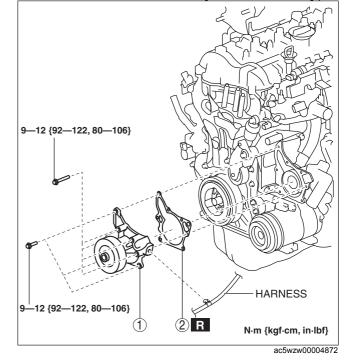
#### Warning

- Never remove the cooling system cap or loosen the radiator drain plug while the engine is running, or when the engine and radiator are hot. Scalding engine coolant and steam may shoot out and cause serious injury. It may also damage the engine and cooling system.
- Turn off the engine and wait until it is cool. Even then, be very careful when removing the cap. Wrap a thick cloth around it and slowly turn it counterclockwise to the first stop. Step back while the pressure escapes.
- When you are sure all the pressure is gone, press down on the cap using the cloth, turn it, and remove it.

#### Caution

- Be careful not to damage the exterior circumference surface of the water pump pulley when using tools, otherwise it will cause wear, breakage, abnormal noise of the drive belt, damage to the pulley, and rust.
- Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)
- 2. Remove the front under cover No.2. (See FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.)
- 3. Remove the splash shield (RH). (See SPLASH SHIELD REMOVAL/INSTALLATION.)
- 4. Remove the drive belt. (See DRIVE BELT REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 5. Remove the engine cover. (See ENGINE COVER REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 6. Remove the generator. (See GENERATOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)
- 7. Drain the engine coolant. (See ENGINE COOLANT REPLACEMENT [SKYACTIV-D 2.2].)
- 8. Remove in the order indicated in the table.
- 9. Install in the reverse order of removal.
- 10. Refill the engine coolant. (See ENGINE COOLANT REPLACEMENT [SKYACTIV-D 2.2].)
- 11. Inspect for engine coolant leakage. (See ENGINE COOLANT LEAKAGE INSPECTION [SKYACTIV-D 2.2].)

1	Water pump component
	(See Water Pump Component Removal Note.)
	(See Water Pump Component Installation Note.)
2	Gasket



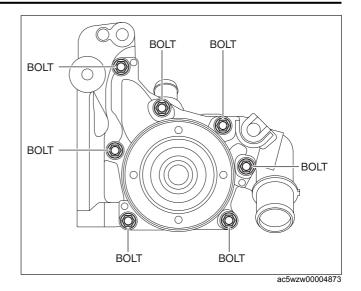
## **Water Pump Component Removal Note**

#### Caution

 Be careful not to damage the exterior circumference surface of the water pump pulley when using tools, otherwise it will cause wear, breakage, abnormal noise of the drive belt, damage to the pulley, and rust. 1. Slightly loosen the seven water pump component bolts shown in the figure and collect the draining engine coolant into a container.

## Caution

 Do not remove the water pump component completely at this time because a small amount of the engine coolant remaining in the engine will drain out.

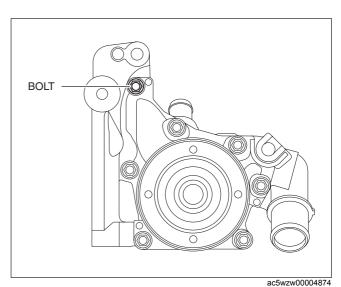


# **Water Pump Component Installation Note**

### Caution

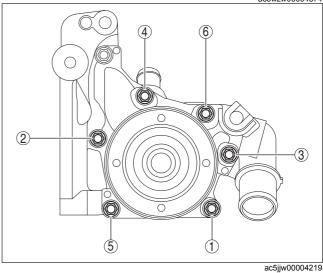
- Be careful not to damage the exterior circumference surface of the water pump pulley when using tools, otherwise it will cause wear, breakage, abnormal noise of the drive belt, damage to the pulley, and rust.
- 1. Install the water pump using the following procedure:

  (1) Tomporarily tighten the belts shown in the
  - (1) Temporarily tighten the bolts shown in the figure.



(2) Tighten the bolts in the order shown in the figure.

Tightening torque 9—12 N⋅m {92—122 kgf⋅cm, 80—106 in⋅lbf}



(3) Finally, tighten the bolt shown in the figure to the specified torque.

Tightening torque 9—12 N·m {92—122 kgf·cm, 80—106 in·lbf}

