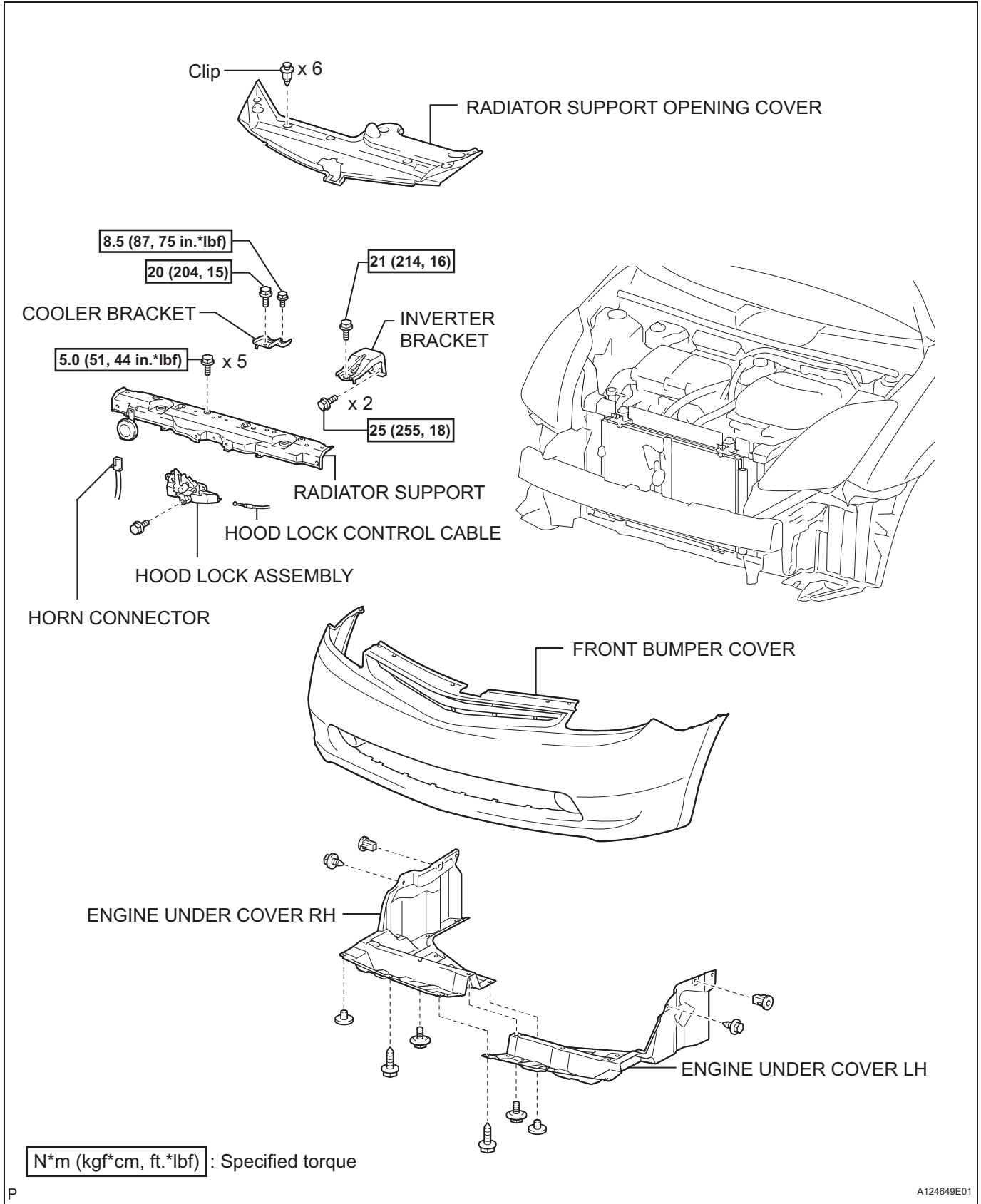
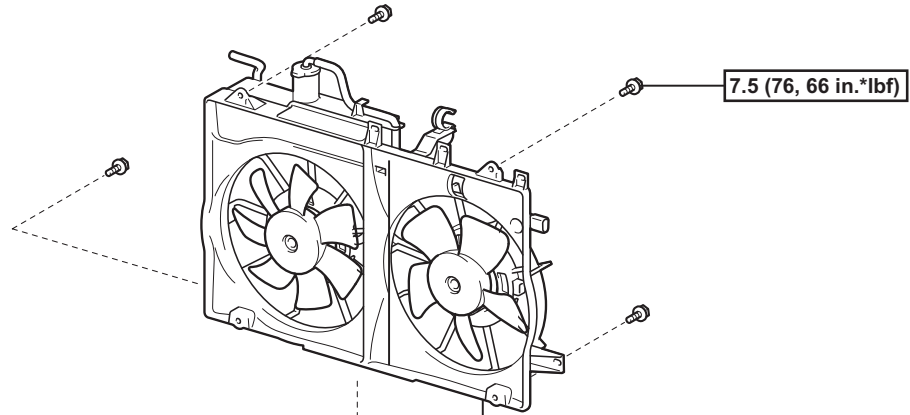


# RADIATOR COMPONENTS



CO



FAN ASSEMBLY WITH MOTOR

5.0 (51, 44 in.\*lbf)

RADIATOR SUPPORT UPPER RH

5.0 (51, 44 in.\*lbf)

RADIATOR SUPPORT UPPER LH

NO. 2 INVERTER COOLING HOSE

WIRE HARNESS

FAN MOTOR CONNECTOR

RADIATOR INLET HOSE

FAN CONNECTOR

RADIATOR OUTLET HOSE

NO. 1 INVERTER COOLING HOSE

TEMPERATURE SWITCH CONNECTOR

HOSE CLAMP

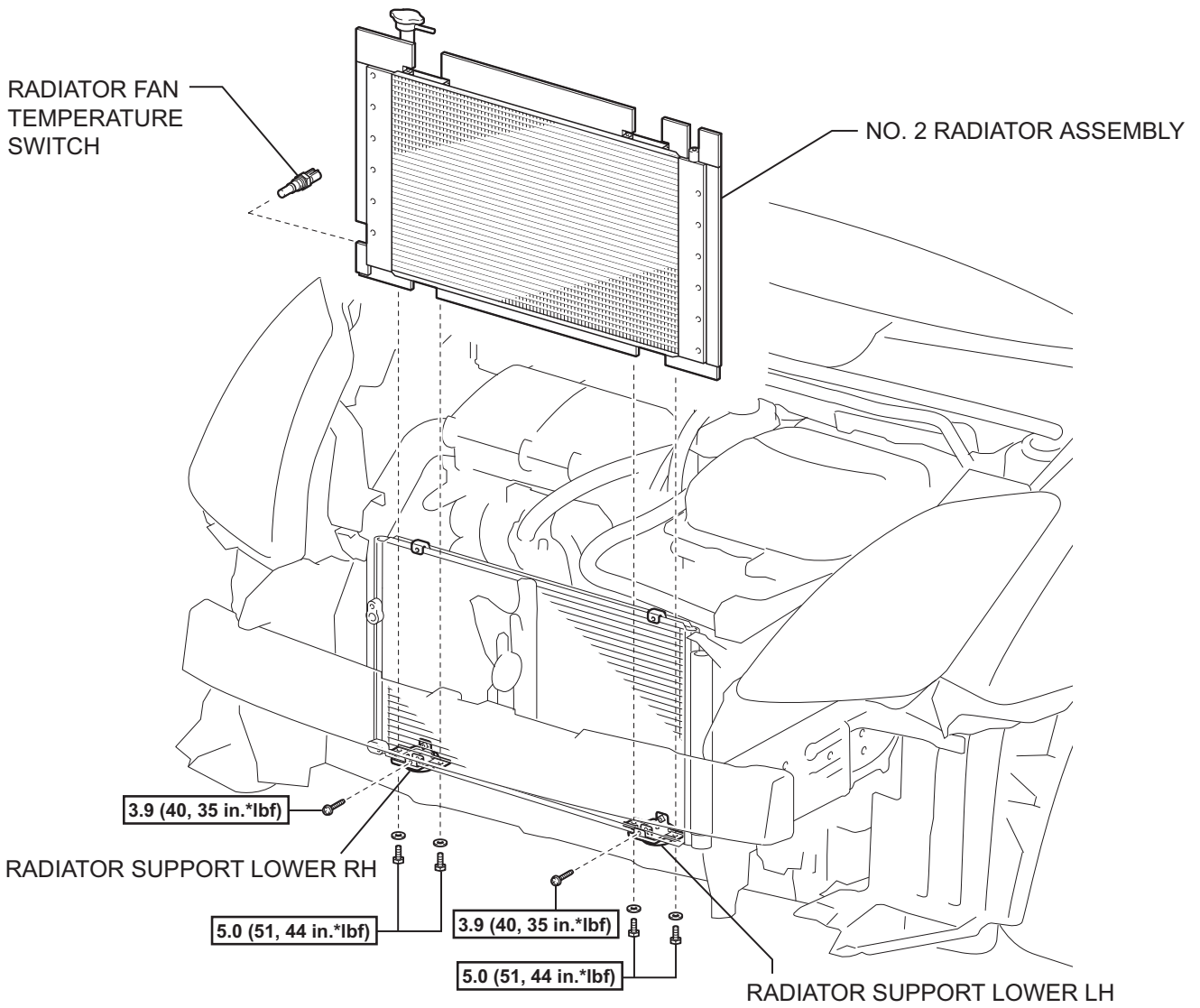
RADIATOR DRAIN COCK PLUG

NO. 5 INVERTER COOLING HOSE

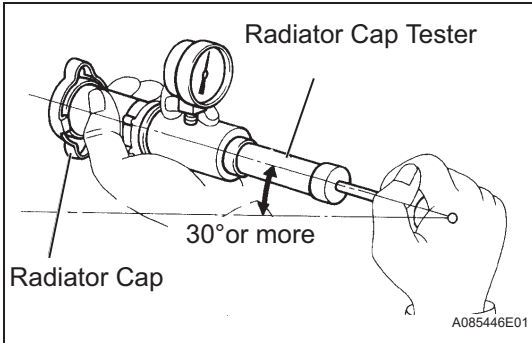
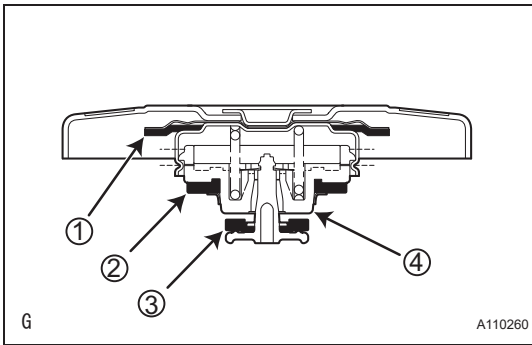
NO. 1 HEAT STORAGE WATER BY-PASS HOSE

N\*m (kgf\*cm, ft.\*lbf) : Specified torque





**N\*m (kgf\*cm, ft.\*lbf)** : Specified torque



## ON-VEHICLE INSPECTION

### 1. CHECK RADIATOR CAP SUB-ASSEMBLY

- (a) Measure the valve opening pressure.
  - (1) If there are water stains or foreign matter on rubber packing 1, 2 or 3, clean the part(s) with water and finger scouring.
  - (2) Check that 1, 2 or 3 is not deformed, cracked or swollen.
  - (3) Check that 3 and 4 are not stuck together.
  - (4) Apply engine coolant to 2 and 3 before using the radiator cap tester.
  - (5) Pump the cap tester several times, and check the maximum pressure\*.

**NOTICE:**

**When using the cap tester, keep the tester at an angle of 30° or more above horizontal.**

**Pumping speed:**

**1 pump per second**

\*: Even if the cap cannot maintain the maximum pressure, it is not a defect.

**Judgment criterion**

Item	Specified Condition
Standard value (for brand-new cap)	93.3 to 122.7 kPa (0.95 to 1.25 kgf/cm <sup>2</sup> , 13.5 to 17.8 psi)
Minimum standard value (after using cap)	78.5 kPa (0.8 kgf/cm <sup>2</sup> , 11.4 psi)

If the maximum pressure is less than the minimum standard value, replace the radiator cap sub-assembly.

## ON-VEHICLE CLEANING

### 1. CHECK FINS FOR BLOCKAGE

- (a) Check that the radiator and condenser are not blocked with leaves, dirt, or insects. Clean the hose connections.

If the fins are blocked, wash them with water or a steam cleaner.

**NOTICE:**

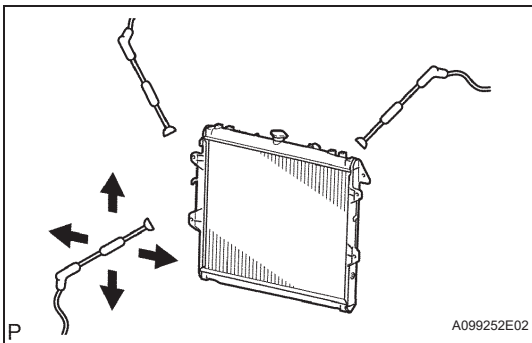
- If the distance between the steam cleaner and core is too close, the fins may be damaged.
- Keep the following injection distance.

**Standard injection distance**

Injection Pressure	Specified Condition
2,942 to 4,903 kPa (30 to 50 kgf/cm <sup>2</sup> , 427 to 711 psi)	300 mm (11.81 in.)
4,903 to 7,845 kPa (50 to 80 kgf/cm <sup>2</sup> , 711 to 1,138 psi)	500 mm (19.69 in.)

- If the fins are bent, straighten them with a screwdriver or pliers.
- Never apply water directly onto the electronic components.

- (b) Dry the fins with compressed air.



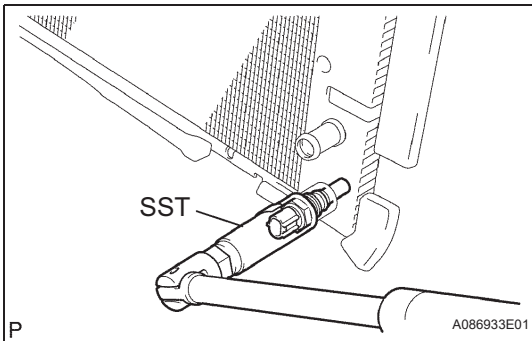
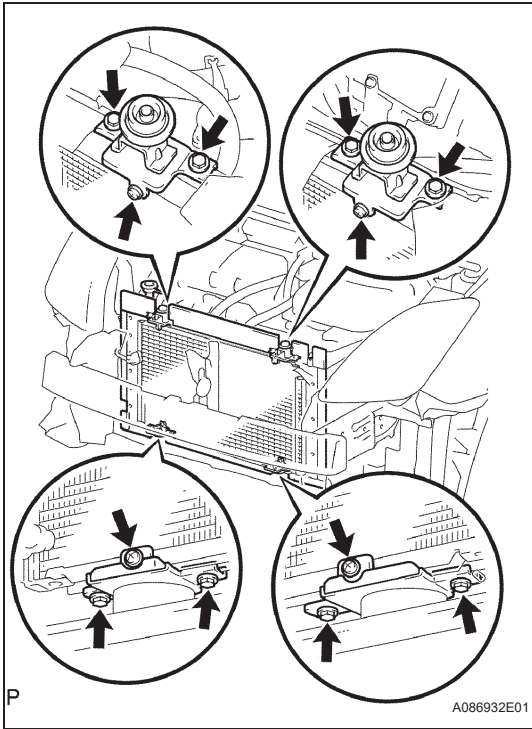
## REMOVAL

### 1. REMOVE FAN ASSEMBLY WITH MOTOR

- (a) Remove the fan with motor (see page CO-19).

### 2. REMOVE NO. 2 RADIATOR ASSEMBLY

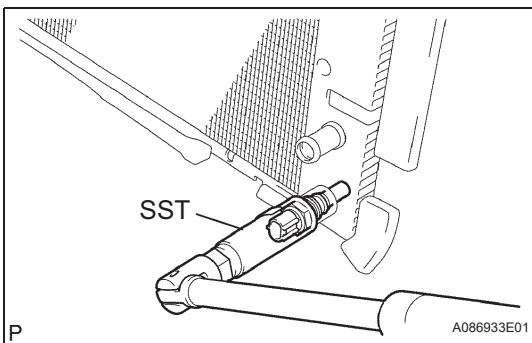
- (a) Remove the 3 bolts and radiator support upper RH.  
 (b) Remove the 3 bolts and radiator support upper LH.  
 (c) Remove the 3 bolts and radiator support lower RH.  
 (d) Remove the 3 bolts and radiator support lower LH.  
 (e) Remove the No. 2 radiator from the vehicle.



### 3. REMOVE RADIATOR FAN TEMPERATURE SWITCH

- (a) Using SST, remove the radiator fan temperature switch.

**SST 09817-33190**



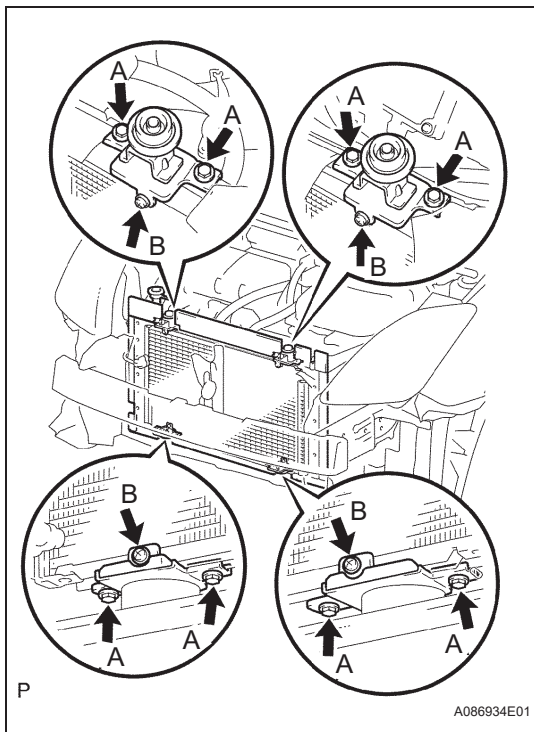
## INSTALLATION

### 1. INSTALL RADIATOR FAN TEMPERATURE SWITCH

- (a) Using SST, install the radiator fan temperature switch.

**SST 09817-33190**

**Torque: 7.0 N\*m (71 kgf\*cm, 62 in.\*lbf)**



## 2. INSTALL NO. 2 RADIATOR ASSEMBLY

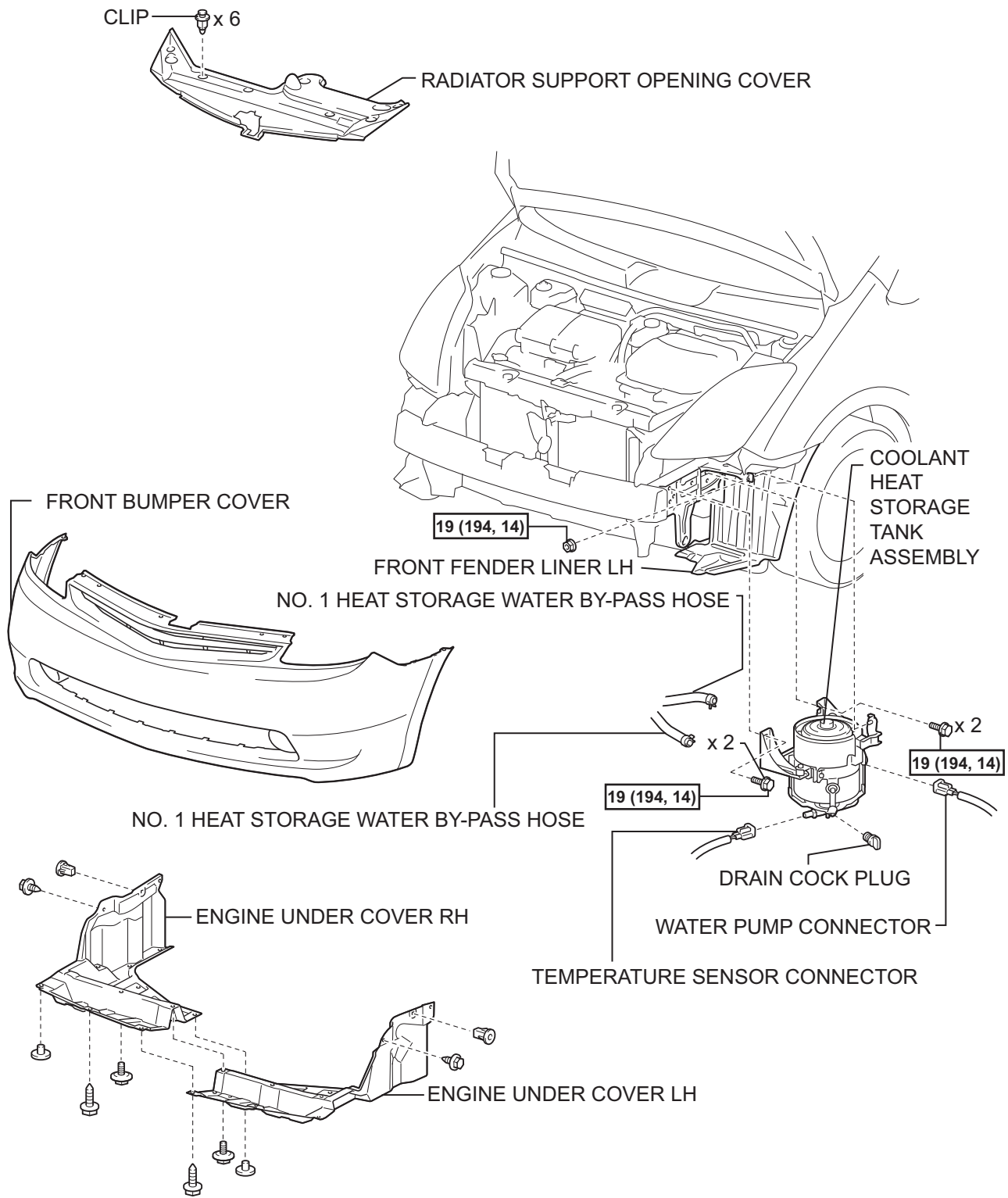
- (a) Install the No. 2 radiator to the vehicle.
- (b) Install the radiator support lower LH with the 3 bolts.  
**Torque: 5.0 N\*m (51 kgf\*cm, 44 in.\*lbf) for bolt A**  
**3.9 N\*m (40 kgf\*cm, 35 in.\*lbf) for bolt B**
- (c) Install the radiator support lower RH with the 3 bolts.  
**Torque: 5.0 N\*m (51 kgf\*cm, 44 in.\*lbf) for bolt A**  
**3.9 N\*m (40 kgf\*cm, 35 in.\*lbf) for bolt B**
- (d) Install the radiator support upper LH with the 3 bolts.  
**Torque: 5.0 N\*m (51 kgf\*cm, 44 in.\*lbf) for bolt A**  
**3.9 N\*m (40 kgf\*cm, 35 in.\*lbf) for bolt B**
- (e) Install the radiator support upper RH with the 3 bolts.  
**Torque: 5.0 N\*m (51 kgf\*cm, 44 in.\*lbf) for bolt A**  
**3.9 N\*m (40 kgf\*cm, 35 in.\*lbf) for bolt B**

## 3. INSTALL FAN ASSEMBLY WITH MOTOR

- (a) Install the fan with motor (see page [CO-22](#)).

# COOLANT HEAT STORAGE TANK

## COMPONENTS



CO

N\*m (kgf\*cm, ft.\*lbf) : Specified torque

## REMOVAL

### CAUTION:

- Before and after the procedure, be sure to check DTCs and confirm that no DTCs are output.
- If the tank has any malfunctions, the tank surface becomes hot. To prevent injuries from burns, do not touch the tank.
- The coolant heat storage tank assembly is prohibited from being disassembled and can be disassembled only as instructed.

1. REMOVE REAR NO. 2 FLOOR BOARD (See page CH-4)
2. REMOVE REAR DECK FLOOR BOX (See page CH-4)
3. REMOVE REAR NO. 3 FLOOR BOARD (See page CH-4)

4. DISCONNECT CABLE FROM BATTERY NEGATIVE TERMINAL

### CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

5. REMOVE RADIATOR SUPPORT OPENING COVER (See page CO-6)

6. REMOVE ENGINE UNDER COVER LH

7. REMOVE ENGINE UNDER COVER RH

8. REMOVE FRONT BUMPER COVER (See page ET-4)

9. REMOVE FRONT FENDER LINER LH

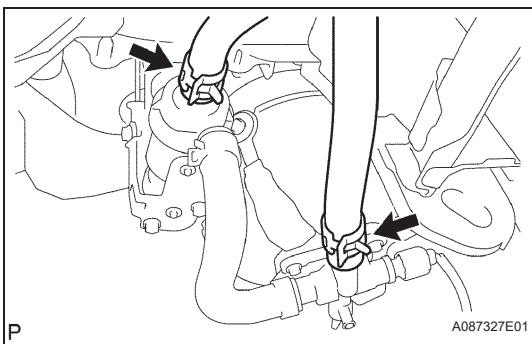
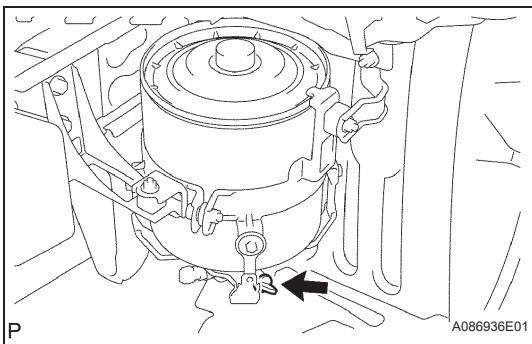
(a) Partially remove the front fender liner LH.

10. DRAIN ENGINE COOLANT

(a) Loosen the drain cock plug, then drain the coolant.

### CAUTION:

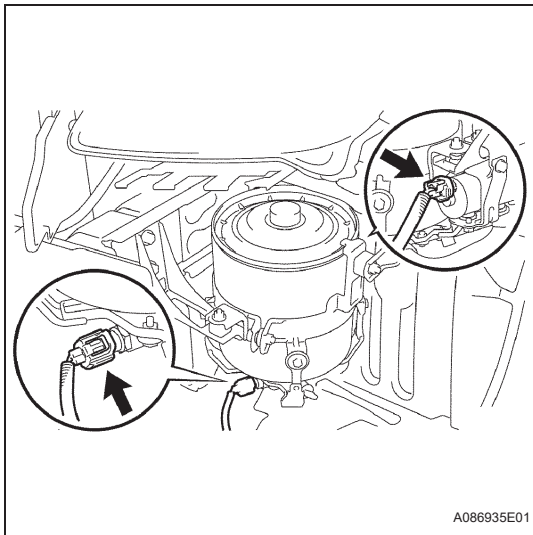
Even if the engine is cold, the coolant in the coolant heat storage tank is still hot. Be careful of the hot coolant when draining it.



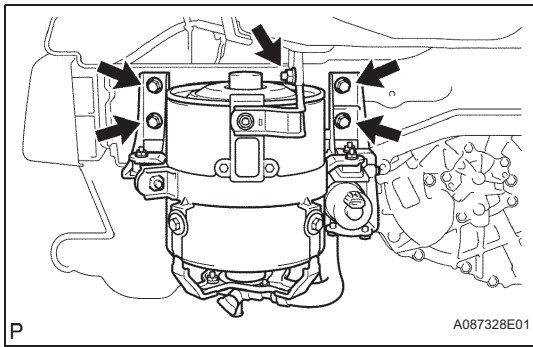
11. REMOVE COOLANT HEAT STORAGE TANK ASSEMBLY

(a) Disconnect the 2 hoses.





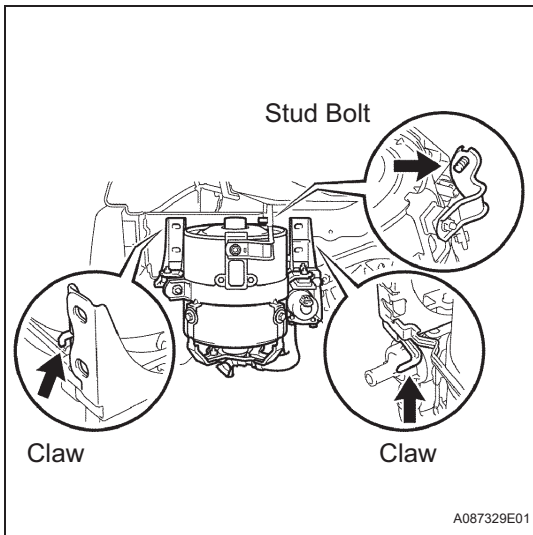
- (b) Disconnect the water pump motor and temperature sensor connectors.



- (c) Remove the nut and 4 bolts.

**NOTICE:**

The coolant heat storage tank bracket can be easily bent. Hold the coolant heat storage tank tightly when removing the nut and bolts.



- (d) Separate the stud bolt and 2 claws shown in the illustration, then remove the coolant heat storage tank.

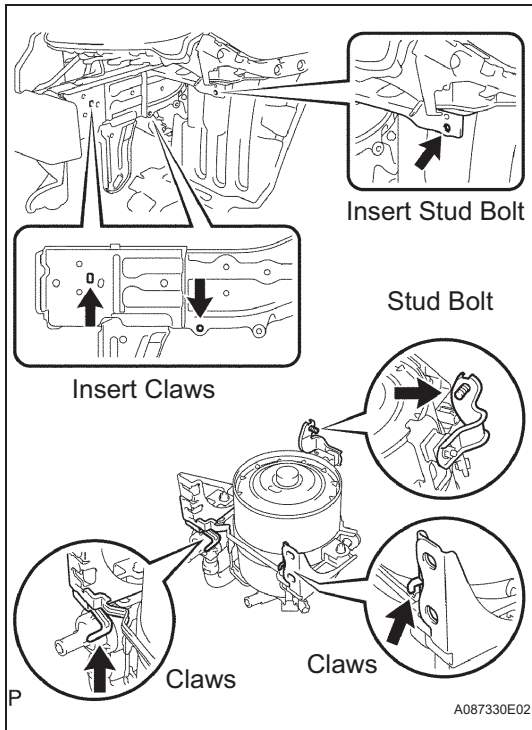
## INSTALLATION

### 1. INSTALL COOLANT HEAT STORAGE TANK ASSEMBLY

- (a) Insert the 2 claws shown in the illustration to the vehicle side, then insert the stud bolt to the vehicle side.

**NOTICE:**

The coolant storage tank bracket can be easily bent. Hold the coolant storage tank tightly when inserting the claws and stud bolt.

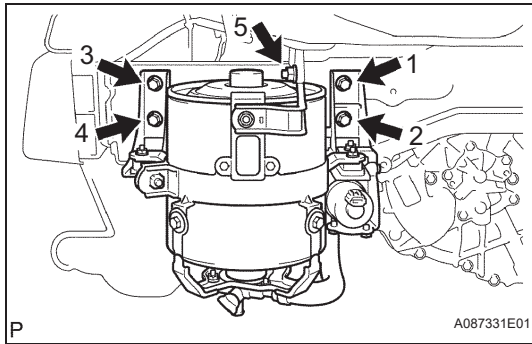


- (b) Install the 4 bolts and nut.

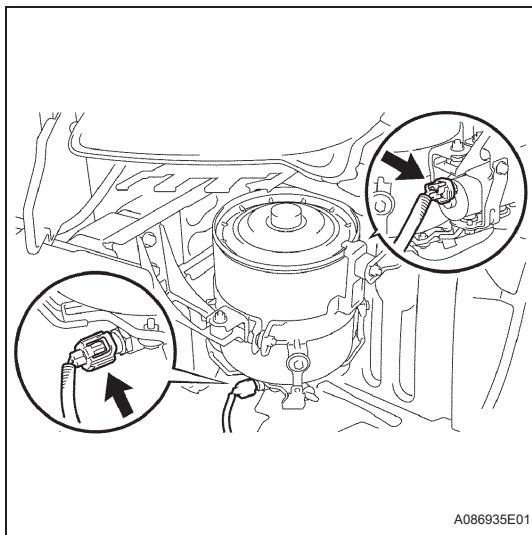
**Torque: 19 N\*m (194 kgf\*cm, 14 ft.\*lbf)**

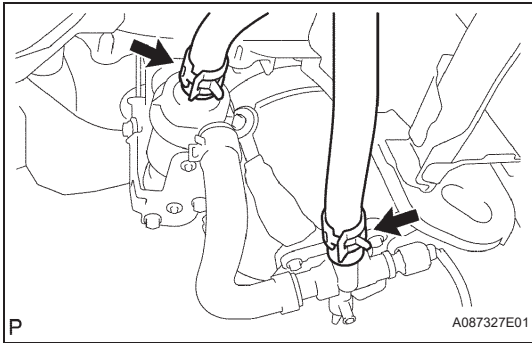
**NOTICE:**

- When tightening bolt 1 and 2, push the coolant heat storage tank bracket to the vehicle front.
- The coolant heat storage tank bracket can be easily bent. Hold the coolant heat storage tank tightly when installing the bolts and nut.



- (c) Connect the water pump motor and temperature sensor connectors.





(d) Connect the 2 hoses shown in the illustration.

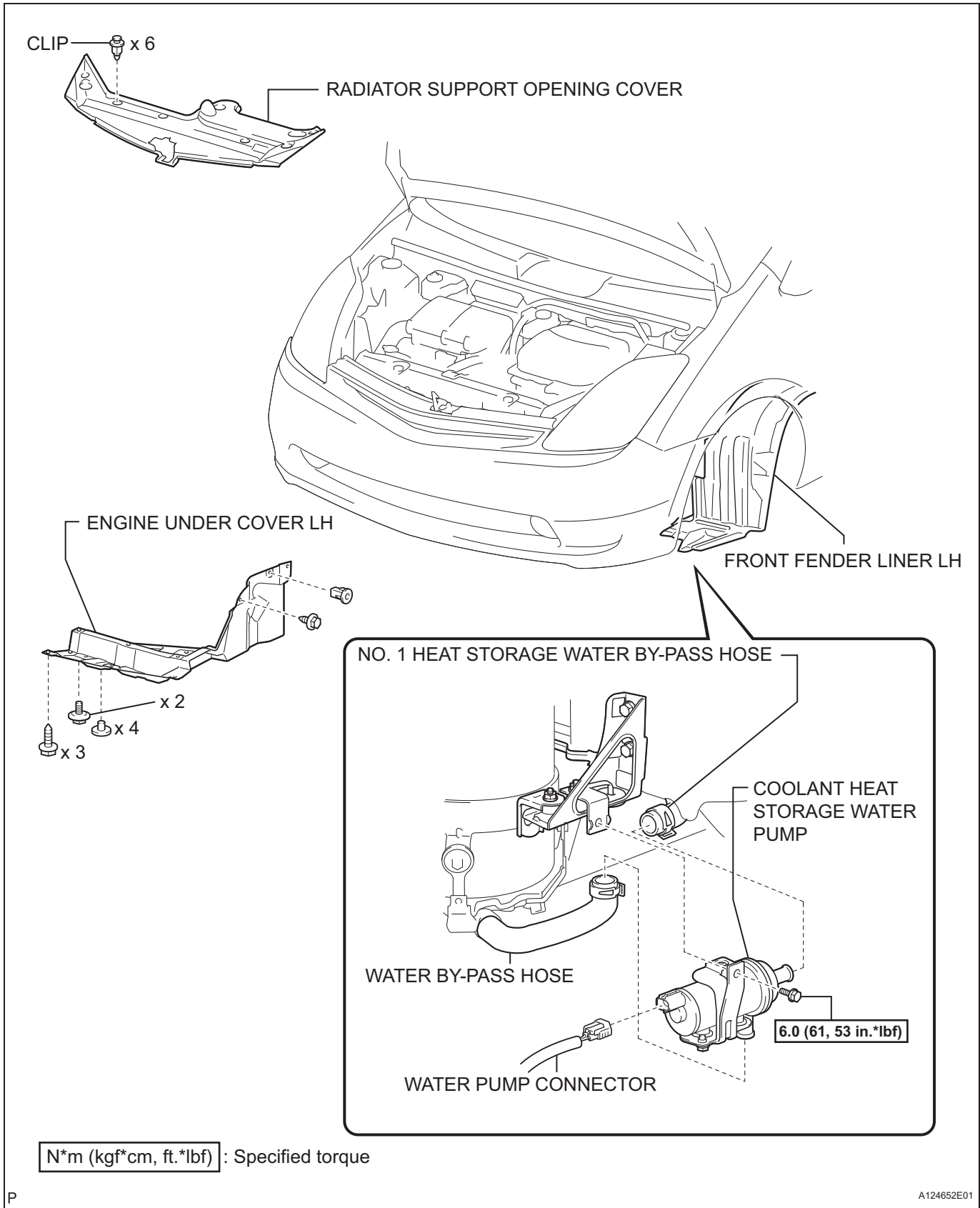
2. **CONNECT CABLE TO BATTERY NEGATIVE TERMINAL**
3. **INSTALL REAR NO. 3 FLOOR BOARD** (See page [CH-8](#))
4. **INSTALL REAR DECK FLOOR BOX** (See page [CH-8](#))
5. **INSTALL REAR NO. 2 FLOOR BOARD** (See page [CH-8](#))
6. **ADD ENGINE COOLANT** (See page [HX-58](#))
7. **CHECK FOR ENGINE COOLANT LEAKS**
8. **INSTALL FRONT FENDER LINER LH**
9. **INSTALL FRONT BUMPER COVER** (See page [ET-6](#))
10. **INSTALL ENGINE UNDER COVER RH**
11. **INSTALL ENGINE UNDER COVER LH**
12. **INSTALL RADIATOR SUPPORT OPENING COVER** (See page [CO-9](#))
13. **PERFORM INITIALIZATION**
  - (a) Perform initialization (see page [IN-32](#)).

**NOTICE:**

**Certain systems need to be initialized after disconnecting the cable from the negative (-) battery terminal.**

# COOLANT HEAT STORAGE WATER PUMP

## COMPONENTS

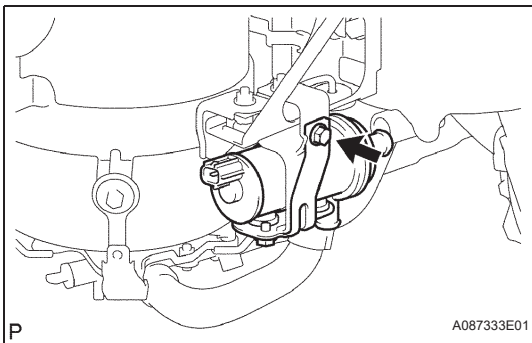
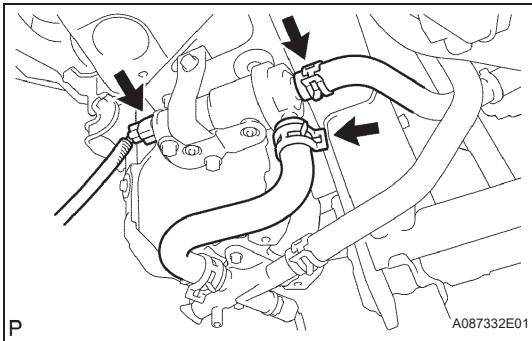


CO

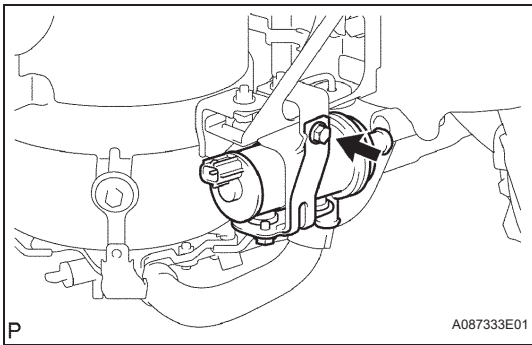
## REMOVAL

1. REMOVE REAR FLOOR NO. 2 BOARD (See page [CH-4](#))
2. REMOVE REAR DECK FLOOR BOX (See page [CH-4](#))
3. REMOVE REAR FLOOR NO. 3 BOARD (See page [CH-4](#))
4. DISCONNECT CABLE FROM BATTERY NEGATIVE TERMINAL  
**CAUTION:**  
 Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.
5. REMOVE RADIATOR SUPPORT OPENING COVER (See page [CO-6](#))
6. REMOVE FRONT WHEEL LH
7. REMOVE ENGINE UNDER COVER LH
8. REMOVE FRONT FENDER LINER LH  
 (a) Partially remove the front fender liner LH.
9. DRAIN ENGINE COOLANT (See page [HX-58](#))
10. REMOVE COOLANT HEAT STORAGE WATER PUMP  
 (a) Disconnect the coolant heat storage water pump connector.  
 (b) Disconnect the 2 hoses.

CO



- (c) Remove the bolt and coolant heat storage water pump.

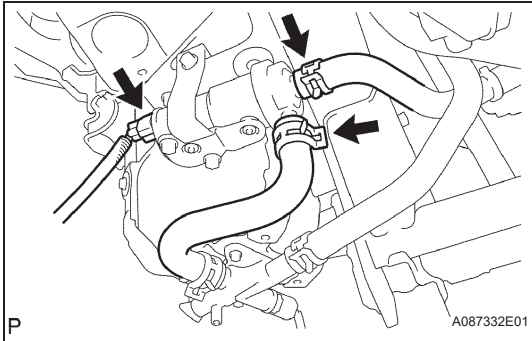


## INSTALLATION

### 1. INSTALL COOLANT HEAT STORAGE WATER PUMP

- (a) Install the coolant heat storage pump water pump with the bolt.

**Torque: 6.0 N\*m (61 kgf\*cm, 53 in.\*lbf)**



- (b) Connect the 2 hoses.

- (c) Connect the connector to the coolant heat storage pump.

### 2. CONNECT CABLE TO BATTERY NEGATIVE TERMINAL

### 3. INSTALL REAR FLOOR NO. 3 BOARD (See page CH-8)

### 4. INSTALL REAR DECK FLOOR BOX (See page CH-8)

### 5. INSTALL REAR FLOOR NO. 2 BOARD (See page CH-8)

### 6. ADD ENGINE COOLANT (See page HX-58)

### 7. CHECK FOR ENGINE COOLANT LEAKS

### 8. INSTALL FRONT FENDER LINER LH

### 9. INSTALL ENGINE UNDER COVER LH

### 10. INSTALL FRONT WHEEL LH

**Torque: 103 N\*m (1050 kgf\*cm, 76 ft.\*lbf)**

### 11. INSTALL RADIATOR SUPPORT OPENING COVER (See page CO-9)

### 12. PERFORM INITIALIZATION

- (a) Perform initialization (see page IN-32).

#### NOTICE:

Certain systems need to be initialized after disconnecting and reconnecting the cable from the negative (-) battery terminal.