

Warning

- Fuel is highly flammable and dangerous. Fuel line spills and leakage can cause serious injury or death, and damage to equipment. If fuel comes into contact with the skin and eyes it will cause irritation. To prevent this, always perform the “Fuel Line Safety Procedure” referring to the “BEFORE REPAIR PROCEDURE”.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before servicing the fuel system, make sure to discharge static electricity by touching a vehicle.

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. Always tighten the injection pipe to the specified torque.
- To prevent fuel leakage, when removing/installing the supply pump, always follow the procedure in the Workshop Manual and perform the procedure.

Note

- If the supply pump is replaced, perform the supply pump data reset procedure.

Operation After Replacing Supply Pump

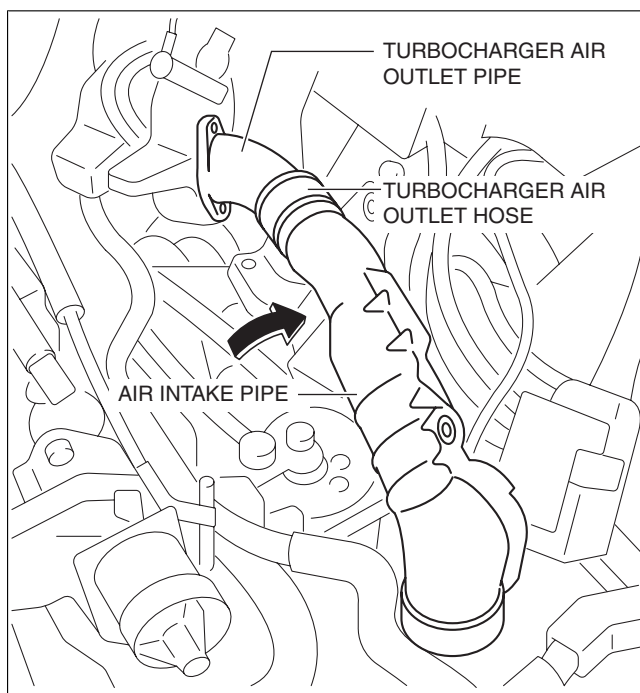
1. If the supply pump is replaced, perform the following procedure.

STEP	ACTION	PAGE/CONDITION
1	Perform supply pump data reset procedure.	(See SUPPLY PUMP DATA RESET [SKYACTIV-D 2.2].)
2	Switch the ignition off.	—
3	Wait for 20 s.	—
4	Switch the ignition ON (engine off).	—
5	Perform KOEO self-test procedure.	(See KOEO/KOER SELF TEST [SKYACTIV-D 2.2].)
6	Start the engine.	—
7	Verify that the check engine light does not illuminate.	—
8	Maintain the idle status for 30 s with the following condition met. • ECT: 60—100 °C {140—212 °F}	—
9	Perform KOER self-test procedure.	(See KOEO/KOER SELF TEST [SKYACTIV-D 2.2].)
10	Switch the ignition off.	—

Supply Pump Removal/Installation

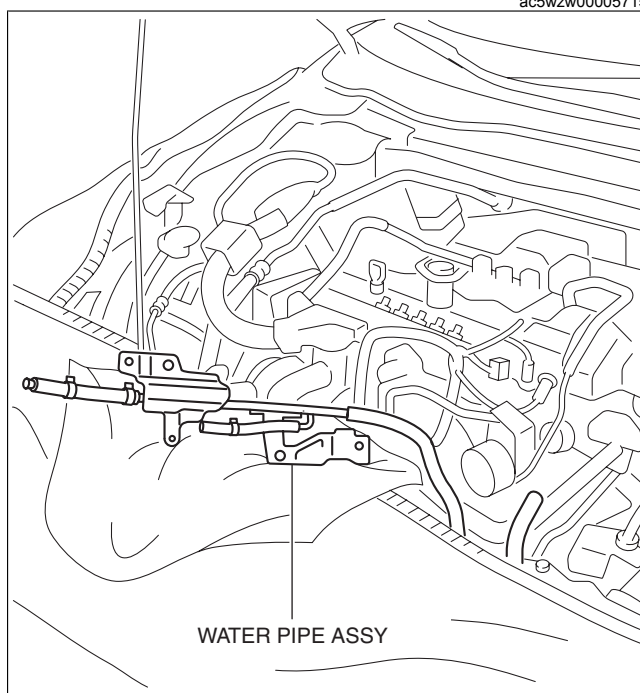
1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
2. Perform the “Fuel Line Safety Procedure” referring to the “BEFORE SERVICE PRECAUTION”. (See BEFORE SERVICE PRECAUTION [SKYACTIV-D 2.2].)
3. Remove the engine cover. (See ENGINE COVER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
4. Remove the air cleaner. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
5. Remove the battery and the battery tray. (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
6. Remove the following parts as a single unit: (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
 - Air hose
 - Air inlet pipe
 - Breather hose
 - Turbocharger air inlet hose
 - Blow-by heater

7. Set the turbocharger air outlet pipe, turbocharger air outlet hose, and air intake pipe aside as a single unit as shown in the figure. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
8. Drain the engine coolant. (See ENGINE COOLANT REPLACEMENT [SKYACTIV-D 2.2].)



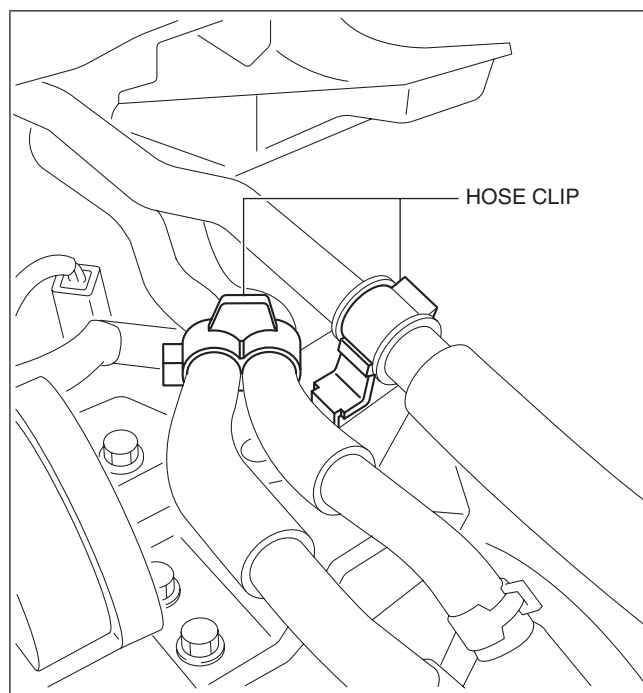
ac5wzw00005715

9. Set the water pipe assy aside as shown in the figure.



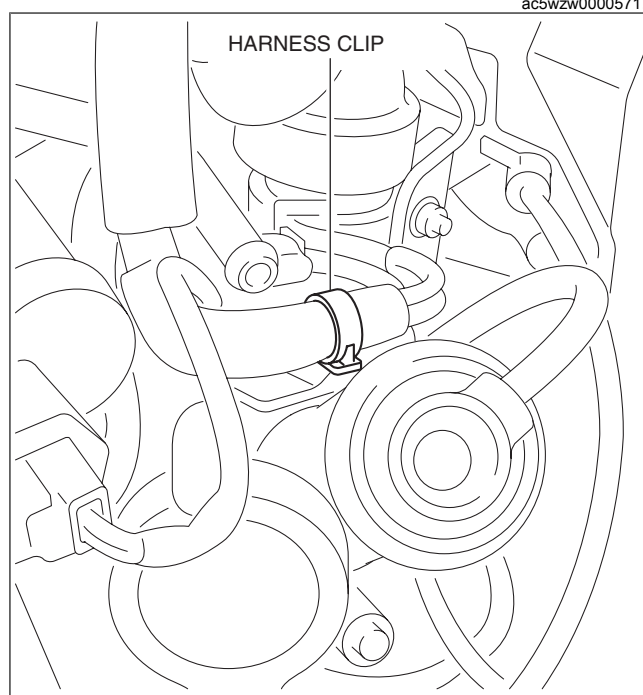
ac5wzw00005716

10. Detach the hose clip shown in the figure.

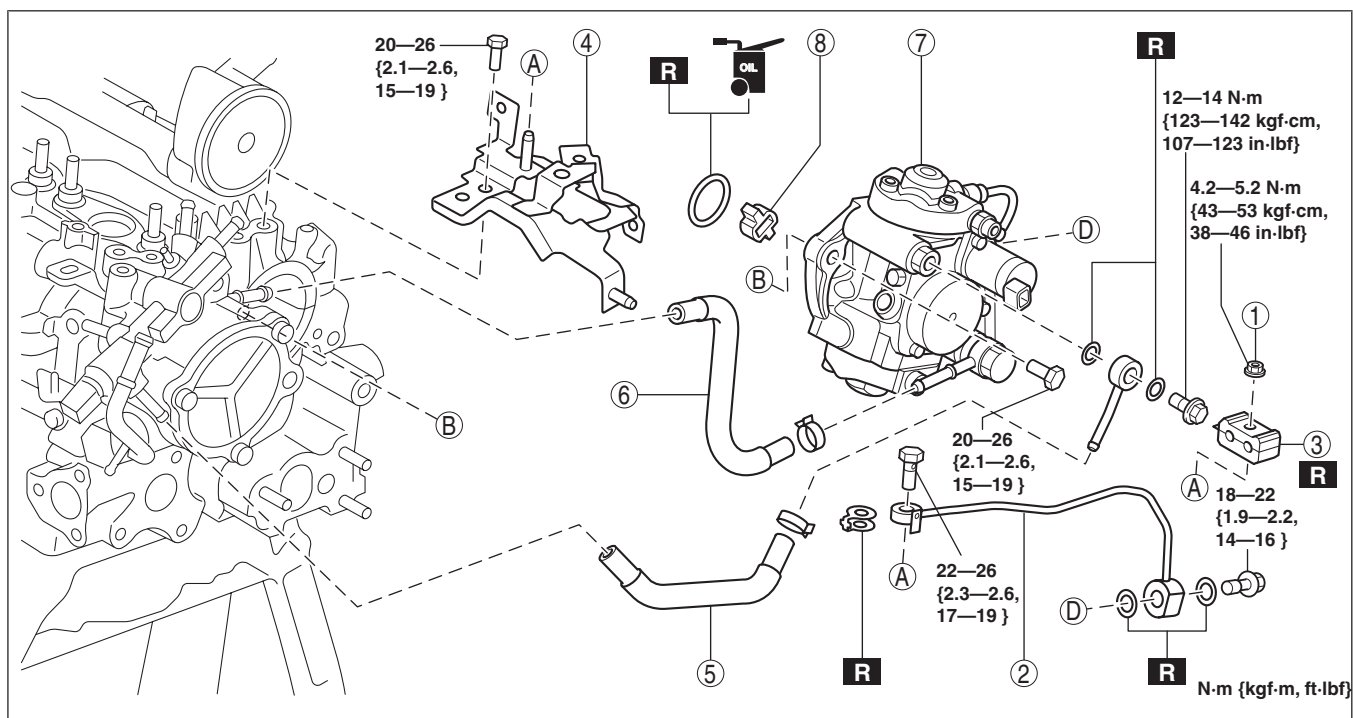


ac5wzw00005717

11. Detach the wiring harness clips shown in the figure.
12. Remove in the order shown in the figure.
13. Install in the reverse order of removal.
14. Perform the fuel hose installation procedure and fuel line air bleeding referring to the "AFTER SERVICE PRECAUTION". (See AFTER SERVICE PRECAUTION [SKYACTIV-D 2.2].)



ac5wzw00005718



ac5wzw00005719

1	Clip installation nut
2	Fuel feed pipe (See Fuel feed pipe removal note.)
3	Clip (See Clip removal note.)
4	Bracket
5	Fuel return hose (See Fuel return hose installation note.)

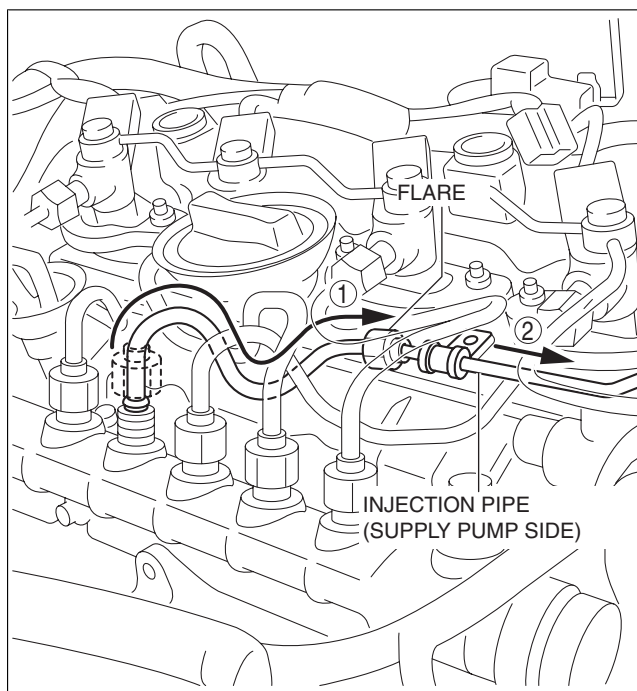
6	Fuel main hose (See Fuel main hose installation note.)
7	Supply pump (See Supply pump removal note.) (See Supply pump installation note.) (See Operation After Replacing Supply Pump.)
8	Spacer

Fuel feed pipe removal note

1. Set the harness protector connected to a bracket.
2. Remove the fuel feed pipe.

Clip removal note

1. Remove the injection pipe (supply pump side) as shown in the figure. (See INJECTION PIPE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
(1) Move the flared section.
(2) Pull out the injection pipe (supply pump side).
2. Remove the clip.



ac5wzw00005720

Supply pump removal note

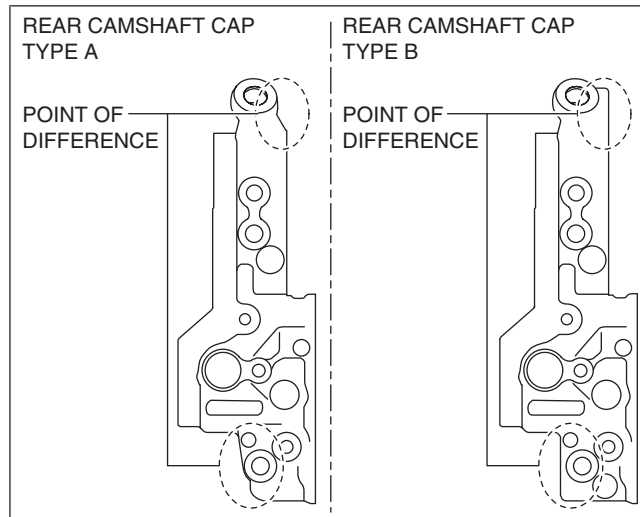
1. Remove the supply pump and the suction control valve as a single unit.
2. Remove the suction control valve from a supply pump.

Supply pump installation note

1. If the rear camshaft cap is type A, apply silicone sealant (TB1217D) to the contact surface of the camshaft cap and the cylinder head.

Caution

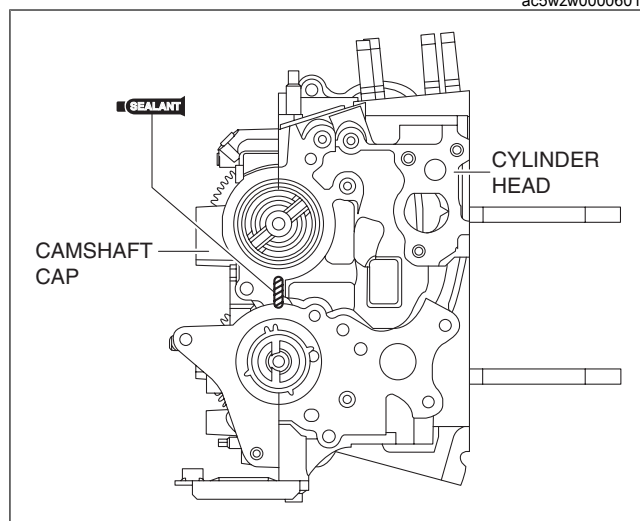
- To prevent silicone sealant from hardening, adhere the supply pump to the cylinder head within 10 min after applying silicone sealant. Tighten the installation bolts completely soon after adhering.



ac5wzw00006019

Bead thickness

3—7 mm {0.12—0.27 in}

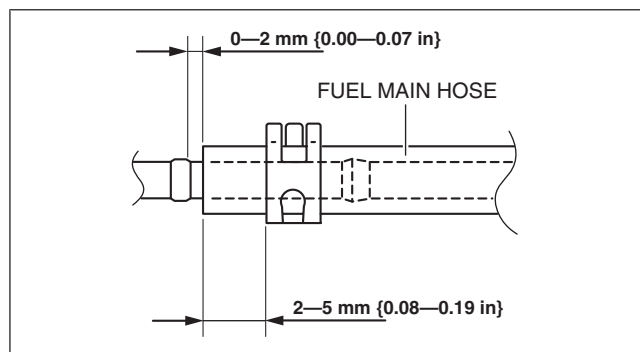


ac5wzw00005833

Fuel main hose installation note

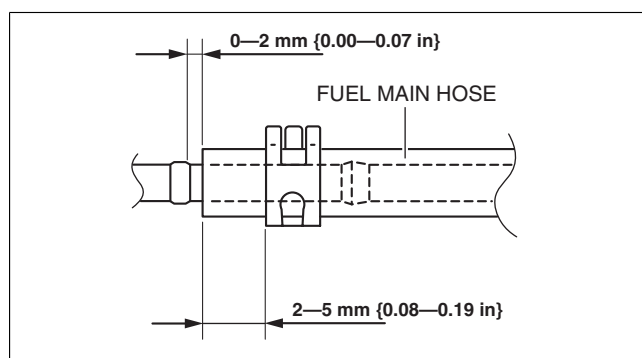
1. Install fuel main hose as shown in the figure.

Supply pump side



ac5wzw00005721

Lower case side

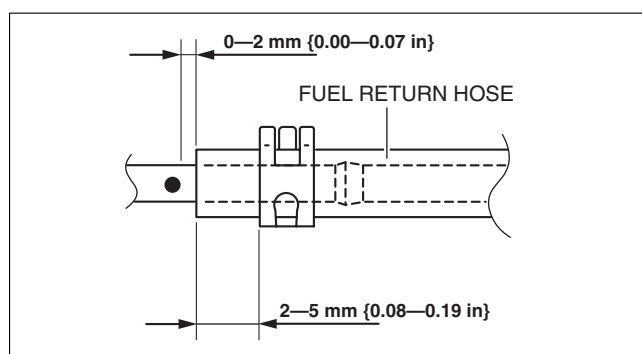


ac5wzw00005721

Fuel return hose installation note

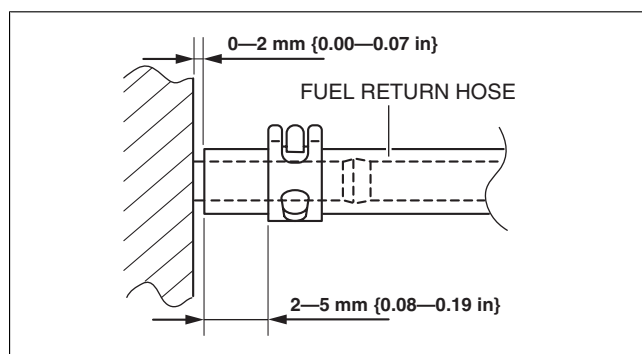
1. Install fuel return hose as shown in the figure.

Supply pump side



ac5wzw00005722

Lower case side



ac5wzw00005723