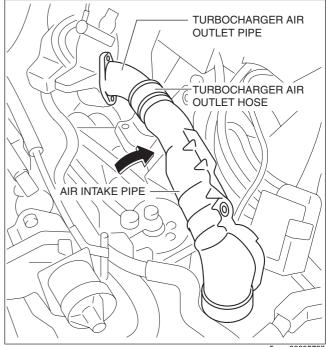
### EGR COOLER BYPASS VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

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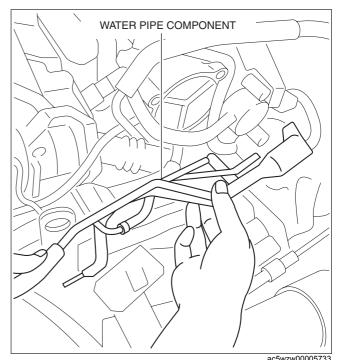
#### Note

- If the EGR cooler bypass valve is replaced, perform the EGR initialization procedure.
- 1. Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
- 2. Remove the engine cover. (See ENGINE COVER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 3. Remove the air cleaner. (See INTAKE-AIR SYSTEM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 4. Remove the battery and the battery tray. (See BATTERY REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 5. 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
- 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].)
- 7. Drain the engine coolant. (See ENGINE COOLANT REPLACEMENT [SKYACTIV-D 2.2].)



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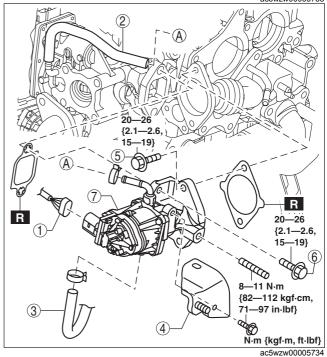
- 8. Set the water pipe component aside as shown in the figure.
- 9. Remove the EGR pipe (EGR valve side). (See EGR PIPE REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- Set the EGR cooler out of the way. (See EGR COOLER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)



11. Remove in the order shown in the figure.

1	EGR cooler bypass valve connector
2	Water hose No.1
	(See Water Hose No.1 Installation Note.)
3	Water hose No.2
	(See Water hose No.2 Removal Note.)
	(See Water Hose No.2 Installation Note.)
4	Wiring harness bracket
5	EGR cooler bypass valve installation bolt No.1
	(See EGR Cooler Bypass Valve Installation Bolt
	Installation Note.)
6	EGR cooler bypass valve installation bolt No.2
	(See EGR Cooler Bypass Valve Installation Bolt
	Installation Note.)
7	EGR cooler bypass valve

12. Install in the reverse order of removal.



### Water hose No.2 Removal Note

- Remove the coolant reserve tank. (See COOLANT RESERVE TANK REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 2. Remove the water hose No.2.

### **EGR Cooler Bypass Valve Installation Bolt Installation Note**

- 1. Temporarily tighten the bolt until the flanged of the retaining bolt No.1 and No.2 of the EGR pipe (of the EGR cooler bypass valve) are completely seated.
- 2. Tighten the EGR cooler bypass valve installation bolt No.2.

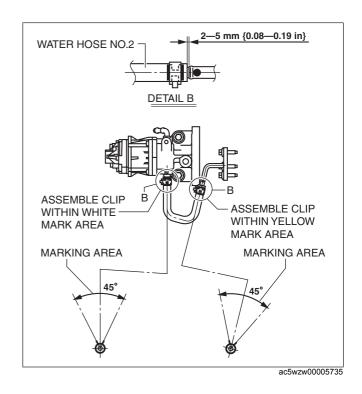
## Tightening torque 20—26 N·m {2.1—2.6 kgf·m, 15—19 ft·lbf}

3. Tighten the EGR cooler bypass valve installation bolt No.1.

# Tightening torque 20—26 N·m {2.1—2.6 kgf·m, 15—19 ft·lbf}

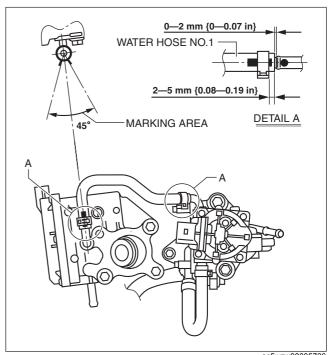
### Water Hose No.2 Installation Note

1. Install water hose No.2 as shown in the figure.



### **Water Hose No.1 Installation Note**

1. Install water hose No.1 as shown in the figure.



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