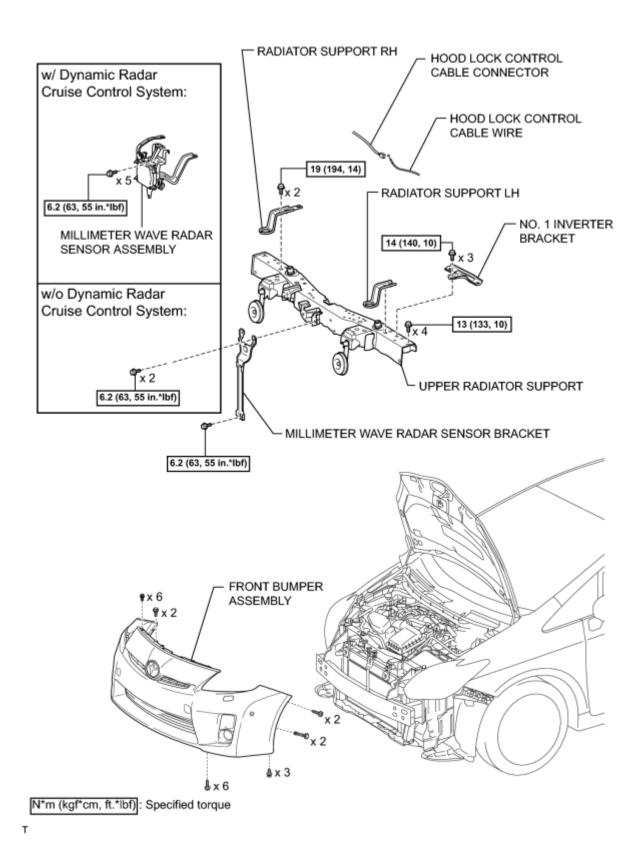
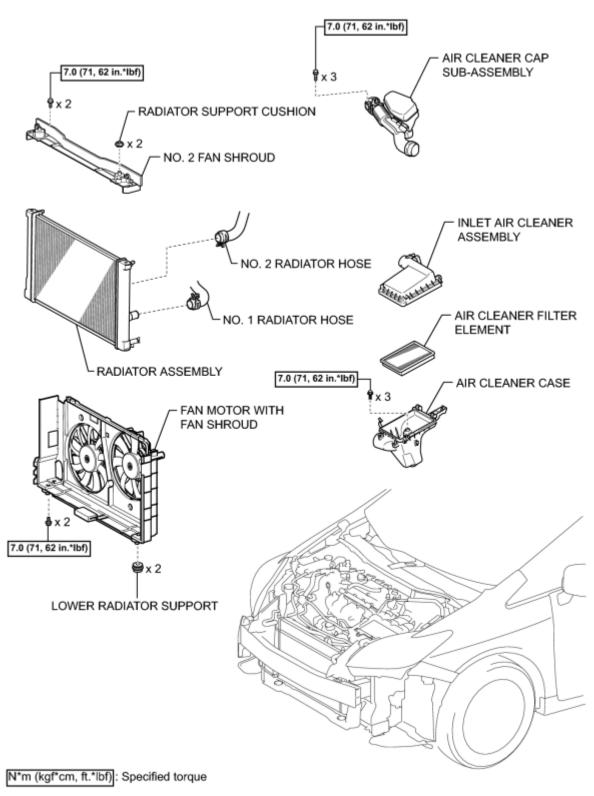


# **ILLUSTRATION**

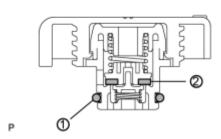


# **ILLUSTRATION**



# **ON-VEHICLE INSPECTION**

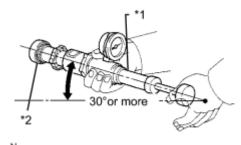
- 1. CHECK RESERVE TANK CAP (for Engine)
- (a) Measure the valve opening pressure.



- (1) If there are water stains or foreign matter on O-ring 1, clean it with water and finger scouring.
- (2) Check that O-ring 1 is not deformed, cracked or swollen.
- (3) Apply engine coolant to O-ring 1 and rubber packing 2 before using a radiator cap tester.
- (4) When using the cap tester, tilt it upwards 30 degrees or more.
  - (5) Pump the cap tester several times, and check the maximum pressure\*1.

# **Text in Illustration**

*1	Radiator Cap Tester
*2	Radiator Cap



Pumping speed:

1 pump per second

HINT:

\*1: Even if the cap cannot maintain the maximum pressure, it is not a defect.

#### Judgment Criterion:

Item	Specified Condition
Standard value	94 to 122 kPa (1.0 to 1.2 kgf/cm <sup>2</sup> , 13.5 to 17
(for brand-new cap)	psi)

Minimum standard value	79 kPa (0.8 kgf/cm <sup>2</sup> , 11.4 psi)
(after using cap)	

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

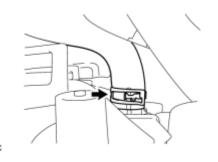
# **REMOVAL**

- 1. REMOVE RADIATOR SUPPORT OPENING COVER\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
- 2. REMOVE REAR NO. 2 FLOOR BOARD (for Separate Type)
- 3. REMOVE REAR DECK FLOOR BOX\_\_\_\_\_\_\_\_\_
- 4. REMOVE REAR NO. 3 FLOOR BOARD\_\_\_\_\_\_\_\_\_
- 5. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

#### NOTICE:

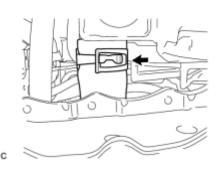
When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

- 6. REMOVE NO. 1 ENGINE UNDER COVER
- 8. DISCONNECT NO. 1 RADIATOR HOSE



(a) Disconnect the No. 1 radiator hose from the radiator assembly.

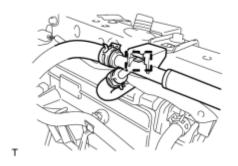
#### 9. DISCONNECT NO. 2 RADIATOR HOSE



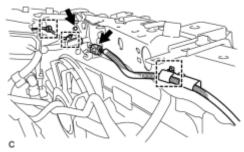
(a) Disconnect the No. 2 radiator hose from the radiator assembly.

10. REMOVE FRONT BUMPER ASSEMBLY\_

- 11. REMOVE MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System).
- 12. REMOVE MILLIMETER WAVE RADAR SENSOR BRACKET\_ NFC
- 13. REMOVE NO. 1 INVERTER BRACKET\_\_\_\_\_\_\_\_\_
- 14. REMOVE HOOD LOCK SUPPORT SUB-ASSEMBLY

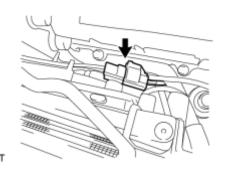


(a) Disconnect the water by-pass hose clamp from the radiator support RH.



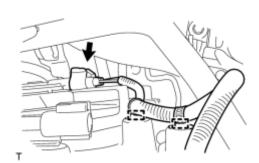
(b) Disconnect the hood lock connector and hood lock control cable wire.

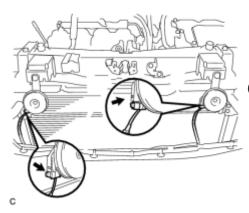
(c) Disconnect the 3 wire harness clamps.



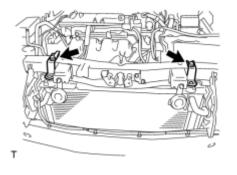
(d) Disconnect the connector from the No. 2 cooling fan motor.

(e) Disconnect the 2 wire harness clamps and connector from the fan shroud and cooling fan motor.

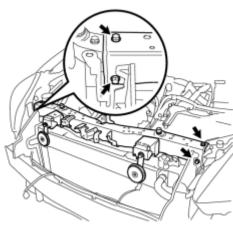




(f) Disconnect the 2 horn connectors.

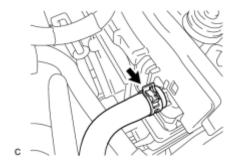


(g) Remove the 2 bolts, radiator support RH and radiator support LH with the 2 cushions from the upper radiator support.

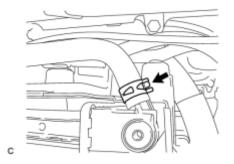


(h) Remove the 4 bolts and upper radiator support.

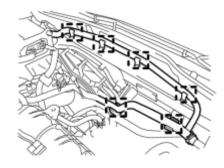
- 15. REMOVE AIR CLEANER CAP SUB-ASSEMBLY\_
- 16. REMOVE INLET AIR CLEANER ASSEMBLY\_\_\_\_\_\_\_\_\_\_
- 17. REMOVE AIR CLEANER CASE\_\_\_\_\_\_\_\_
- 18. REMOVE NO. 2 FAN SHROUD



(a) Disconnect the No. 1 water by-pass hose from the radiator assembly.

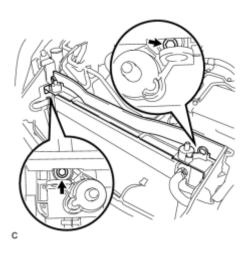


(b) Disconnect the water by-pass hose from the radiator assembly.

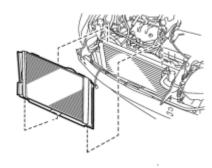


(c) Disconnect the 6 water by-pass hose clamps from the No. 2 fan shroud.

(d) Remove the 2 bolts and No. 2 fan shroud from the radiator assembly.



## 19. REMOVE RADIATOR ASSEMBLY



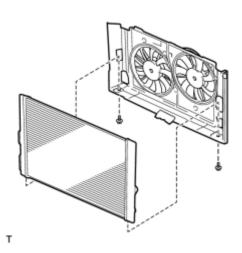
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(a) Remove the radiator assembly with the fan shroud.

## NOTICE:

For vehicles with the air conditioning system, do not apply any excessive force to the cooler condenser assembly or pipe when removing the radiator assembly.

(b) Remove the 2 lower radiator supports.

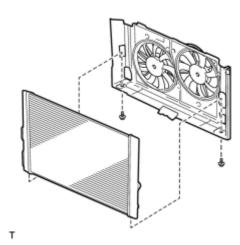


(c) Remove the 2 bolts.

(d) Remove the fan shroud from the radiator assembly.

# **INSTALLATION**

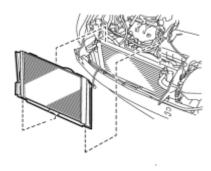
## 1. INSTALL RADIATOR ASSEMBLY



(a) Install the 2 bolts.

Torque: 7.0 N·m (71 kgf·cm, 62in·lbf)

- (b) Install the fan shroud to the radiator assembly.
- (c) Install the 2 lower radiator supports.



(d) Install the radiator assembly with the fan shroud.

## NOTICE:

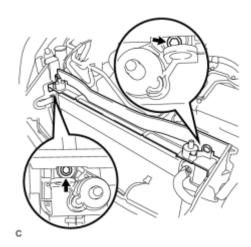
For vehicles with the air conditioning system, do not apply any excessive force to the cooler condenser assembly or pipe when installing the radiator assembly.

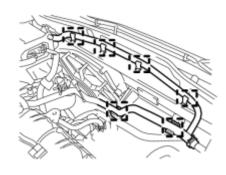
### 2. INSTALL NO. 2 FAN SHROUD

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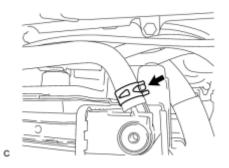
(a) Install the No. 2 fan shroud with the 2 bolts.

Torque: 7.0 N·m (71 kgf·cm, 62in·lbf)

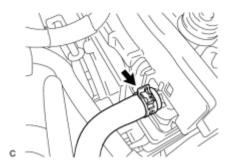




(b) Connect the 6 water by-pass hose clamps to the No. 2 fan shroud.



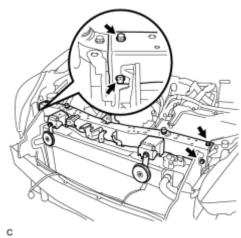
(c) Connect the water by-pass hose to the radiator assembly.



(d) Connect the No. 1 water by-pass hose to the radiator assembly.

- 4. INSTALL INLET AIR CLEANER ASSEMBLY\_ NFO

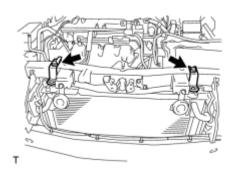
#### 6. INSTALL HOOD LOCK SUPPORT SUB-ASSEMBLY



(a) Install the upper radiator support with the 4 bolts.

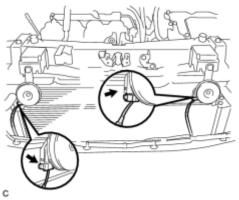
Torque: 13 N·m (133 kgf·cm, 10ft·lbf)

(b) Install the 2 cushions to the radiator support RH and radiator support LH.



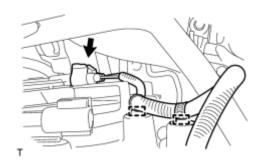
(c) Install the radiator support RH and radiator support LH with the 2 bolts.

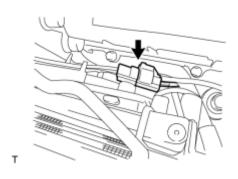
Torque: 19 N·m (194 kgf·cm, 14ft·lbf)



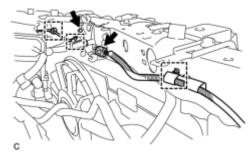
(d) Connect the 2 horn connectors.

(e) Connect the 2 wire harness clamps and connector to the fan shroud and cooling fan motor.



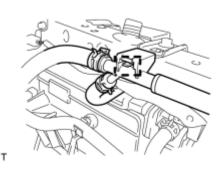


(f) Connect the connector to the No. 2 cooling fan motor.



(g) Connect the hood lock connector and hood lock control cable wire.

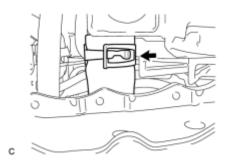
(h) Connect the 3 wire harness clamps.



(i) Connect the water by-pass hose clamp to the radiator support RH.

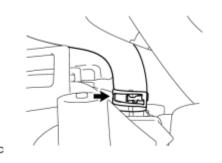
- 7. INSTALL NO. 1 INVERTER BRACKET\_\_\_\_\_\_\_\_\_\_
- 8. INSTALL MILLIMETER WAVE RADAR SENSOR BRACKET\_ NO.
- 9. INSTALL MILLIMETER WAVE RADAR SENSOR ASSEMBLY (w/ Dynamic Radar Cruise Control System).

### 11. CONNECT NO. 2 RADIATOR HOSE



(a) Connect the No. 2 radiator hose to the radiator assembly with the clamp.

#### 12. CONNECT NO. 1 RADIATOR HOSE



(a) Connect the No. 1 radiator hose to the radiator assembly with the clamp.

- 14. INSPECT FOR COOLANT LEAK (for Engine)
- 15. INSTALL NO. 1 ENGINE UNDER COVER
- 16. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

#### NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected

- 17. INSTALL REAR NO. 3 FLOOR BOARD\_ NFC
- 18. INSTALL REAR DECK FLOOR BOX
- 19. INSTALL REAR NO. 2 FLOOR BOARD (for Separate Type)\_\_\_\_\_\_\_
- 20. INSTALL RADIATOR SUPPORT OPENING COVER\_\_\_\_\_\_\_\_
- 21. ADD WASHER FLUID (w/ Headlight Cleaner System)\_\_\_\_\_\_\_\_

- 22. PREPARE VEHICLE FOR FOG LIGHT AIM ADJUSTMENT (w/ Fog Light)\_\_\_\_\_\_\_
- 23. PREPARE FOR FOG LIGHT AIMING\_\_\_\_\_\_\_
- 24. INSPECT FOG LIGHT AIMING NFO
- 25. ADJUST FOG LIGHT AIMING\_\_\_\_\_\_\_