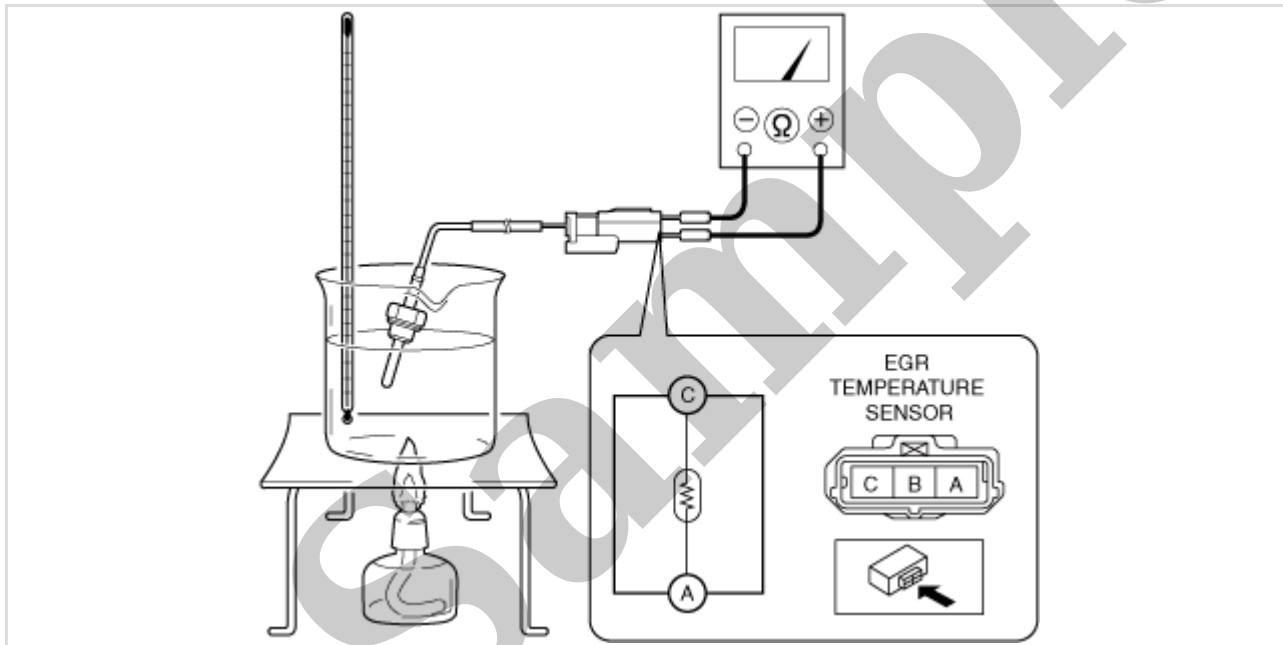
id0140z749990

Resistance Inspection

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

2. Remove the EGR temperature sensor. (See [EGR TEMPERATURE SENSOR INSPECTION \[SKYACTIV-D 2.2\].](#))

3. Place the detection part of the EGR temperature sensor in the water and while gradually increasing the water temperature, measure the resistance between EGR temperature sensor terminals A and C.



ac5uuw00008505

• If not as specified, replace the EGR temperature sensor. (See [EGR TEMPERATURE SENSOR INSPECTION \[SKYACTIV-D 2.2\].](#))

Specification (Reference)

Water temperature (°C {°F})	Resistance (Kilohms)
0 {32}	Approx. 15.00
50 {122}	Approx. 2.20
100 {212}	Approx. 0.508

DEF PUMP INITIALIZATION [SKYACTIV-D 2.2]

SM2897912

id0140z799810

1. Connect the M-MDS to the DLC-2.

2. After the vehicle is identified, select the following item from the initial screen of the M-MDS.

(1) Select the "Powertrain".

3. Then, select the items from the screen menu in the following order.

(1) Select the "Replacement of SCR system".

(2) Select the "Pump".

4. Perform the procedure according to the directions on the screen.

Sample