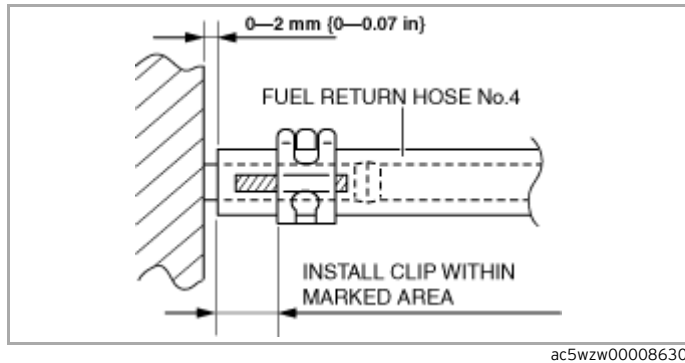


Your Ultimate Source for OEM Repair Manuals

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.

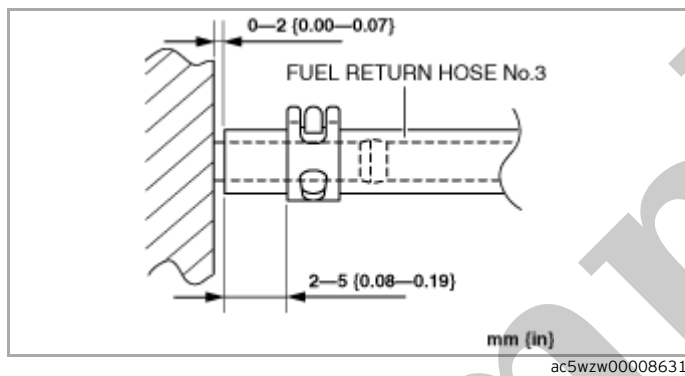
2008 MAZDA 3 / Axela Hatchback OEM Service and Repair Workshop Manual

[Go to manual page](#)



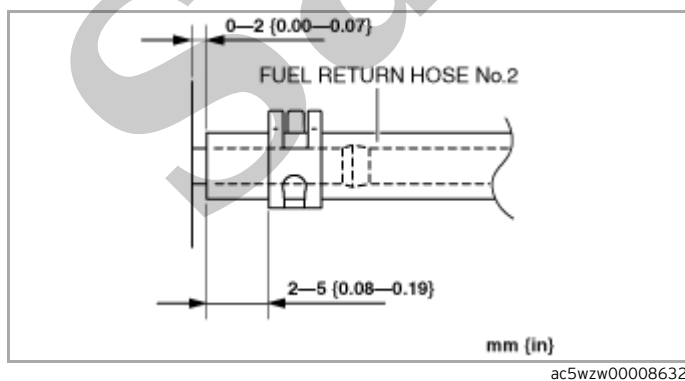
Fuel Return Hose No.3 Installation Note

1.Install fuel return hose No.3 as shown in the figure.



Fuel Return Hose No.2 Installation Note

1.Install fuel return hose No.2 as shown in the figure.



Fuel Main Hose and Fuel Return Hose No.1 Installation Note

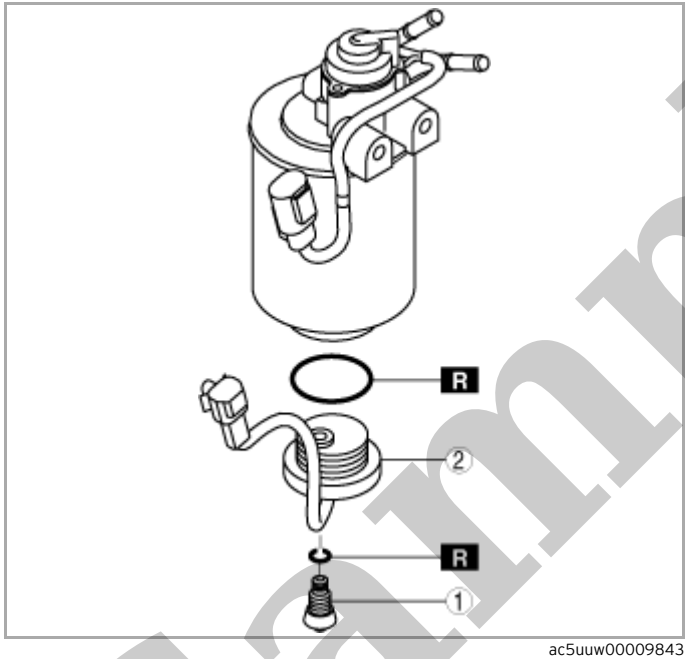
1.Install the fuel main hose and fuel return hose No.1 as shown in the figure.

Drain plug installation note

1.Tighten the drain plug enough to the fuel filter by hand.

Sedimentor Switch Removal/Installation

- 1.Remove the fuel filter. (See [FUEL FILTER REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- 2.Remove in the order indicated in the figure.



1	Drain plug (See Drain plug installation note.)
2	Sedimentor switch (See Sedimentor switch installation note.)

3.Install in the reverse order of removal.

Sedimentor switch installation note

1.Tighten the sedimentor switch enough to the fuel filter by hand.

Drain plug installation note

FUEL CHECK VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

SM2897504

id0114z770610

Note

- The fuel check valve cannot be removed as it is integrated with the lower case.

1.Remove the lower case. (See [LOWER CASE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\]](#).)

Sample

FUEL FEED VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

SM2897506

id0114z770630

Note

- The fuel feed valve cannot be removed as it is integrated with the lower case.

1.Remove the lower case. (See [LOWER CASE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\]](#).)

Sample

FUEL FILTER REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

SM2897510

id0114z780000

Replacement Part

Fuel main hose No.1	Fuel main hose No.2
Quantity: 1	Quantity: 1
Location of use: Fuel filter	Location of use: Fuel filter

Warning

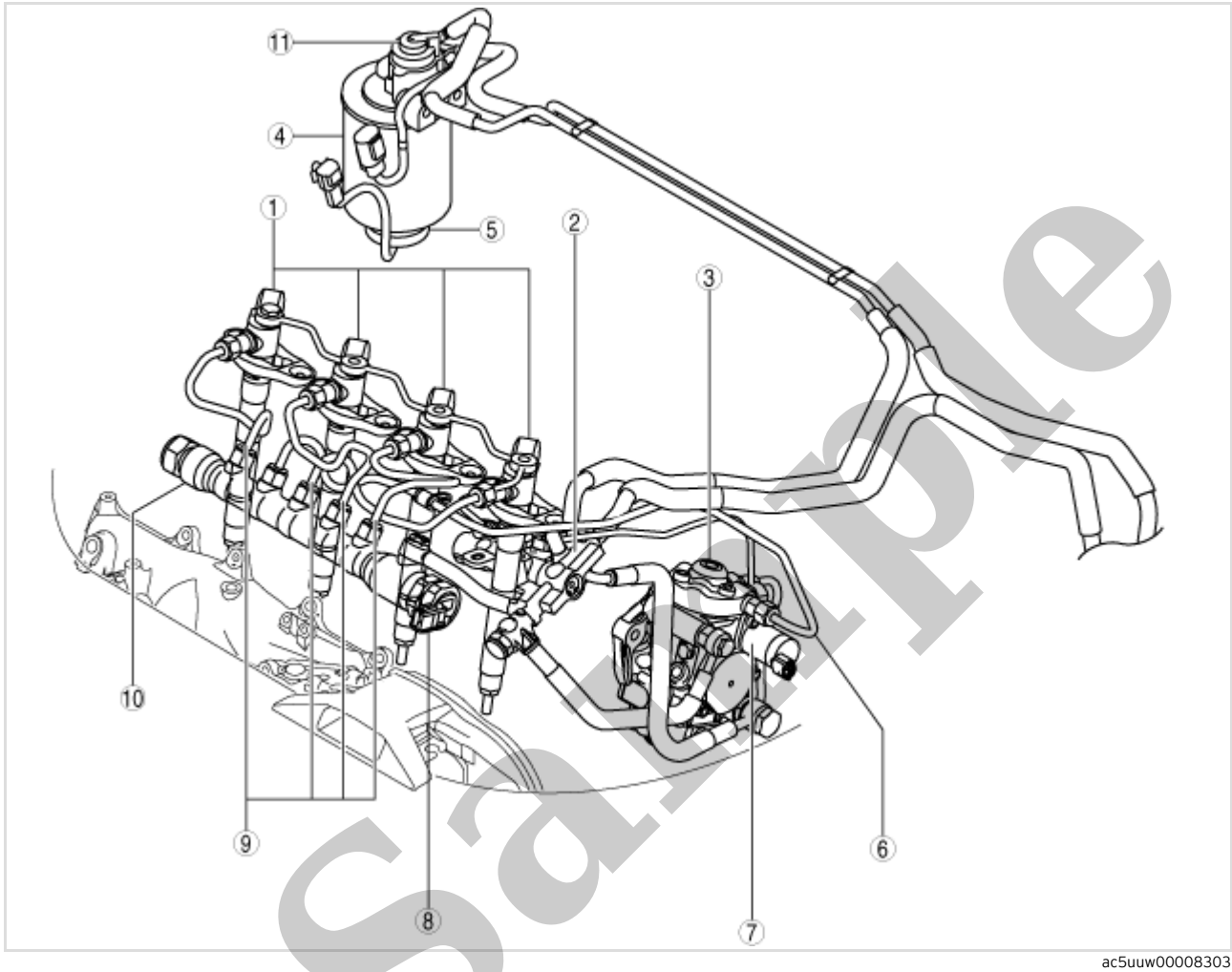
- Highly pressurized fuel may spray out if the fuel line is cut. Due to the following dangers occurring with a fuel spray, always complete the “Fuel Line Safety Procedure” to prevent the fuel from spraying.
 - Fuel may cause irritation if it comes in contact with skin and eyes.
 - If fuel ignites and causes a fire, it may lead to serious injury or death, and damage to property and facilities.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before draining fuel, make sure to discharge static electricity by touching the vehicle body.

Caution

- If parts are exposed to the fuel, their function may be decreased or a fire may occur. Spread a rag to absorb any leaked fuel.
- If fuel does not pass through the fuel filter, it could cause a fuel system malfunction. Therefore, do not install the fuel hoses (main and return side) in reverse. Always refer to the “AFTER SERVICE PRECAUTION” before installing the fuel hose, and execute the “Fuel Hose Installation Procedure”.

- 1.Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Complete the “BEFORE SERVICE PRECAUTION”. (See [BEFORE SERVICE PRECAUTION \[SKYACTIV-D 2.2\].](#))
- 3.Remove the engine cover. (See [ENGINE COVER REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- 4.Remove in the order shown in the figure.

Engine compartment side



ac5uuw00008303

1	Fuel injector (See FUEL INJECTOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See FUEL INJECTOR INSPECTION [SKYACTIV-D 2.2].)
2	Lower case (See LOWER CASE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See FUEL CHECK VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See FUEL CHECK VALVE INSPECTION [SKYACTIV-D 2.2].) (See FUEL FEED VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See FUEL FEED VALVE INSPECTION [SKYACTIV-D 2.2].)
3	Supply pump (See SUPPLY PUMP REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See SUPPLY PUMP INSPECTION [SKYACTIV-D 2.2].)
4	Fuel filter (See FUEL FILTER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) (See FUEL FILTER INSPECTION [SKYACTIV-D 2.2].)
5	Sedimentor switch (See SEDIMENTOR SWITCH INSPECTION [SKYACTIV-D 2.2].)
6	Injection pipe (supply pump side) (See INJECTION PIPE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)

FUEL INJECTOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2]


SM2897512

id0114z780060

Special Service Tool (SST)

1:49 0000 203
2:-

Injector bore cleaning kit



Replacement Part

Clip	Nut	Washer
Quantity: 5	Quantity: 8	Quantity: 4
Location of use: Fuel return pipe (fuel injector side)	Location of use: Fuel injector bracket	Location of use: Fuel injector
Injection pipe (fuel injector side)		
Quantity: 4	-	-
Location of use: Fuel injector		

Warning

- Highly pressurized fuel may spray out if the fuel line is cut. Due to the following dangers occurring with a fuel spray, always complete the “Fuel Line Safety Procedure” to prevent the fuel from spraying.
 - Fuel may cause irritation if it comes in contact with skin and eyes.
 - If fuel ignites and causes a fire, it may lead to serious injury or death, and damage to property and facilities.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before draining fuel, make sure to discharge static electricity by touching the vehicle body.

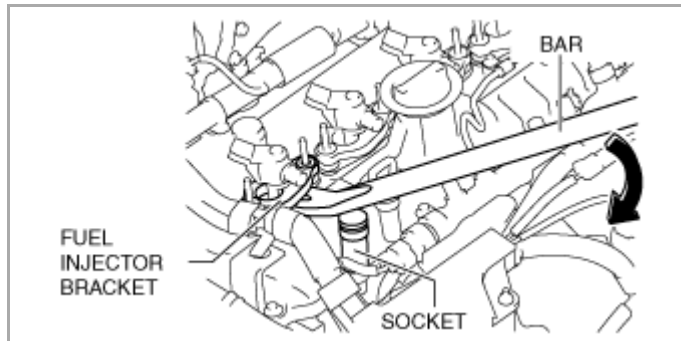
Caution

- If parts are exposed to the fuel, their function may be decreased or a fire may occur. Spread a rag to absorb any leaked fuel.
- Do not let foreign matter get into the injection pipe to prevent clogging. In addition, always install the injection pipe to the specified tightening torque.
- If a hand or tool touches a fuel injector terminal or fuel injector connector terminal, the fuel injector might be damaged. To prevent damage to a fuel injector, do not touch the terminals.
- If high-voltage generating parts or components and electronic devices come near a fuel injector, the fuel injector could be damaged. To prevent damage to a fuel injector, always keep high-voltage generating parts or components and electronic devices away from it.

Note

- If the fuel injector is replaced, perform the “Operation After Replacing Fuel Injector” procedure.

Operation After Replacing Fuel Injector



ac5wzw00008450

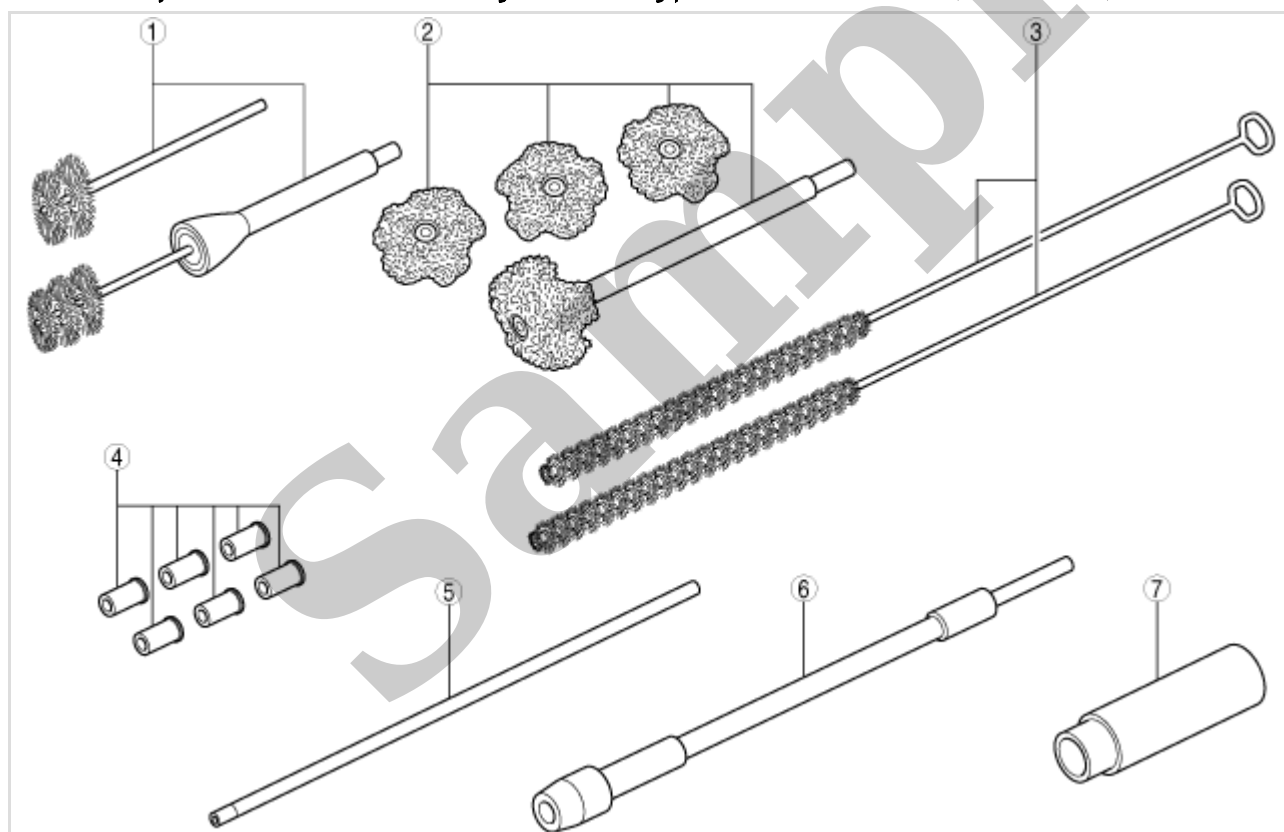
Note

- Set the bar on the socket with the socket as the fulcrum point.

Fuel injector installation note

Note

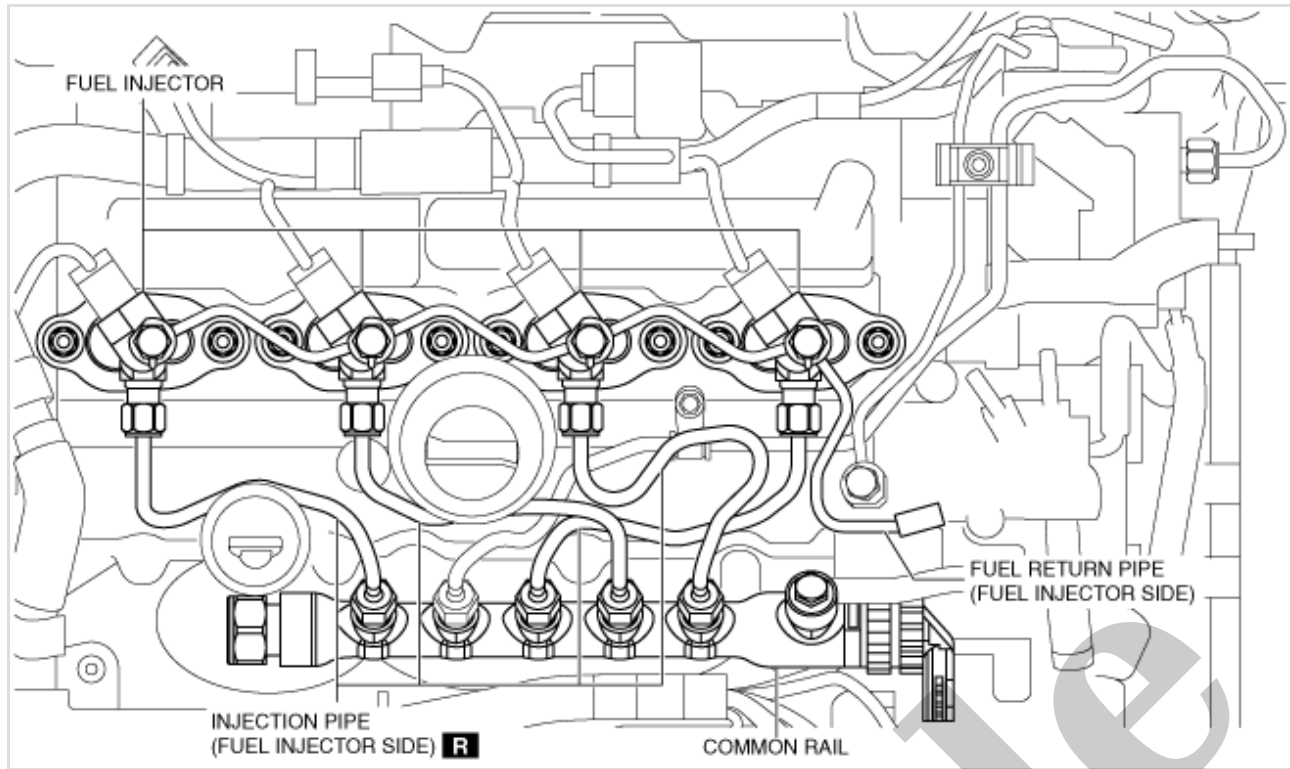
- Clean the injector hole and the bore using the following procedure and the SSTs (49 0000 203) shown in the figure.



am6xuw00012307

1	Round wire brush
2	Fleece brush
3	Wire brush
4	Blanking plug
5	Extension bar
6	Flexible shaft
7	Holder

1. Install the blanking plug to the end of the extension bar.



12. Loosen the common rail.

13. Temporarily tighten the new injection pipe (fuel injector side).

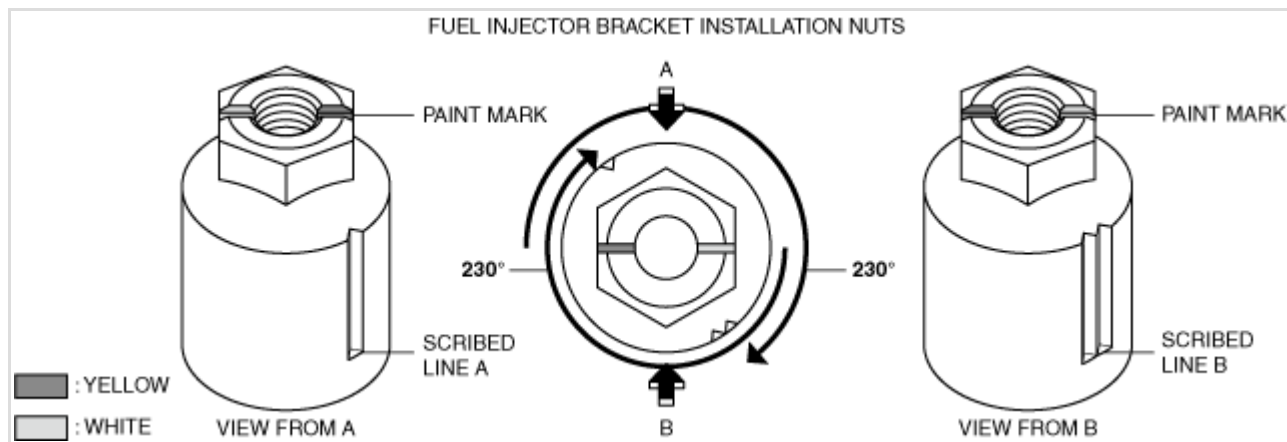
14. Tighten the new fuel injector bracket installation nuts using the following procedure.

Caution

- If the fuel injector bracket installation nuts are tightened incorrectly, it could damage the fuel injector bracket and cause gas leakage due to incorrect installation. To prevent this, tighten the fuel injector bracket installation nuts using the following procedure.

Note

- There is a scribe line engraved on the fuel injector bracket installation nut for tightening it to the specified angle. (The angles between the white paint mark and scribe line A, and between the yellow paint mark and scribe line B are both 230 degrees as shown in the figure)



- Tighten only the fuel injector bracket installation nuts on the engine rear side to the specified angle.