

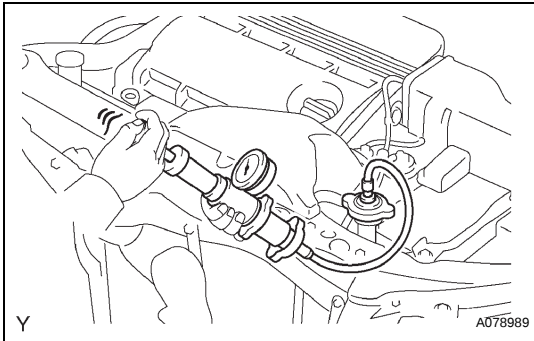
COOLING SYSTEM

ON-VEHICLE INSPECTION

1. INSPECT COOLING SYSTEM FOR LEAKS

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Thermal expansion will cause hot engine coolant and steam to blow out from the radiator.



- (a) Fill the radiator with coolant and attach a radiator cap tester.
- (b) Warm up the engine.
- (c) Pump it to 118 kPa (1.2 kgf*cm, 17 psi), and check that the pressure does not drop.
If the pressure drops, check the hoses, radiator and water pump for leaks. If there are no signs or traces of external coolant leaks, check the heater core, cylinder block and head.

2. CHECK ENGINE COOLANT LEVEL AT RESERVOIR

- (a) The engine coolant should be between the "LOW" and "FULL" lines, when the engine is cold.
If low, check for leaks and add "Toyota Long Life Coolant" or equivalent up to the "FULL" line.

NOTICE:

Do not substitute plain water for engine coolant.

3. CHECK ENGINE COOLANT QUALITY

- (a) Remove the radiator cap.

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Thermal expansion will cause hot engine coolant and steam to blow out from the radiator.

- (b) Check if there are any excessive deposits of rust or scales around the radiator cap and radiator filler hole; the coolant should be free of oil.

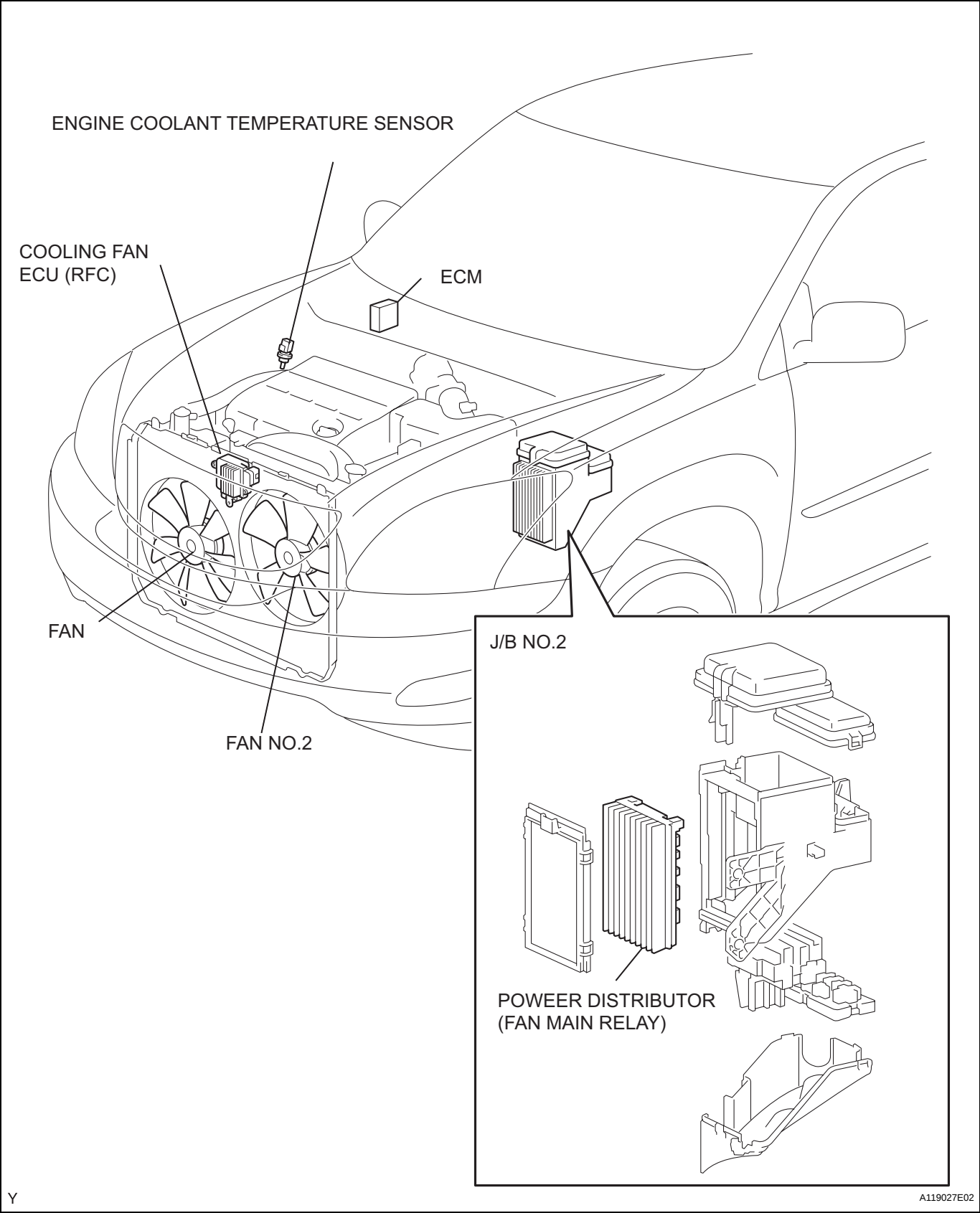
HINT:

If excessively dirty, replace the coolant.

- (c) Reinstall the radiator cap.

COOLING FAN SYSTEM

PARTS LOCATION



PROBLEM SYMPTOMS TABLE

COOLING FAN SYSTEM

Symptom	Suspected area	See page
Cooling fan is malfunctioning	1. Cooling fan motor(s)	CO-3
	2. Cooling fan ECU *1, *2	CO-3
	3. wire harness (ECM (RFC) to cooling fan ECU (SI)) *3	-
	4. wire harness (Power distributor (FCL) to cooling fan ECU (+B))	-
	5. Wire harness (Power distributor (FCB) to cooling fan fuse) *4	-

*1: Terminal SI of the cooling fan ECU is faulty, inspect the wire harness.

*2: Terminal +B of the cooling fan ECU is faulty, inspect the wire harness.

*3: If the wire harness is normal, replace the ECM.

*4: If the wire harness is normal, inspect the power distributor.

ON-VEHICLE INSPECTION

NOTICE:

Check that no DTCs are present in the ABS and VSC motor relay.

If any one of the DTCs (C0273/13, C0274/14, C1361/91) is detected, inspect the ABS and VSC motor relay in accordance with the troubleshooting of the brake system. (See page [BC-3](#)).

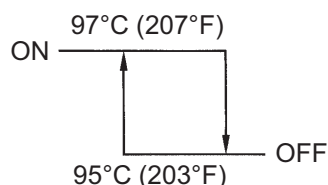
1. INSPECT COOLING FAN OPERATION WHEN COOLANT TEMPERATURE IS BELOW 95°C (203°F)

- Check that the cooling fan does not operate when turning the ignition switch ON with the A/C switch OFF.
- Check that the cooling fan operates when turning the ignition switch ON with the engine coolant temperature sensor connector disconnected.

2. INSPECT COOLING FAN OPERATION WHEN COOLANT TEMPERATURE IS ABOVE 97°C (207°F)

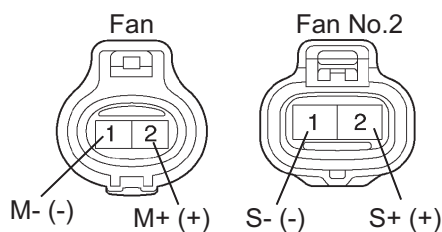
- Warm up the engine and turn the A/C switch OFF.
- Check that the cooling fan operates when the coolant temperature is above 97°C (207°F).
- Check that the cooling fan stops when the coolant temperature is below 95°C (203°F).

Cooling Fan Operation



Z013471E01

Cooling Fan Connector



A079212E01

3. INSPECT COOLING FAN ECU

- Disconnect the cooling fan connectors.
- Check that the fan operates when applying battery positive to terminal M+ and battery negative to terminal M-.
- Measure the amperage.

Fan operation amperage:

10.6 to 16.6 A

- Disconnect the cooling fan No.2 connector.
- Check that the fan operates when applying battery positive to terminal S+ and battery negative to terminal S-.
- Measure the amperage.

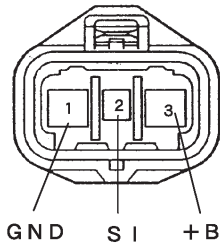
Fan operation amperage:

5.6 to 11.6 A

If the amperage is not as specified, replace the fan motor(s).

- Reconnect the cooling fan connectors.

Cooling Fan ECU Connector



A050564E02

4. INSPECT COOLING FAN ECU

- (a) Check the cooling fan ECU power source.
- (1) Disconnect the cooling fan ECU connector.
 - (2) Measure the voltage between terminals +B and GND.

Voltage:

9 to 14 V

- If the voltage is not as specified, check the fusible links, fuses, wire harness and fan relay.
- If the terminal voltage is within specification and the motor is working properly, replace the cooling fan ECU.

- (3) Reconnect the connectors.

HINT:

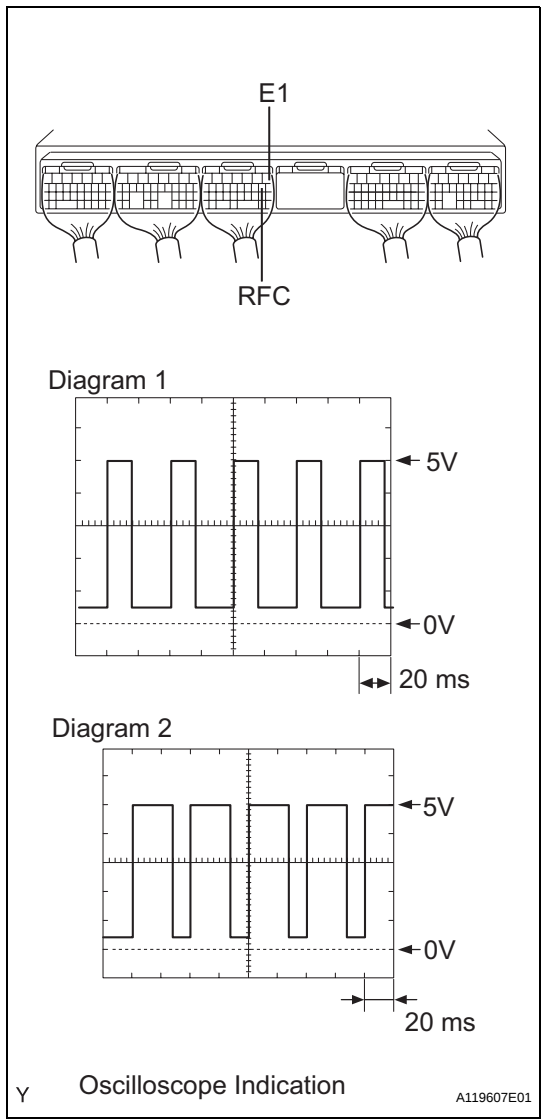
Wire harness condition is diagnosed by cooling fan operation.

Cooling fan operation	Wire harness condition
Not operate	Short
Operate continuously	Open

- (b) Check the ECM power source.
- (c) Check RFC signal generation.

NOTICE:

Perform this inspection when coolant temperature is 82°C (180°F) below.



- (1) Connect an oscilloscope to terminals RFC and E1 of the ECM.
- (2) Check the signal generation and measure the fan amperage under condition.

Condition	RFC signal generation	Fan amperage	Fan operation
Engine stopped, IG switch ON	-	-	Not operate
Engine idling, A/C OFF	-	-	Not operate
Engine idling, A/C ON	See Diagram 1	3 to 13 A	Operate
Engine idling, Engine coolant temperature sensor connector disconnected	See Diagram 2	5 to 21 A	Operate (High speed)

- HINT:
- If RFC signal is not as specified, replace the ECM.
 - When the fan amperage has a problem despite the RFC signal that has no problem, replace the cooling fan ECU.

COOLANT

ON-VEHICLE INSPECTION

1. DRAIN ENGINE COOLANT

- (a) Remove the radiator cap.

CAUTION:

To avoid the danger of being burned, do not remove the radiator cap while the engine and radiator are still hot. Thermal expansion will cause hot engine coolant and steam to blow out from the radiator.

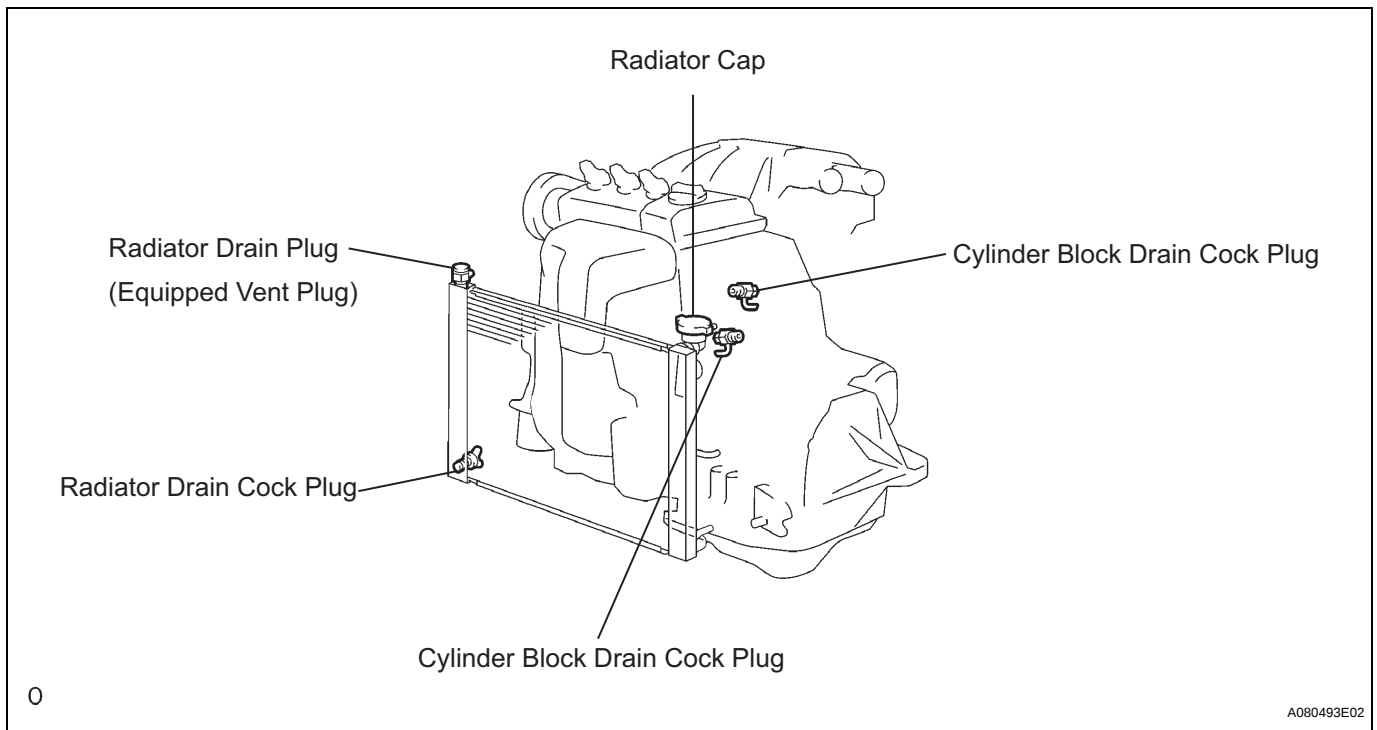
- (b) Drain the engine coolant by loosening the lower drain plug of the radiator and the cylinder block drain cock plugs.

HINT:

Engine coolant inside the radiator is drained from the drain hole located on the bottom of the engine under cover.

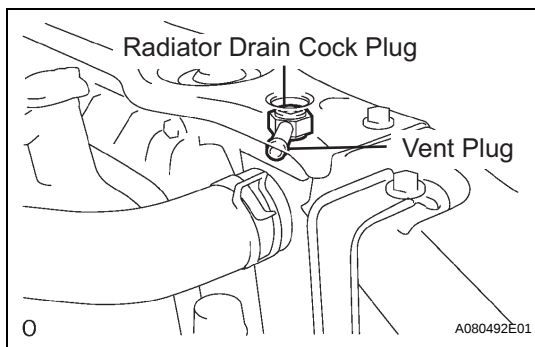
- (c) Tighten the cylinder block drain cock plugs.

Torque: 13 N*m (133 kgf*cm, 9 in.*lbf)



2. ADD ENGINE COOLANT

- (a) Tighten the lower drain plug of the radiator.
(b) Loosen the upper drain plug of the radiator.



- (c) Install a vinyl tube to the vent plug located on the upper drain plug.
- (d) Fill the radiator with engine coolant until the vinyl tube is filled with the coolant.
- (e) Tighten the upper drain plug.

NOTICE:

- **Do not use an alcohol type coolant or plain water alone.**
- **The coolant must be mixed with plain water (preferably de-mineralized water).**

Capacity:

9.7 liters (10.3 US qts, 8.5 Imp. qts)

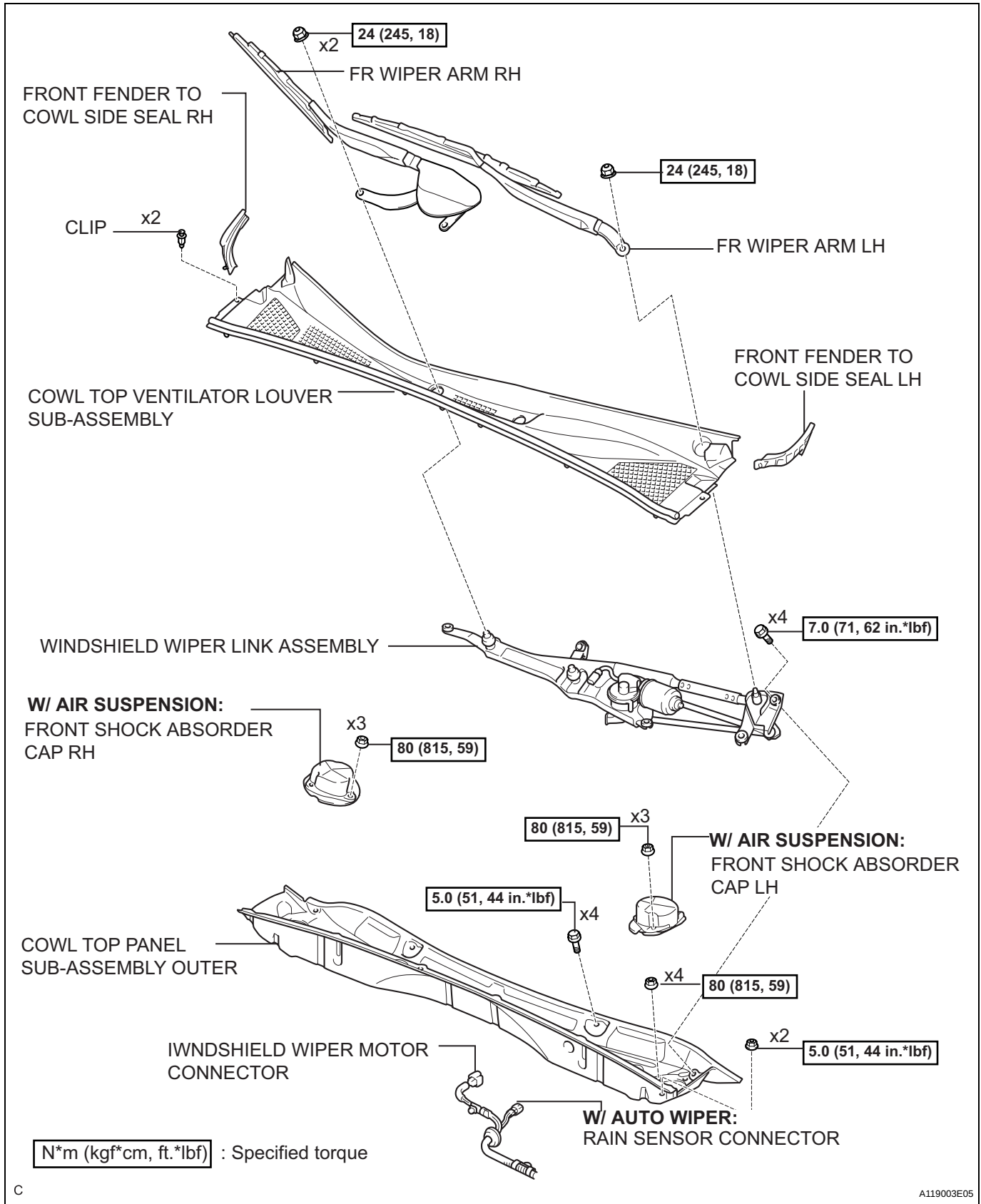
HINT:

- Improper coolants may damage engine cooling system.
 - Use "Toyota Long Life Coolant" or equivalent. Mix it with plain water according to the manufacturer's instruction.
 - Using of coolant which includes more than 50% (freezing protection down to -35°C (-31°F) or 60% (freezing protection down to -50°C (-58°F) of ethylene-glycol is recommended but not more than 70%.
 - Observe the coolant level inside the radiator by pressing the inlet and outlet radiator hoses several times by hand. If the coolant level goes down, add the coolant.
- (f) Install the radiator cap securely.
 - (g) Fill the radiator reservoir tank with coolant fill.
 - (h) Warm up the engine.
- HINT:**
Press the inlet and outlet radiator hoses several times by hand while warming up the engine.
- (i) Stop the engine and wait until the coolant cools down.
 - (j) Remove the radiator cap and check the coolant level inside the radiator.
 - (k) If the coolant level is below the full level, perform the steps from (a) through (j) and repeat the operation until the coolant level stays the full level.
 - (l) Recheck the coolant level inside the radiator reservoir tank. If it is below the full level, add the coolant.

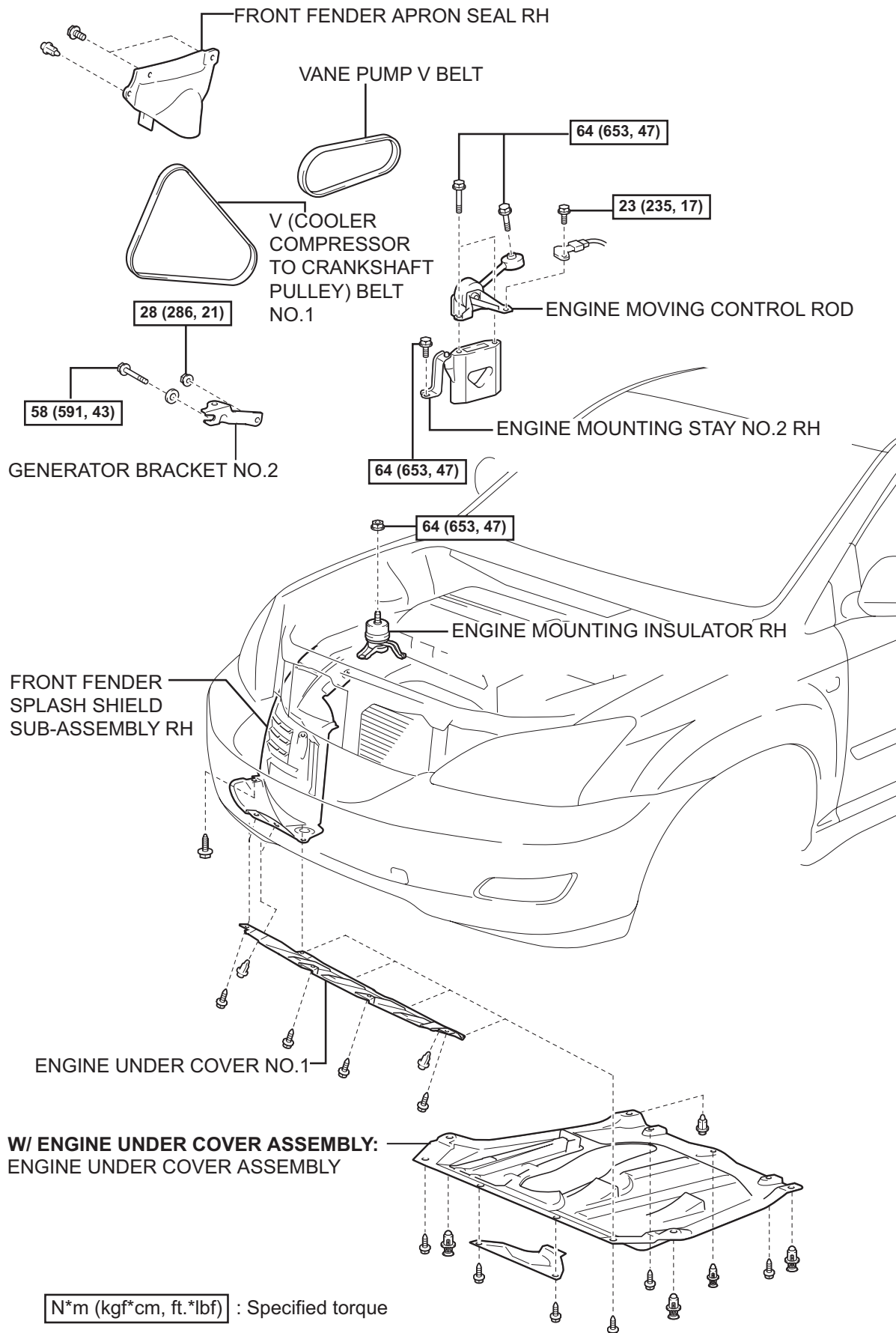
3. CHECK FOR ENGINE COOLANT LEAKS (See page [CO-1](#))

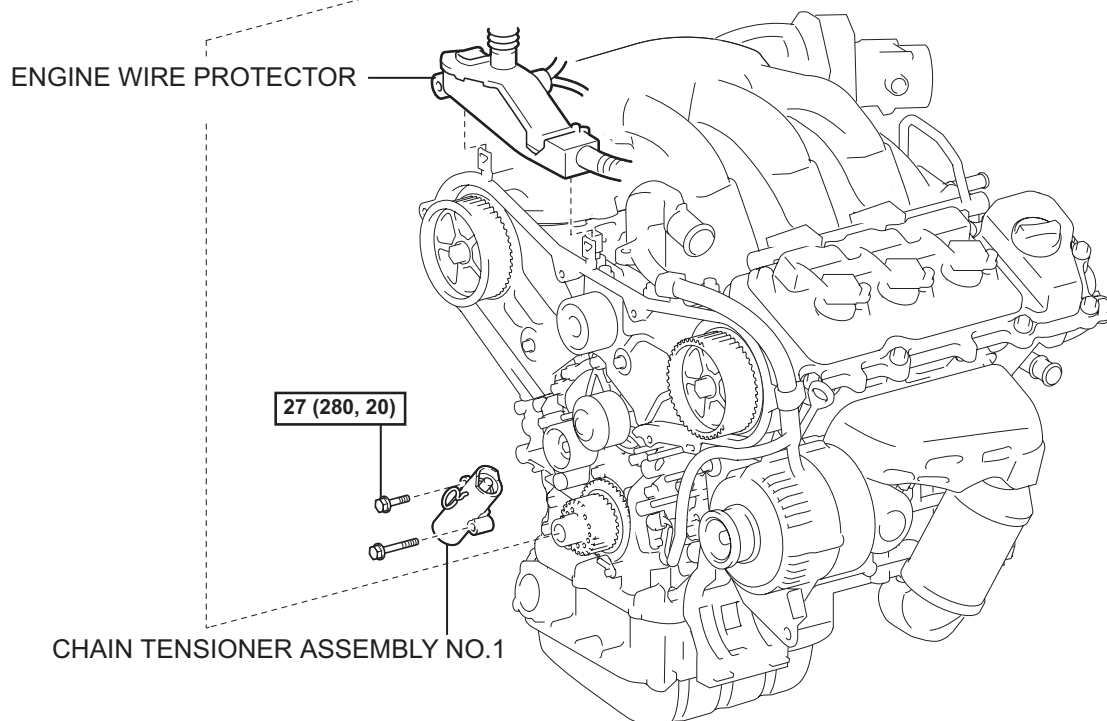
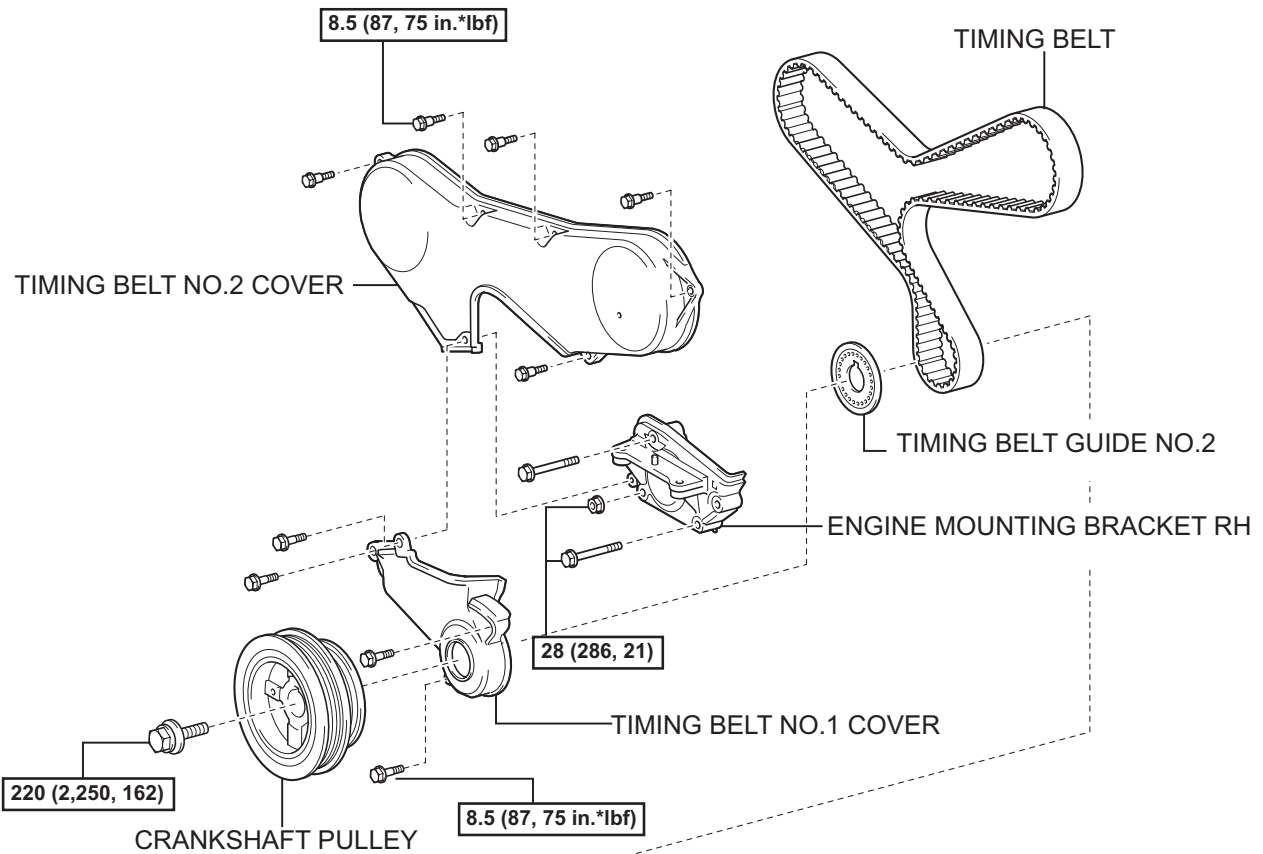
WATER PUMP

COMPONENTS



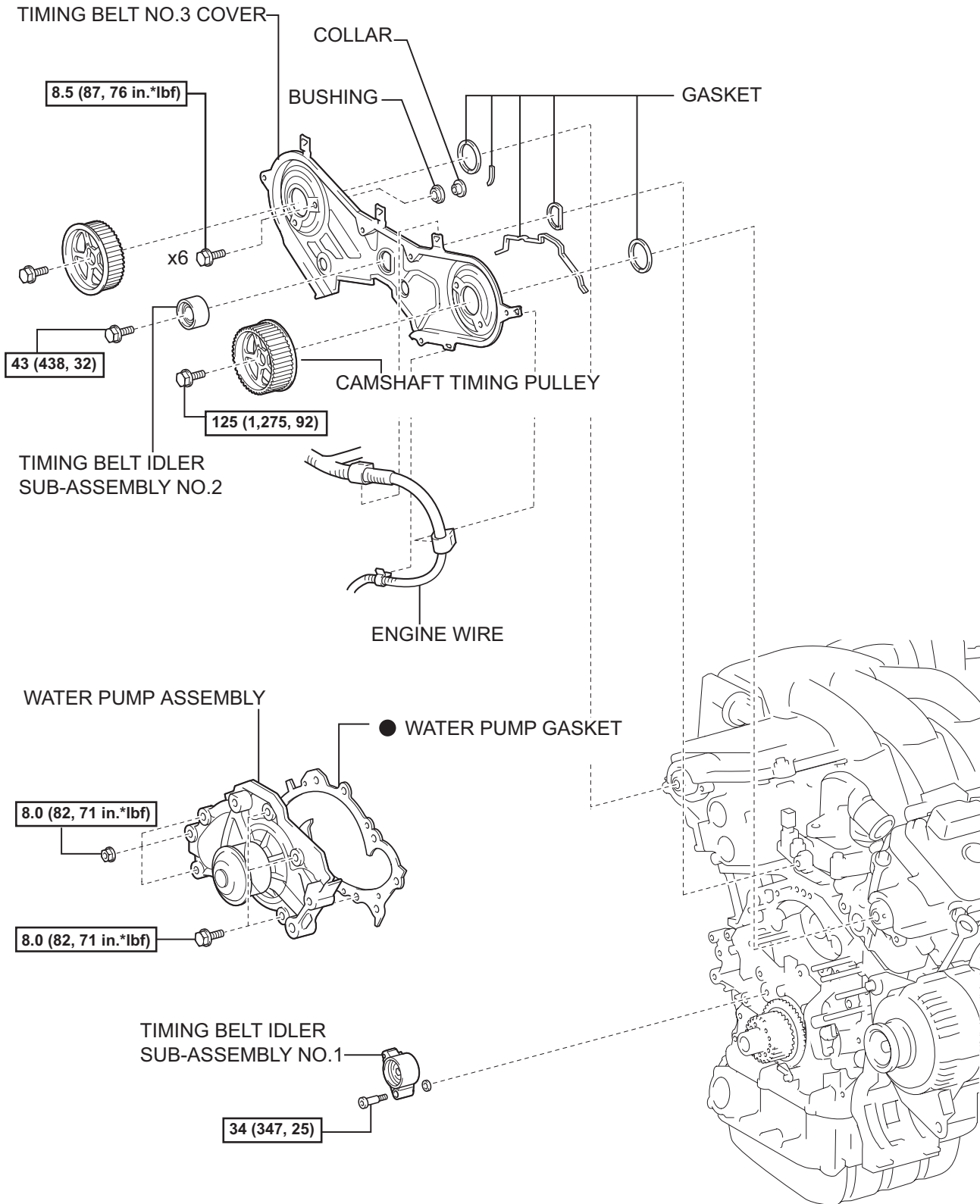
CO





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

CO



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

● Non- reusable part

REMOVAL

1. DRAIN ENGINE COOLANT (See page [CO-7](#))
2. REMOVE FRONT WHEEL RH
3. REMOVE FR WIPER ARM RH
4. REMOVE FR WIPER ARM LH
5. REMOVE COWL TOP VENTILATOR LOUVER SUB-ASSEMBLY
6. REMOVE WINDSHIELD WIPER LINK ASSEMBLY
7. REMOVE COWL TOP PANEL SUB-ASSEMBLY OUTER (See page [FU-10](#))
8. REMOVE ENGINE UNDER COVER ASSEMBLY
9. REMOVE ENGINE UNDER COVER NO.1
10. REMOVE FRONT FENDER APRON SEAL RH (See page [ES-368](#))
11. REMOVE V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1
 - (a) Remove the V (cooler compressor to crankshaft pulley) belt No. 1 (See page [EM-6](#)).
12. REMOVE VANE PUMP V BELT
 - (a) Remove vane pump V belt (See page [EM-6](#)).
13. REMOVE ENGINE MOVING CONTROL ROD
 - (a) Remove engine moving control rod (See page [EM-22](#)).
14. REMOVE ENGINE MOUNTING STAY NO.2 RH
 - (a) Remove engine mounting stay No. 2 RH (See page [EM-22](#)).
15. REMOVE GENERATOR BRACKET NO.2
 - (a) Remove generator bracket No. 2 (See page [EM-22](#)).
16. REMOVE CRANKSHAFT PULLEY
 - (a) Remove crankshaft pulley (See page [EM-22](#)).
SST 09213-54015 (91651-60855), 09330-00021,
09950-50013 (09951-05010, 09952-05010,
09953-05020, 09954-05031)
17. REMOVE TIMING BELT NO.1 COVER
18. REMOVE TIMING BELT NO.2 COVER
 - (a) Remove timing belt No. 2 cover (See page [EM-22](#)).
19. REMOVE ENGINE MOUNTING BRACKET RH
 - (a) Remove engine mounting bracket RH (See page [EM-22](#)).
20. REMOVE TIMING BELT GUIDE NO.2
21. REMOVE TIMING BELT
 - (a) Remove timing belt (See page [EM-22](#)).

22. REMOVE TIMING BELT IDLER SUB-ASSEMBLY NO.2**23. REMOVE CAMSHAFT TIMING PULLEY**

- (a) Remove camshaft timing pulley (See page [EM-39](#)).
SST 09960-10010 (09962-01000, 09963-01000), 09249-63010

24. REMOVE TIMING BELT NO.3 COVER

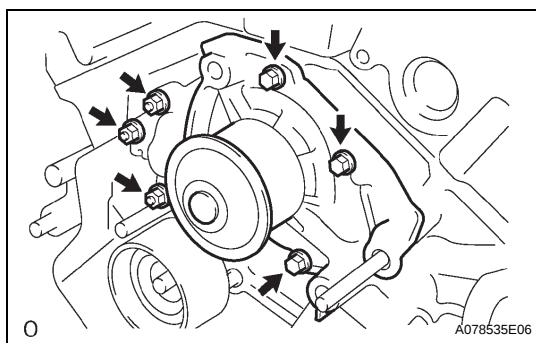
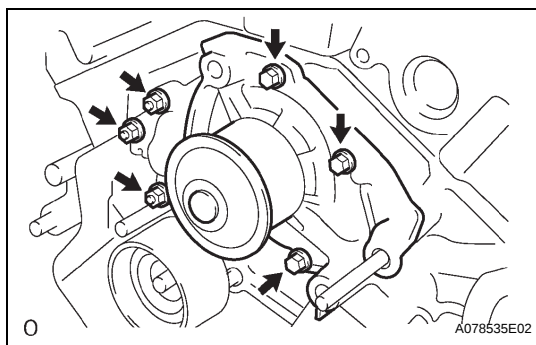
- (a) Remove timing belt No. 3 cover (See page [EM-39](#)).

25. REMOVE TIMING BELT IDLER SUB-ASSEMBLY NO.1

- (a) Using a socket hexagon wrench 10, remove the pivot bolt, timing belt idler No. 1 and plate washer.

26. REMOVE WATER PUMP ASSEMBLY

- (a) Remove the 3 bolts and 3 nuts, then remove the water pump and the gasket.

**INSTALLATION****1. INSTALL WATER PUMP ASSEMBLY**

- (a) Install a new gasket and the water pump with the 3 bolts and 3 nuts.

Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)

2. INSTALL TIMING BELT IDLER SUB-ASSEMBLY NO.1

- (a) Using a socket hexagon wrench 10, install the plate washer and timing belt idler No. 1 with the pivot bolt.

3. INSTALL TIMING BELT NO.3 COVER

- (a) Install timing belt No. 3 cover (See page [EM-44](#)).

4. INSTALL CAMSHAFT TIMING PULLEY

- (a) Install camshaft timing pulley (See page [EM-44](#)).
SST 09960-10010 (09962-01000, 09963-01000), 09249-63010

5. INSTALL TIMING BELT IDLER SUB-ASSEMBLY NO.2

- (a) Install timing belt idler sub-assembly No. 2 (See page [EM-44](#)).

6. INSPECT TIMING BELT

- (a) Inspect timing belt (See page [EM-26](#)).

7. INSTALL TIMING BELT

- (a) Install timing belt (See page [EM-26](#)).
SST 09960-10010 (09962-01000, 09963-01000)

8. INSTALL CHAIN TENSIONER ASSEMBLY NO.1

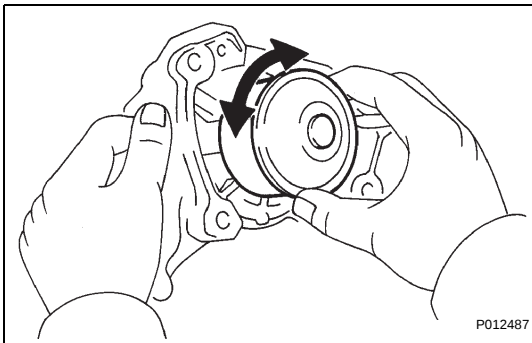
- (a) Install chain tensioner assembly No. 1 (See page [EM-26](#)).

9. INSTALL TIMING BELT GUIDE NO.2

- (a) Install timing belt guide No. 2 (See page [EM-26](#)).

10. **INSTALL ENGINE MOUNTING BRACKET RH**
 - (a) Install engine mounting bracket (See page [EM-26](#)).
 11. **INSTALL TIMING BELT NO.2 COVER**
 - (a) Install timing belt No. 2 cover (See page [EM-26](#)).
 12. **INSTALL TIMING BELT NO.1 COVER**
 - (a) Install timing belt No. 1 cover (See page [EM-26](#)).
 13. **INSTALL CRANKSHAFT PULLEY**
 - (a) Install crankshaft puller (See page [EM-26](#)).
SST 09213-54015 (91651-60855), 09330-00021
 14. **INSTALL GENERATOR BRACKET NO.2**
 - (a) Install generator bracket No. 2 (See page [EM-26](#)).
 15. **INSTALL ENGINE MOUNTING STAY NO.2 RH**
 - (a) Install engine mounting stay No. 2 RH (See page [EM-26](#)).
 16. **INSTALL ENGINE MOVING CONTROL ROD**
 - (a) Install engine moving control rod (See page [EM-26](#)).
 17. **INSTALL VANE PUMP V BELT**
 - (a) Install vane pump V belt (See page [EM-6](#)).
 18. **INSTALL V (COOLER COMPRESSOR TO CRANKSHAFT PULLEY) BELT NO.1**
 - (a) Remove the V (cooler compressor to crankshaft pulley) belt No. 1 (See page [EM-6](#)).
 19. **INSPECT DRIVE BELT DEFLECTION AND TENSION (REFERENCE)**
 20. **INSTALL COWL TOP PANEL SUB-ASSEMBLY OUTER (See page [FU-16](#))**
 21. **INSTALL WINDSHIELD WIPER LINK ASSEMBLY**
 22. **INSTALL FR WIPER ARM LH**
 23. **INSTALL FR WIPER ARM RH**
 24. **INSTALL FRONT WHEEL RH (See page [CO-7](#))**
 25. **ADD ENGINE COOLANT (See page [CO-1](#))**
 26. **CHECK FOR ENGINE COOLANT LEAKS**
- ## INSPECTION

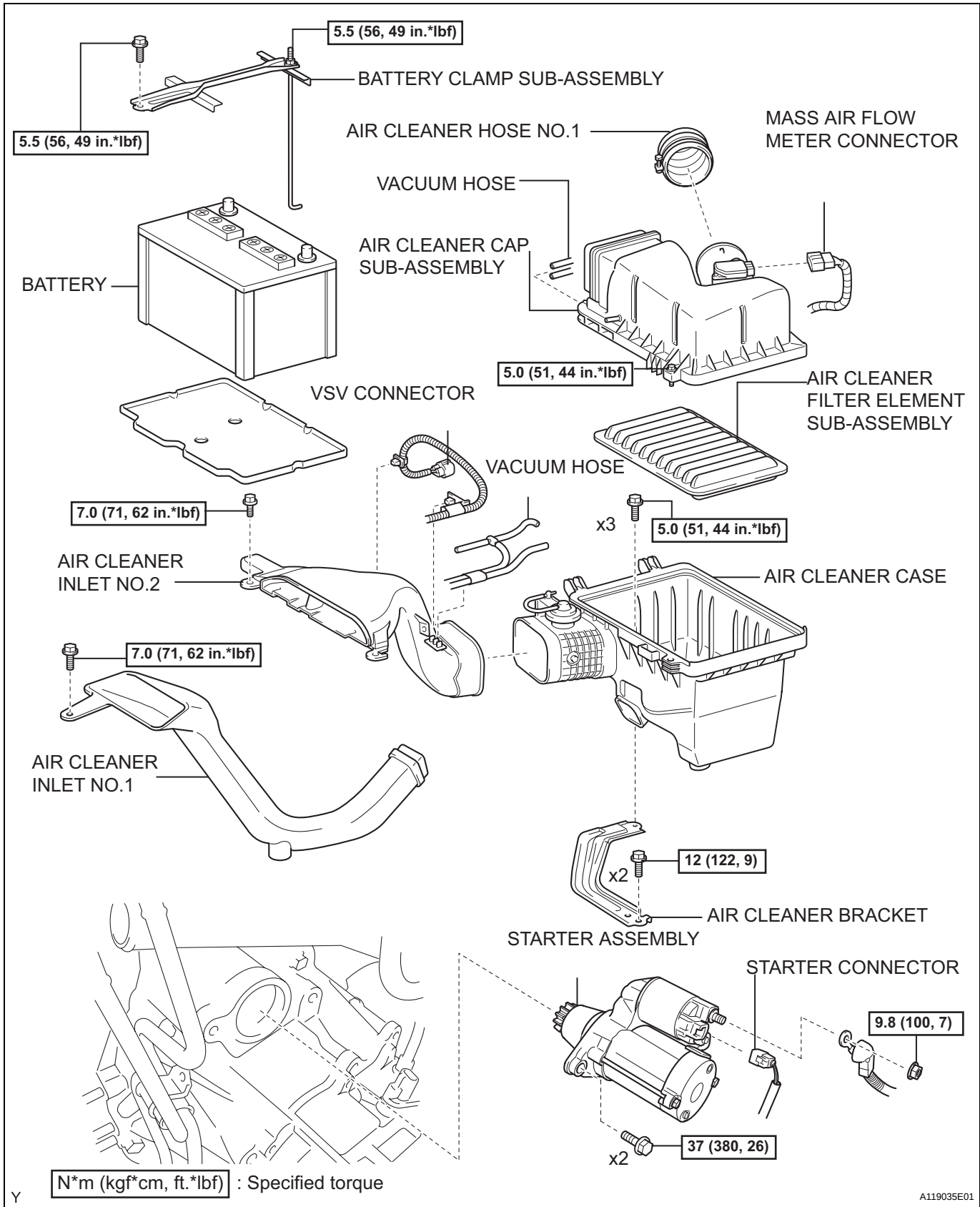
CO

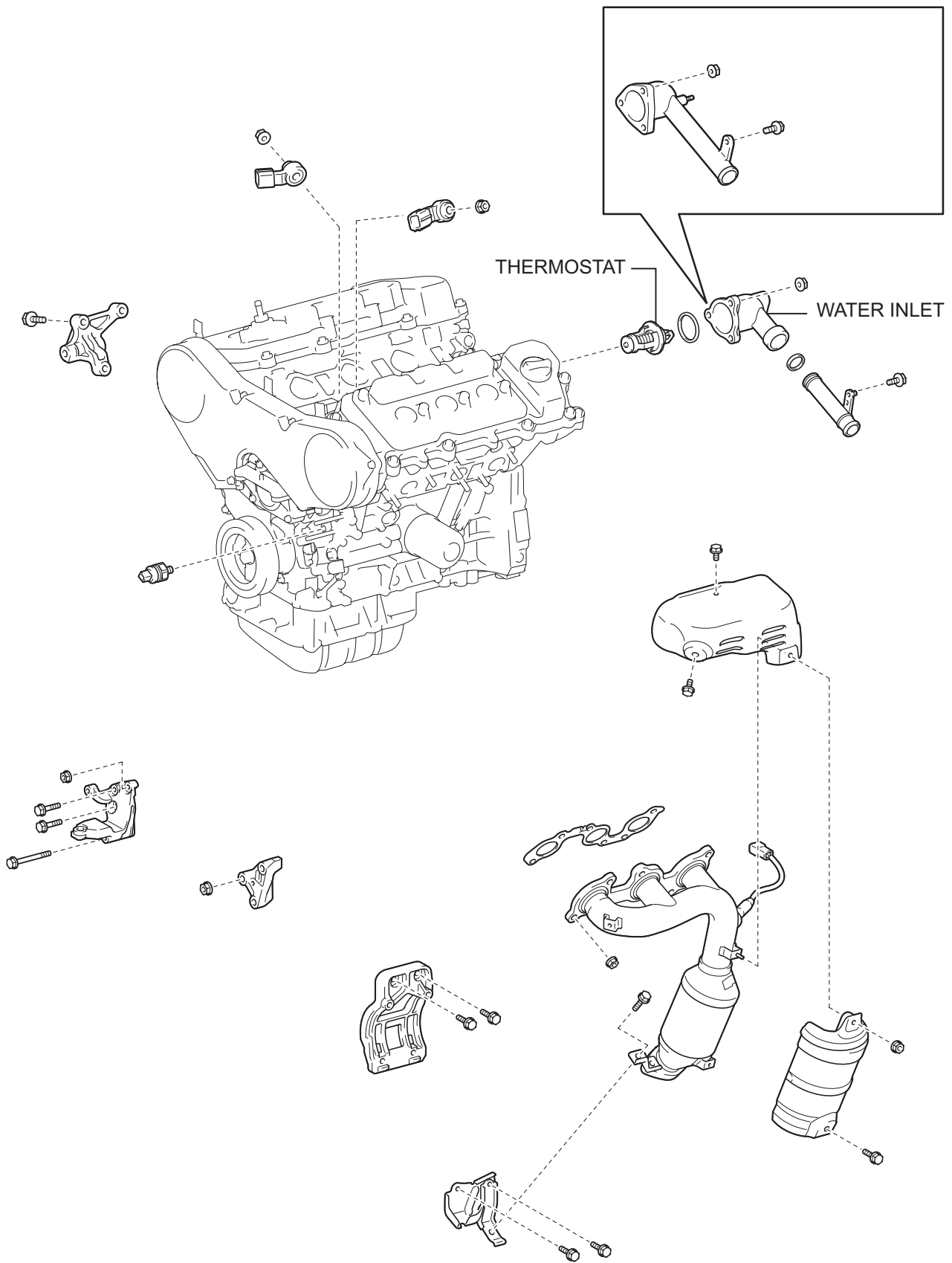


1. **INSPECT WATER PUMP ASSEMBLY**
 - (a) Visually check the drain hole for coolant leakage. If leakage is found, replace the water pump.
 - (b) Turn the pulley, and check that the water pump bearing moves smoothly and does not make any noise. If necessary, replace water pump.

THERMOSTAT

COMPONENTS

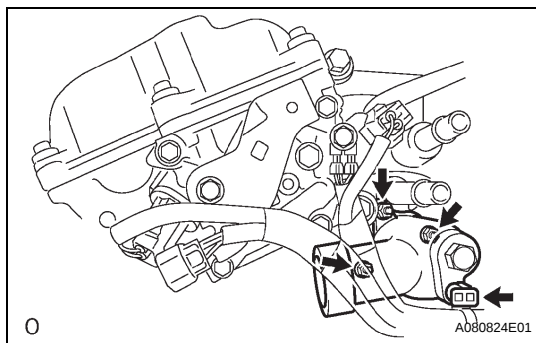
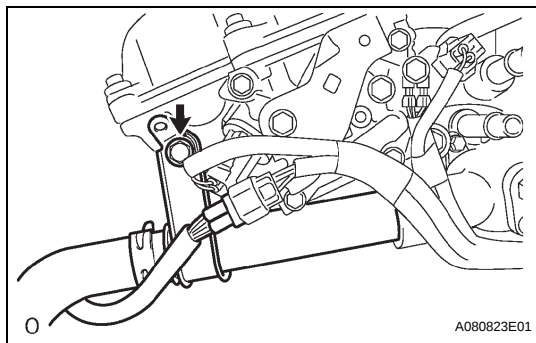




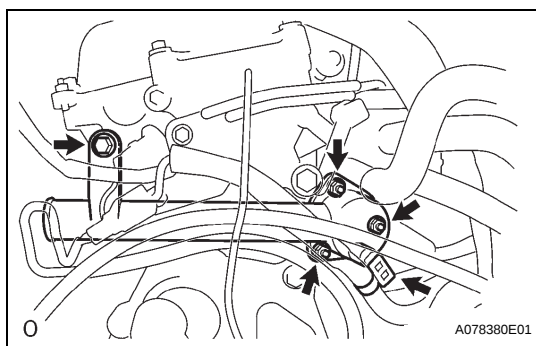
CO

REMOVAL

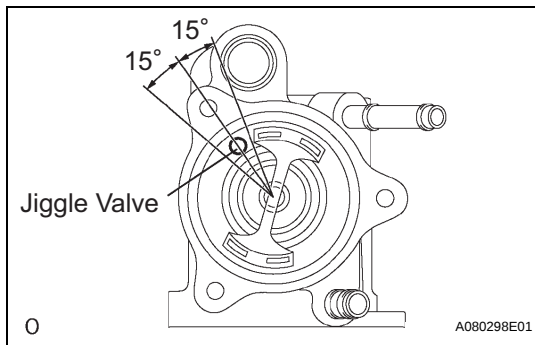
1. DRAIN ENGINE COOLANT (See page [CO-7](#))
2. REMOVE BATTERY
3. REMOVE AIR CLEANER CAP SUB-ASSEMBLY
 - (a) Remove air cleaner cap sub-assembly (See page [ST-5](#)).
4. REMOVE AIR CLEANER FILTER ELEMENT SUB-ASSEMBLY
5. REMOVE AIR CLEANER INLET NO.2 (See page [CO-1](#))
6. REMOVE AIR CLEANER CASE (See page [CO-1](#))
7. REMOVE AIR CLEANER BRACKET (See page [CO-1](#))
8. REMOVE AIR CLEANER INLET NO.1 (See page [CO-1](#))
9. REMOVE STARTER ASSEMBLY (TMMWV MADE) (See page [CO-1](#))
10. REMOVE WATER INLET PIPE (TMC MADE)
 - (a) Remove the bolt and the water inlet pipe.
 - (b) Remove the O-ring from the water inlet pipe.



11. REMOVE WATER INLET (TMC MADE)
 - (a) Disconnect the wire harness clamp.
 - (b) Remove the 3 nuts and the water inlet.



12. REMOVE WATER INLET (TMMWV MADE)
 - (a) Disconnect the wire harness clamp.
 - (b) Remove the bolt and 3 nuts, then remove the water inlet.
13. REMOVE THERMOSTAT



INSTALLATION

1. INSTALL THERMOSTAT

- Install a new gasket to the thermostat.
- Align the jiggle valve of the thermostat and water inlet, and insert the thermostat in the water inlet housing.

HINT:

The jiggle valve should be set within 15° of either side of the prescribed position.

2. INSTALL WATER INLET

Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)

3. INSTALL WATER INLET PIPE

- Install a new O-ring to the water inlet pipe.
- Apply soapy water to the O-ring.
- Connect the water inlet pipe to the water inlet.
- Install the bolt which is used to fix the water inlet pipe to the cylinder head.

Torque: 20 N*m (199 kgf*cm, 14 ft.*lbf)

4. INSTALL WATER INLET

Torque: Nut

8.0 N*m (82 kgf*cm, 71 in.*lbf)

Bolt

20 N*m (199 kgf*cm, 14 ft.*lbf)

5. INSTALL STARTER ASSEMBLY (TMMWV MADE)

- Install starter assembly (See page [ST-12](#)).

6. INSTALL AIR CLEANER INLET NO.1

- Install air cleaner inlet No. 1 (See page [ST-12](#)).

7. INSTALL AIR CLEANER BRACKET

- Install air cleaner bracket (See page [ST-12](#)).

8. INSTALL AIR CLEANER CASE

- Install air cleaner case (See page [ST-12](#)).

9. INSTALL AIR CLEANER INLET NO.2

- Install air cleaner inlet No. 2 (See page [ST-12](#)).

10. INSTALL AIR CLEANER CAP SUB-ASSEMBLY

- Install air cleaner cap sub-assembly (See page [ST-12](#)).

11. ADD ENGINE COOLANT (See page [CO-7](#))

12. CHECK FOR ENGINE COOLANT (See page [CO-1](#))

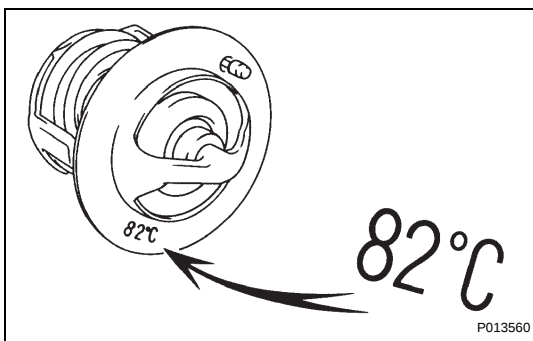
INSPECTION

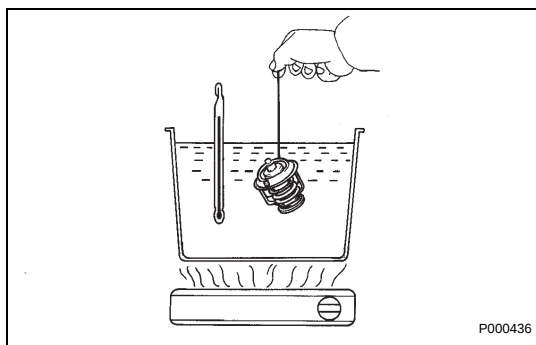
1. INSPECT THERMOSTAT

- Check the thermostat number.

HINT:

The thermostat is numbered with the valve opening temperature.



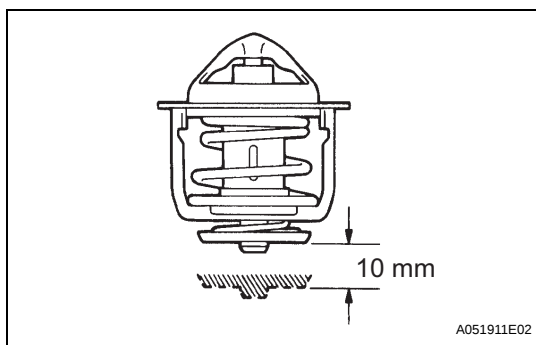


- (b) Immerse the thermostat in water and gradually heat the water.
- (c) Check the valve opening temperature of the thermostat.

Valve opening temperature:

80 to 84°C (176 to 183°F)

If the valve opening temperature is not as specified, replace the thermostat.



- (d) Check the valve lift.

Valve lift:

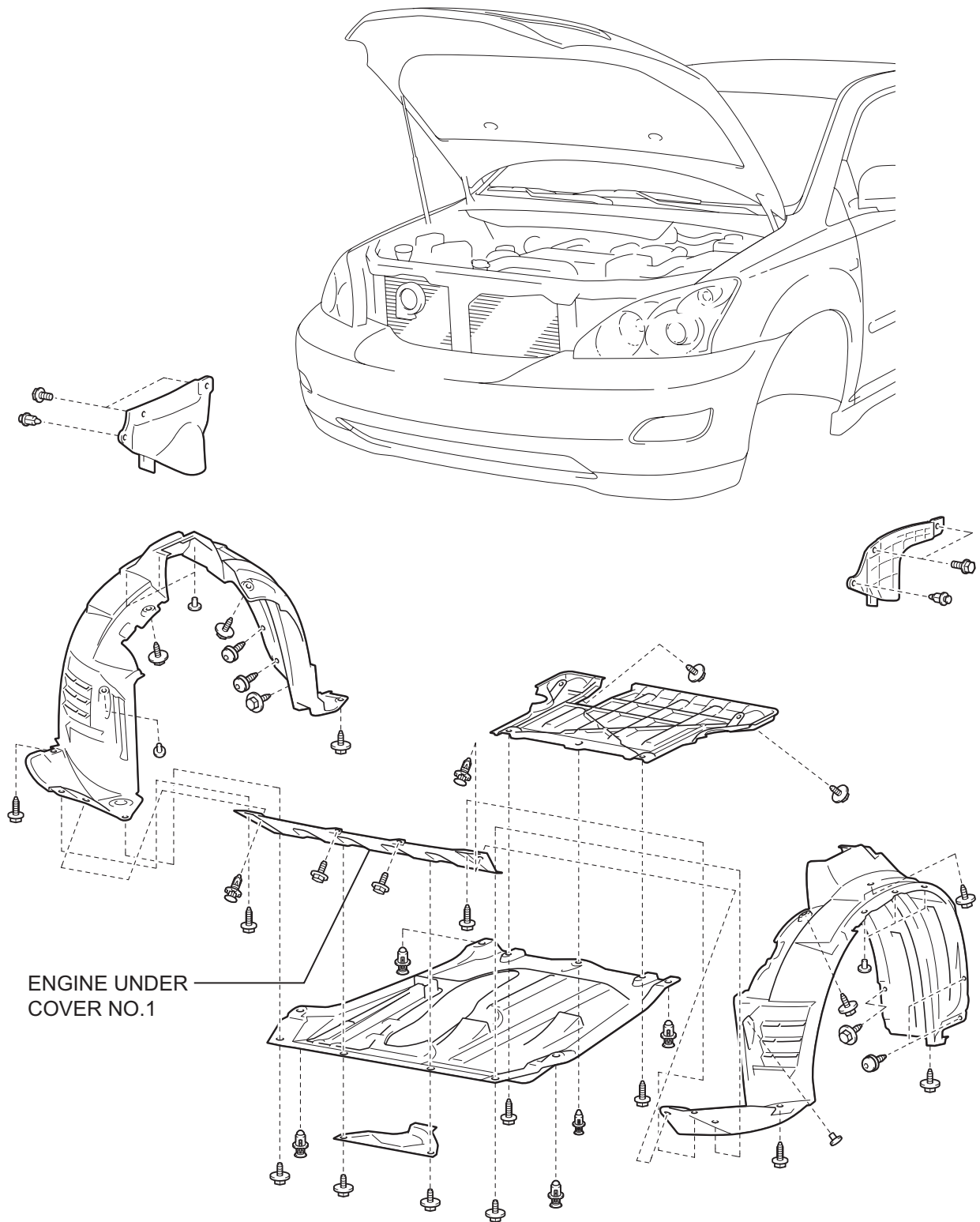
10 mm (0.394 in.) or more at 95°C (203°F)

If the valve lift is not as specified, replace the thermostat.

- (e) Check that the valve is fully closed when the thermostat temperature is low (below 77°C (171°F)). If not closed, replace the thermostat.

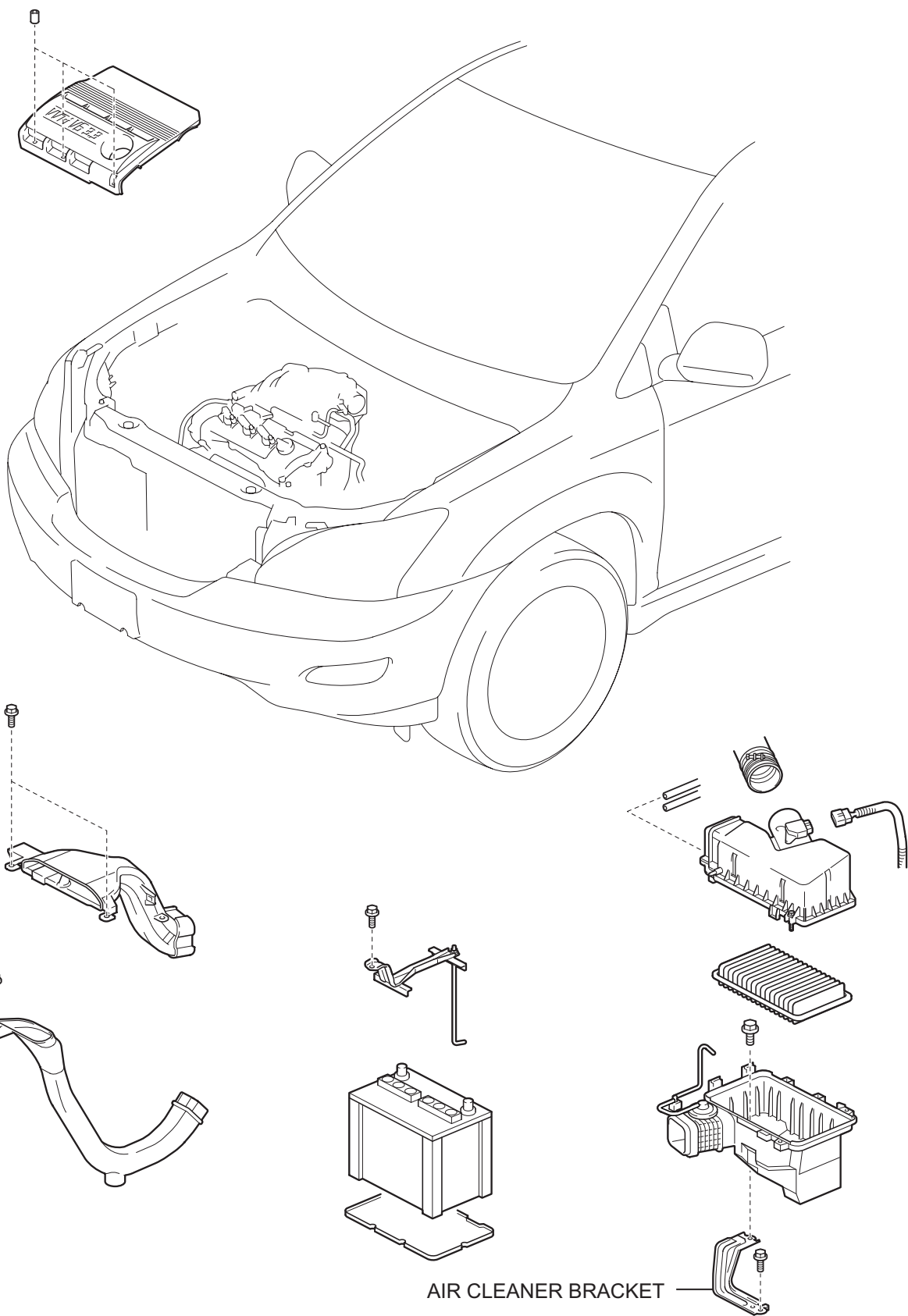
RADIATOR

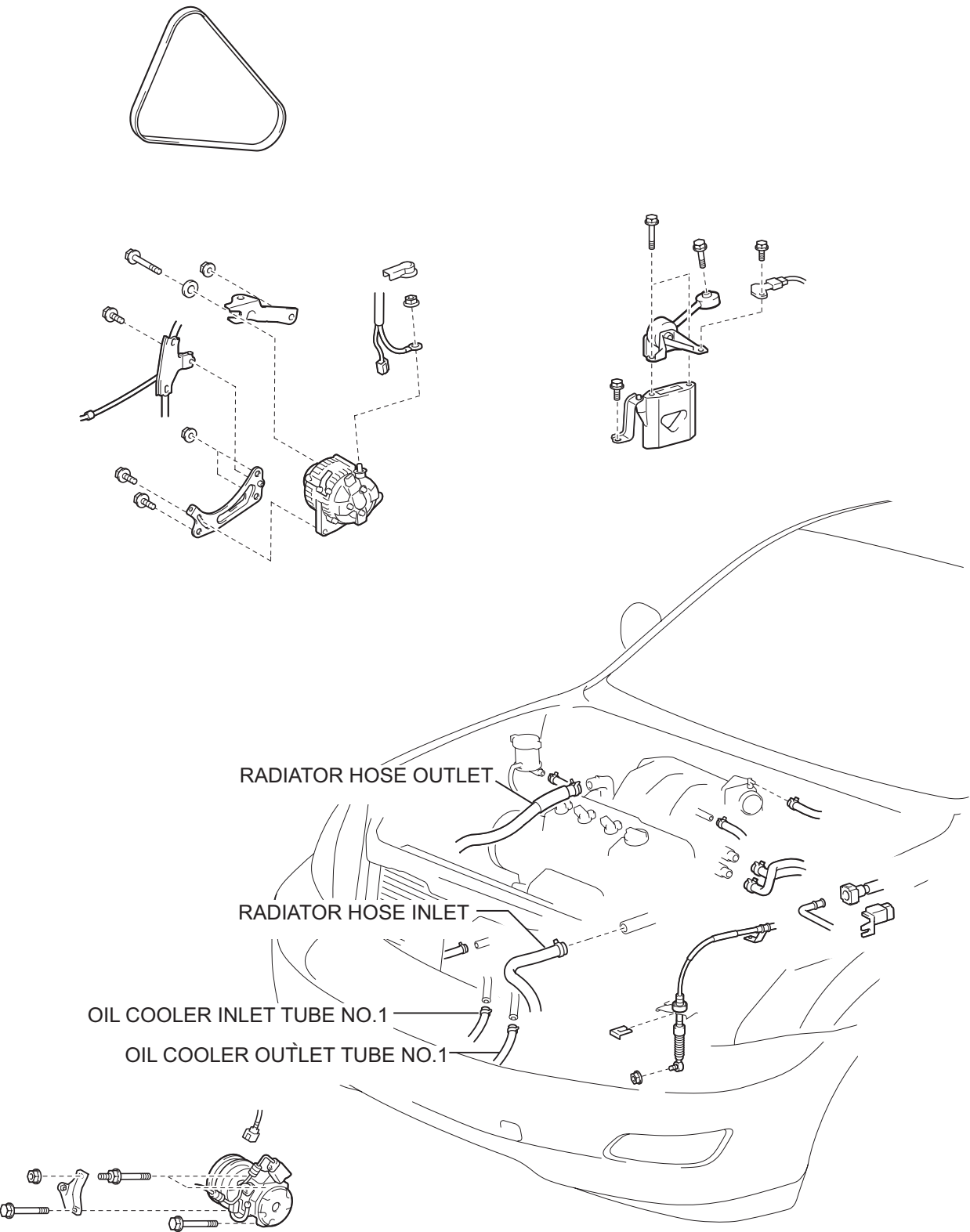
COMPONENTS

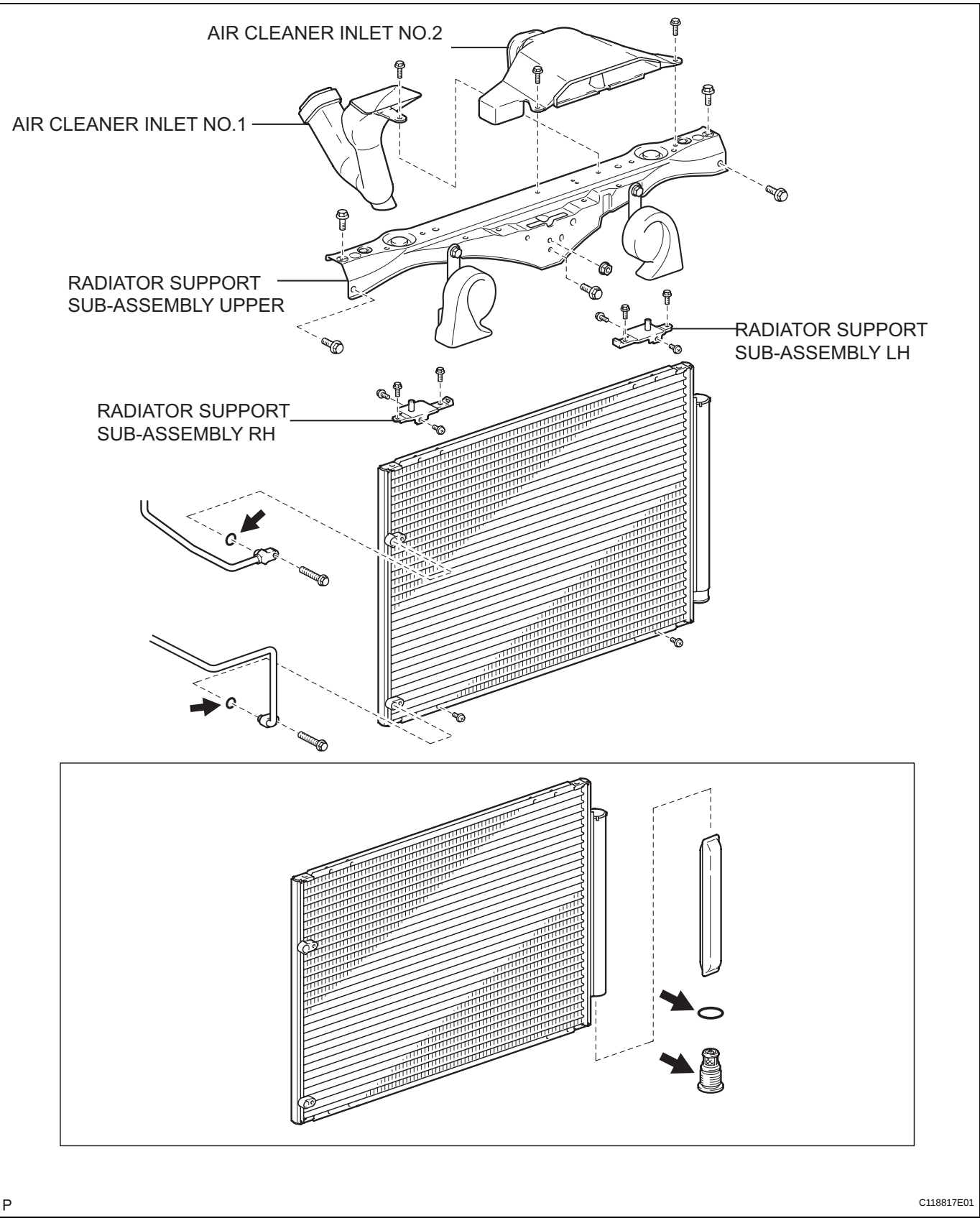


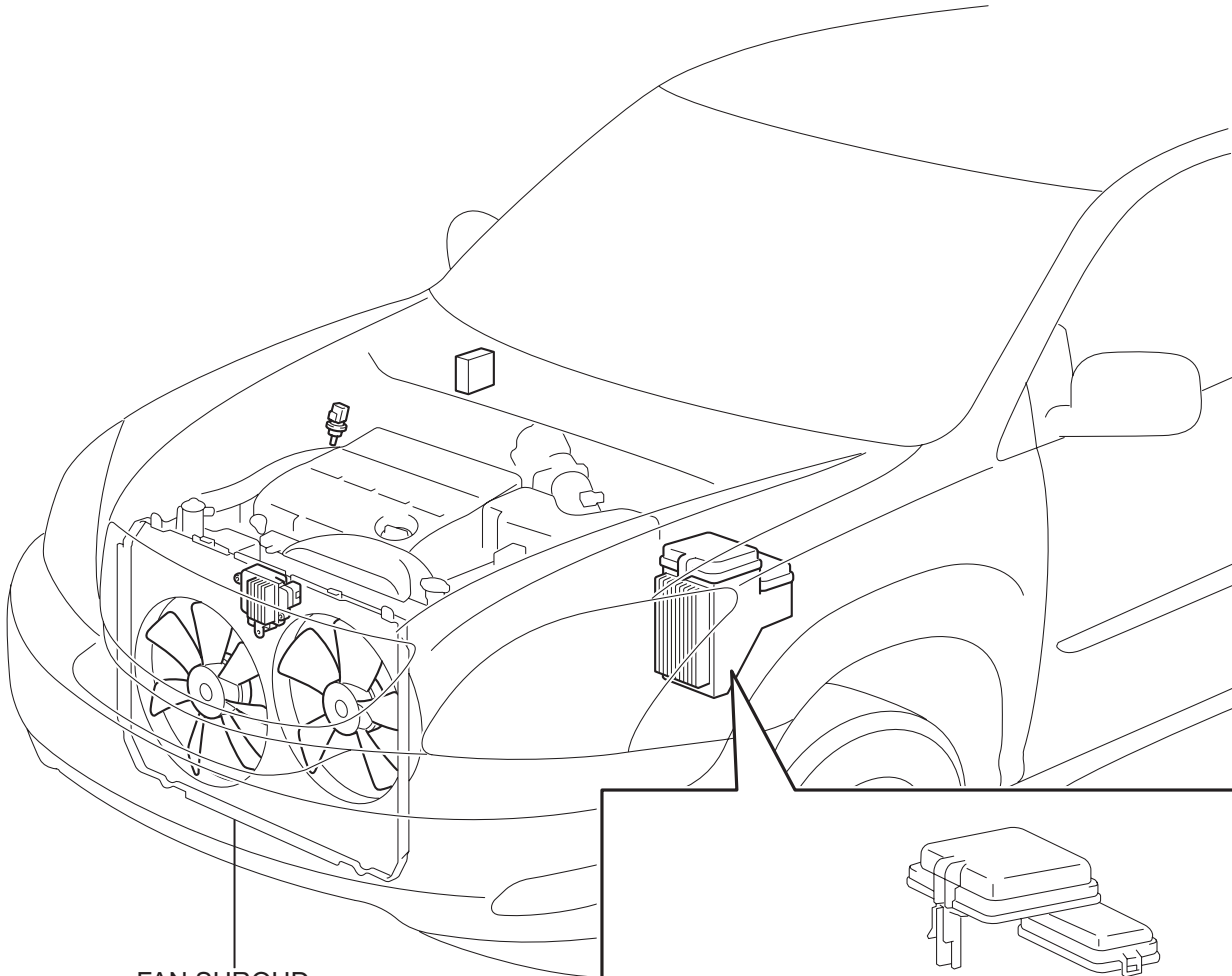
CO

CO

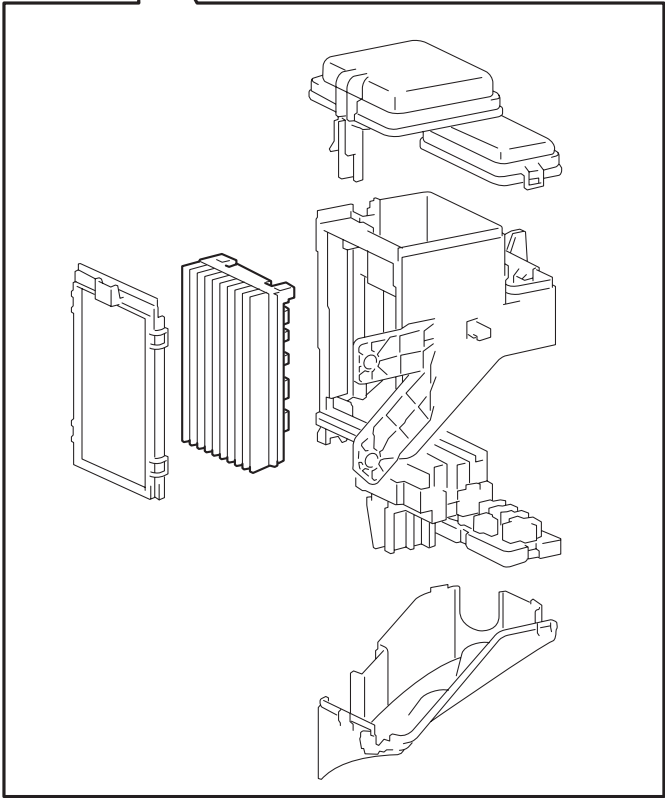




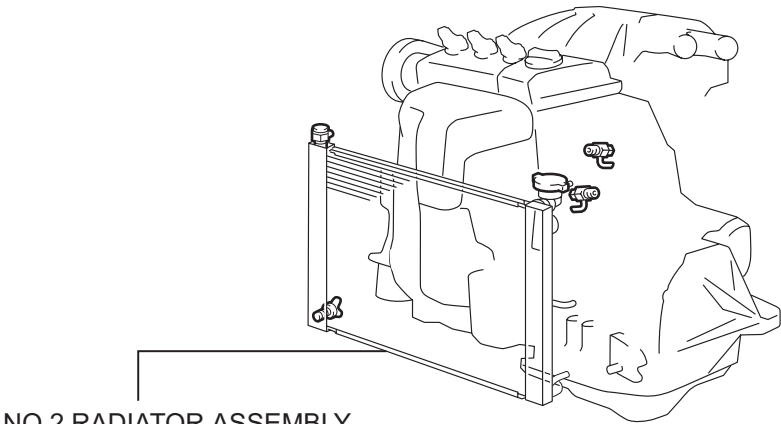




FAN SHROUD



CO



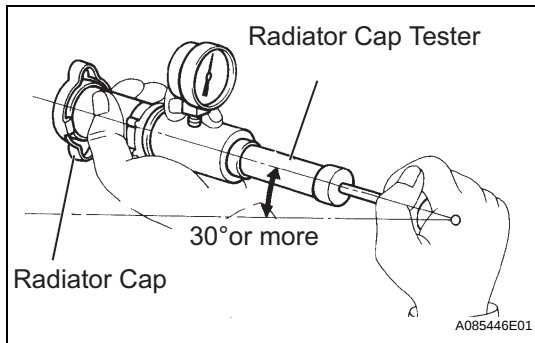
NO.2 RADIATOR ASSEMBLY

ON-VEHICLE INSPECTION

1. INSPECT RADIATOR CAP SUB-ASSEMBLY

NOTICE:

- If the radiator cap is contaminated, rinse it with water.
- Before using a radiator cap tester, wet the relief valve and the pressure valve with engine coolant or water.
- When performing following steps (a) and (b), keep the tester at an angle of over 30° above horizontal.



- (a) Using a radiator cap tester, slowly pump the tester and check that air is coming from the vacuum valve.

Pump speed:

1 push / 3 seconds or more

NOTICE:

Push the pump at a constant speed.

If air is not coming from the the vacuum valve, replace the radiator cap.

- (b) Pump the tester and measure the relief valve opening pressure.

Pump speed:

1 push within 1 second

NOTICE:

The above pump speed is for the first pump only (in order to close the vacuum valve). After the first pump, the pump speed can be reduced.

Standard opening pressure:

74 to 103 kPa (0.75 to 1.05 kgf/cm², 10.7 to 14.9 psi)

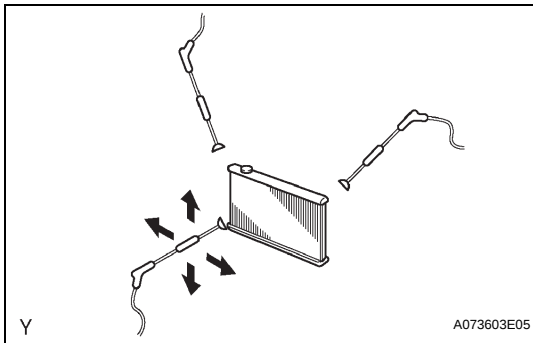
Minimum opening pressure:

59 kPa (0.6 kgf/cm², 8.6 psi)

If the opening pressure is less than minimum, replace the radiator cap.

HINT:

Use the tester's maximum reading as the opening pressure.



ON-VEHICLE CLEANING

1. INSPECT FINS BLOCKAGE

- (a) If fins are clogged, wash them with water or a steam cleaner and dry with compressed air.

NOTICE:

- If the distance between the steam cleaner and the core is too close, there is a possibility of damaging the fins, so keep the following injection distance.

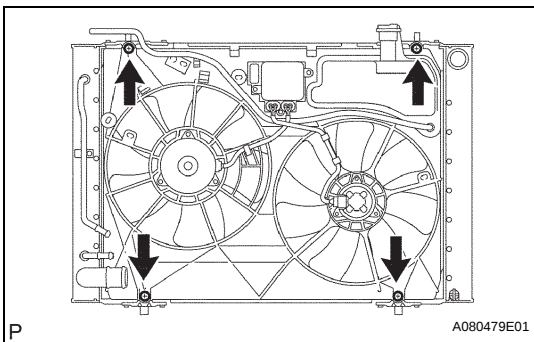
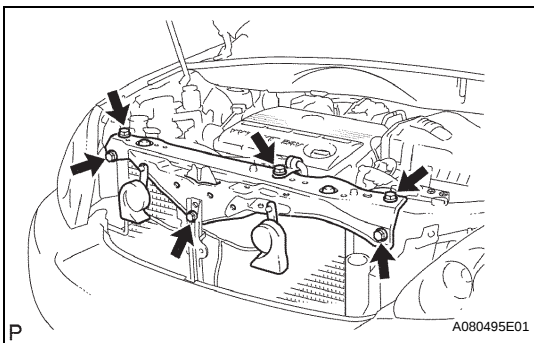
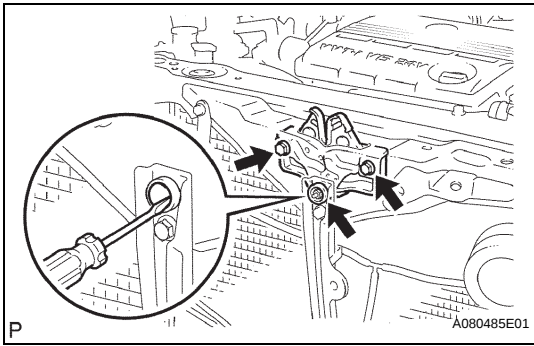
Injection Pressures kPa (kgf/cm ² , psi)	Injection Distance mm (in.)
2,942 to 4,903 (30 to 50, 427 to 711)	300 (11.811)
4,903 to 7,845 (50 to 80, 711 to 1,138)	500 (19.685)

- If the fins are bent, straighten them with a screwdriver or pliers.

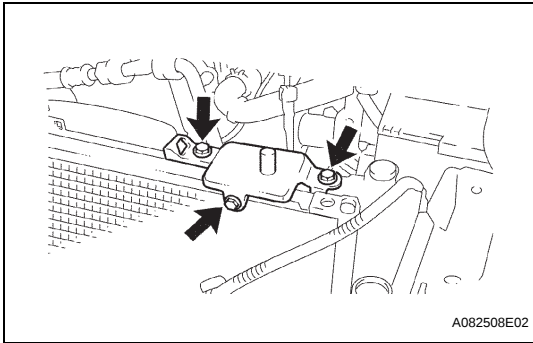
- **Be careful not to expose electronic components to water.**

REMOVAL

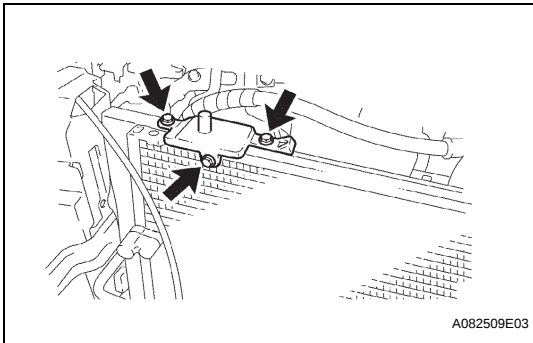
1. **DRAIN ENGINE COOLANT** (See page [CO-7](#))
2. **REMOVE ENGINE UNDER COVER NO.1**
3. **REMOVE AIR CLEANER INLET NO.2**
(a) Remove air cleaner inlet No. 2 (See page [ST-5](#)).
4. **REMOVE AIR CLEANER ASSEMBLY**
(a) Remove air cleaner assembly (See page [ST-5](#)).
5. **REMOVE AIR CLEANER BRACKET**
(a) Remove air cleaner bracket (See page [ST-5](#)).
6. **REMOVE AIR CLEANER INLET NO.1**
(a) Remove air cleaner inlet No. 1 (See page [ST-5](#)).
7. **DISCONNECT RADIATOR HOSE INLET**
8. **DISCONNECT RADIATOR HOSE OUTLET**
9. **DISCONNECT OIL COOLER INLET TUBE NO.1**
10. **DISCONNECT OIL COOLER OUTLET TUBE NO.1**
11. **SEPARATE HOOD LOCK ASSEMBLY**
(a) Using a screw drive, remove the cap.
(b) Remove the 2 bolts and nut, and separate the hood lock.



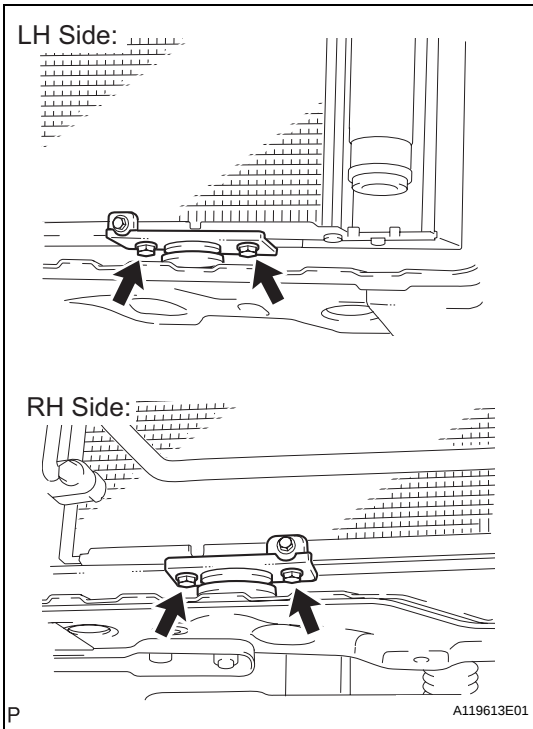
12. **REMOVE RADIATOR SUPPORT SUB-ASSEMBLY UPPER**
(a) Remove the bolt and separate the suction tube bracket.
(b) Disconnect the horn connectors.
(c) Remove the 5 bolts and the radiator upper support.
13. **REMOVE FAN SHROUD**
(a) Disconnect the engine coolant reservoir hose.
(b) Disconnect the fan motor connectors.
(c) Remove the 4 bolts and the fan shroud.

**14. REMOVE RADIATOR SUPPORT SUB-ASSEMBLY LH**

- (a) Remove the 3 bolts and the radiator support upper LH.

**15. REMOVE RADIATOR SUPPORT SUB-ASSEMBLY RH**

- (a) Remove the 3 bolts and the radiator support upper RH.

**16. REMOVE NO.2 RADIATOR ASSEMBLY**

- (a) Remove the 4 bolts.
(b) Lift radiator, then remove it.

INSTALLATION

1. **INSTALL NO.2 RADIATOR ASSEMBLY**
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)
2. **ADJUST RADIATOR SUPPORT SUB-ASSEMBLY LH**
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)
3. **INSTALL RADIATOR SUPPORT SUB-ASSEMBLY RH**
Torque: 5.0 N*m (51 kgf*cm, 44 in.*lbf)
4. **INSTALL FAN SHROUD**
Torque: 13.5 N*m (138 kgf*cm, 10 ft.*lbf)
5. **INSTALL RADIATOR SUPPORT SUB-ASSEMBLY UPPER**
 - (a) Install the 5 bolts and the radiator upper support.
NOTICE:
Secure the member with retaining claws of the radiator upper support.
Torque: 7.8 N*m (71 kgf*cm, 62 in.*lbf)
 - (b) Connect the horn connector.
 - (c) Install the suction tube bracket with the bolt.
Torque: 9.8 N*m (100 kgf*cm, 7 ft.*lbf)
6. **INSTALL HOOD LOCK ASSEMBLY**
Torque: 8.0 N*m (82 kgf*cm, 71 in.*lbf)
7. **INSTALL AIR CLEANER INLET NO.1**
 - (a) Install air cleaner inlet No. 1 (See page [ST-12](#)).
8. **INSTALL AIR CLEANER BRACKET**
 - (a) Install air cleaner bracket (See page [ST-12](#)).
9. **INSTALL AIR CLEANER ASSEMBLY**
 - (a) Install air cleaner assembly (See page [ST-12](#)).
10. **INSTALL AIR CLEANER INLET NO.2**
 - (a) Install all cleaner inlet No. 2 (See page [ST-12](#)).
11. **ADJUST HOOD SUB-ASSEMBLY (ENGINE HOOD / HOOD / HOOD / ADJUSTMENT)** (See page [ED-93](#))
12. **ADD ENGINE COOLANT** (See page [CO-7](#))
13. **CHECK FOR ENGINE COOLANT LEAKS** (See page [CO-1](#))