

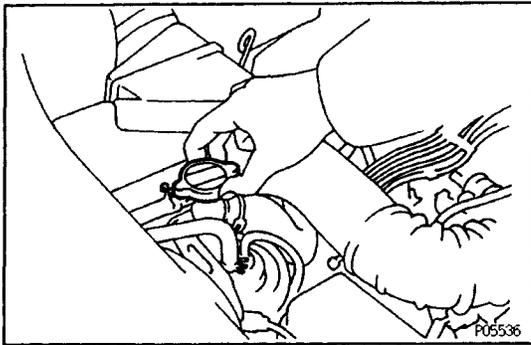
RADIATOR

RADIATOR CLEANING

EG13L-01

Using water or a steam cleaner, remove any mud and dirt from the radiator core.

NOTICE: If using a high pressure type cleaner, be careful not to deform the fins of the radiator core. If the cleaner nozzle pressure is 2,942 – 3.432 kPa (30 – 35 kgf/cm², 427 – 498 psi), keep a distance of at least 40 – 50 cm (15.75 – 19.69 in.) between the radiator core and cleaner nozzle.

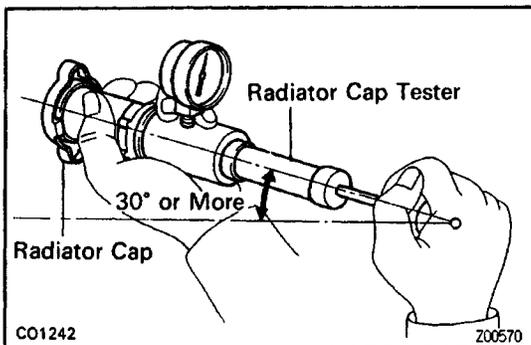


RADIATOR INSPECTION

EG13M-01

1. REMOVE RADIATOR (WATER FILLER) CAP

CAUTION: To avoid the danger of being burned, do not remove it while the engine and radiator are still hot, as fluid and steam can be blown out under pressure.



2. INSPECT RADIATOR (WATER FILLER) CAP

NOTICE: When performing steps (a) and (b) below, keep the radiator pump tester at an angle of over 30° above the horizontal.

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

Pump speed:

1 push/3 seconds or more

NOTICE: Push the pump at a constant speed.

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

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

Pump speed:

1st time

1 push/1 second or less

2nd time or more

Any speed

Standard opening pressure:

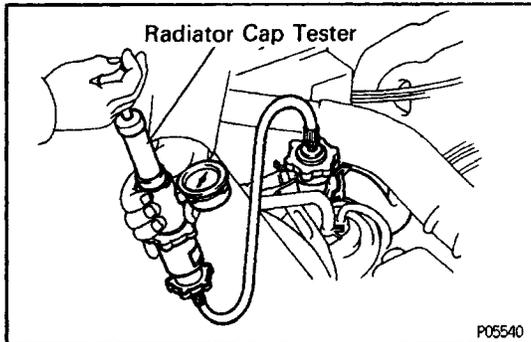
74 – 103 kPa

(0.75 – 1.05 kgf/cm², 10.7 – 14.9 psi)

Minimum opening pressure:

59 kPa (0.6 kgf/cm², 8.5 psi)

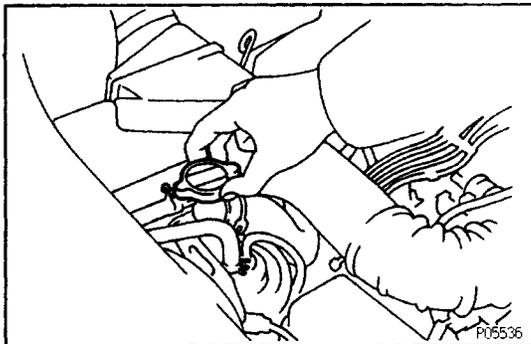
If the opening pressure is less than minimum, r
place the radiator cap.



3. INSPECT COOLING SYSTEM FOR LEAKS

- (a) Fill the radiator with coolant and attach a radiator cap tester to the water filler.
- (b) Warm up the engine.
- (c) Pump it to 118 kPa (1.2 kgf/cm², 17.1 psi), and check that the pressure does not drop.

If the pressure drops, check the hoses, radiator or water pump for leaks. If no external leaks are found, check the heater core, cylinder block and head.

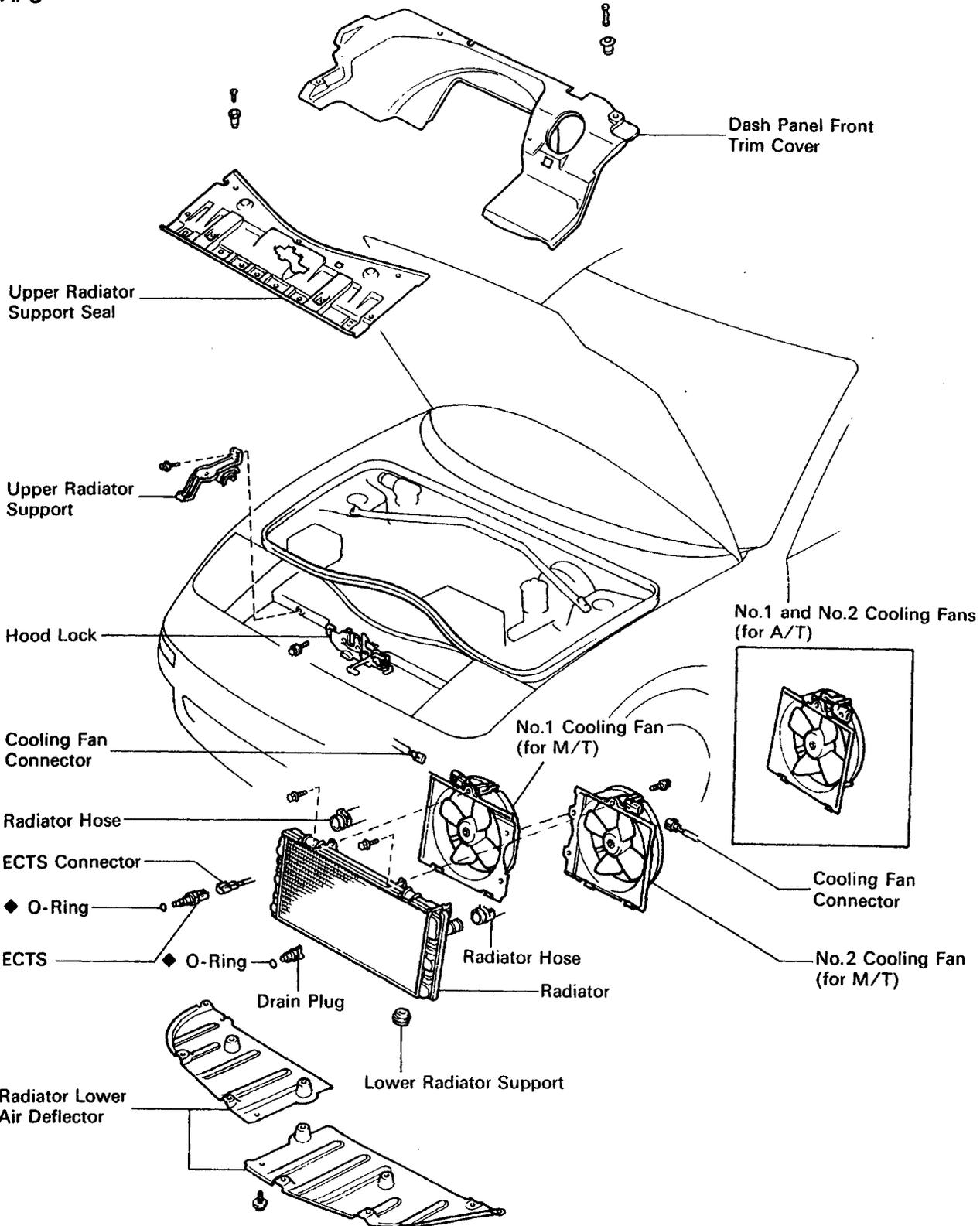


4. REINSTALL RADIATOR (WATER FILLER) CAP

EG13N-01

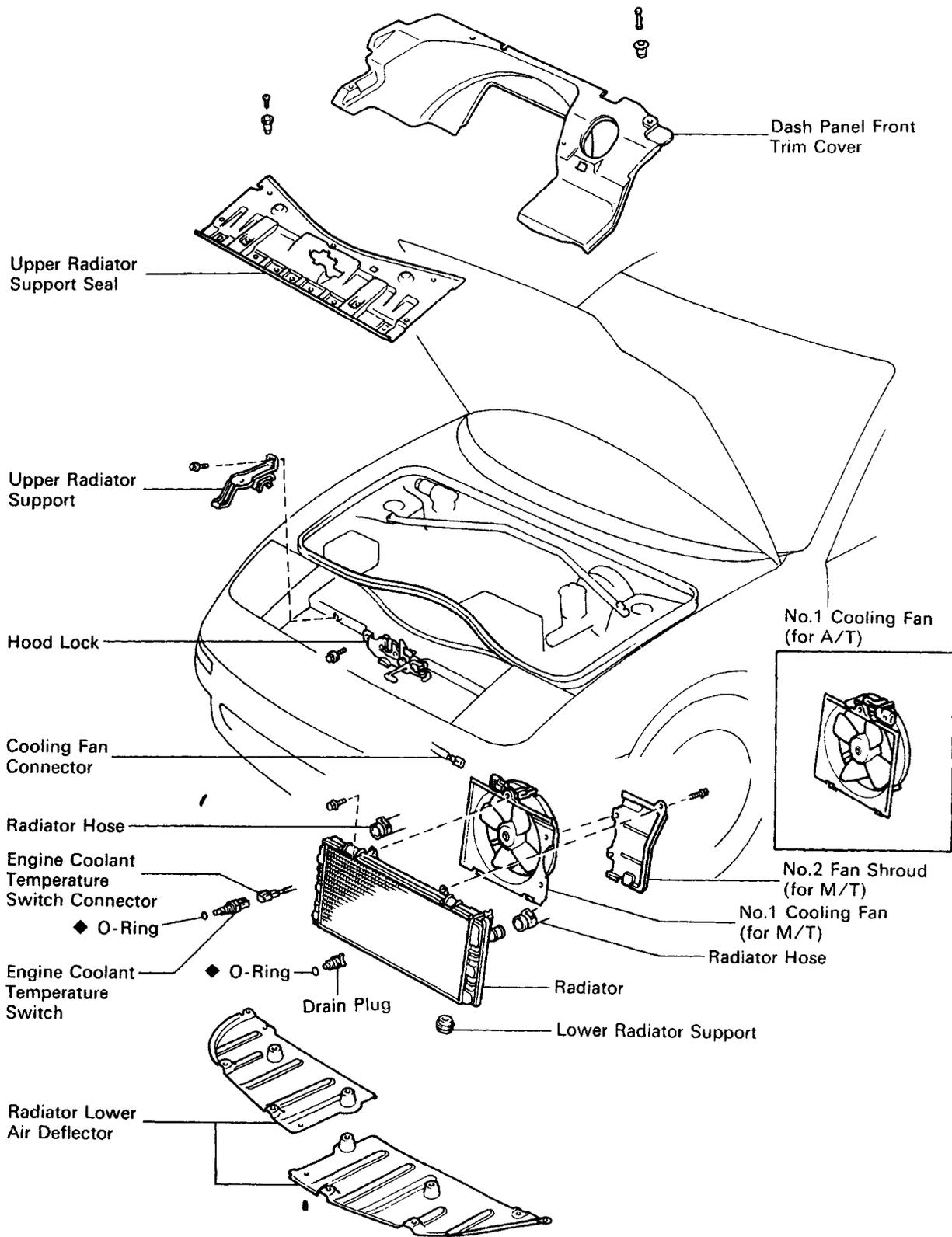
COMPONENTS FOR REMOVAL AND INSTALLATION

w/ A/C

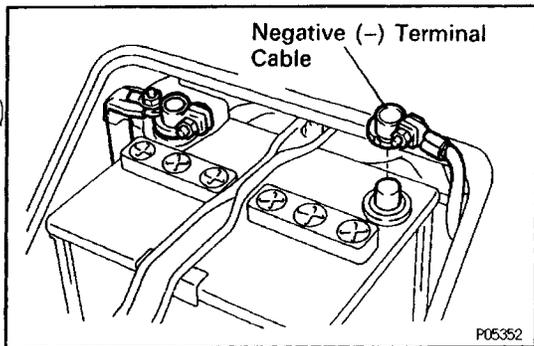


• Non-reusable part

w/o A/C



◆ Non-reusable part

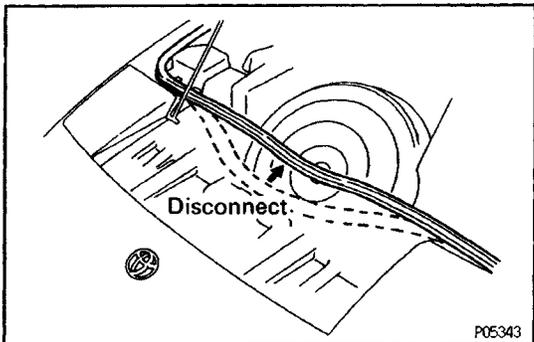


RADIATOR REMOVAL

(See Components for Removal and Installation)

1. DISCONNECT CABLE FROM NEGATIVE TERMINAL OF BATTERY

CAUTION: Turn the ignition switch to "LOCK". Disconnect the negative terminal from the battery. Wait at least 20 seconds before proceeding with work.

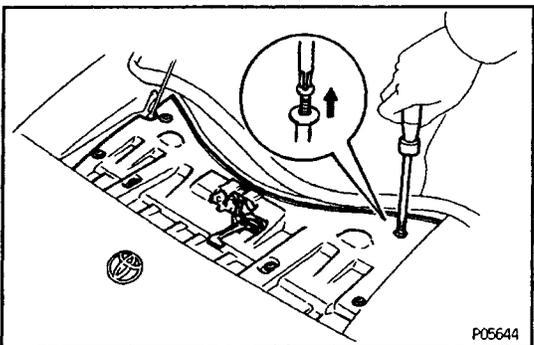


2. REMOVE RADIATOR LOWER AIR DEFLECTOR

3. DRAIN ENGINE COOLANT

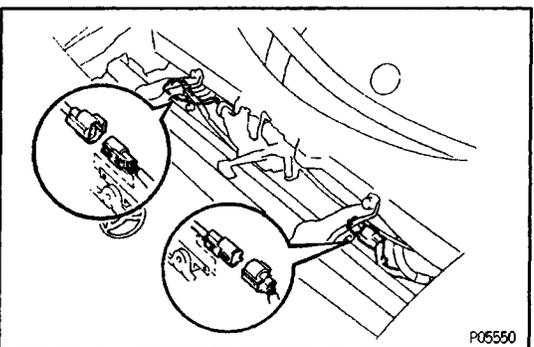
4. REMOVE UPPER RADIATOR SUPPORT SEAL

(a) Disconnect the hood weatherstrip.



(b) Remove the seven clips.

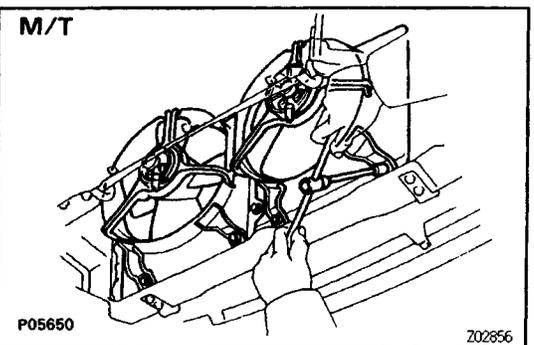
(c) Remove the two hood lock mounting bolts, and remove the support seal.



5. (w/ A/C)

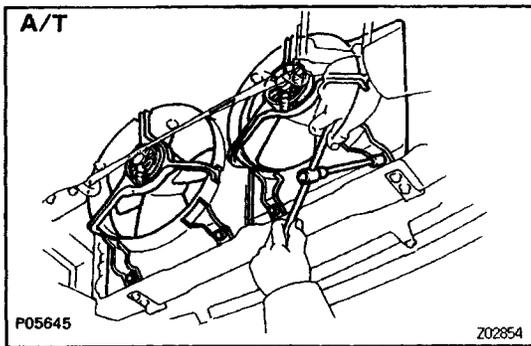
REMOVE NO.1 AND NO.2 COOLING FANS

(a) Disconnect the two cooling fan connectors.

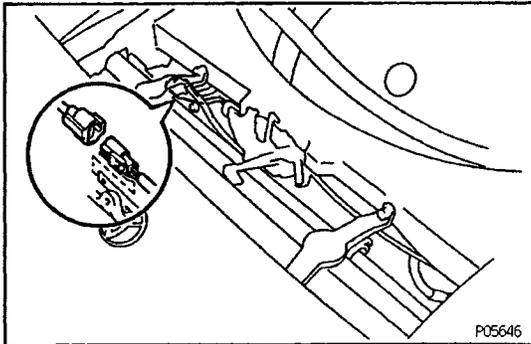


(b) (M/T)

Remove the five bolts and No.2 cooling fan. Remove the three bolt and No.1 cooling fan.



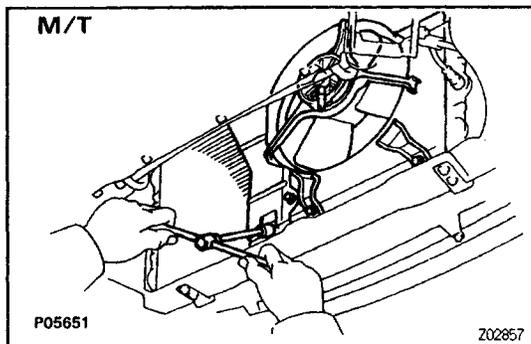
(c) (A/T)
Remove the three bolts and cooling fan. Remove the two cooling fans.



6. (w/o A/C)

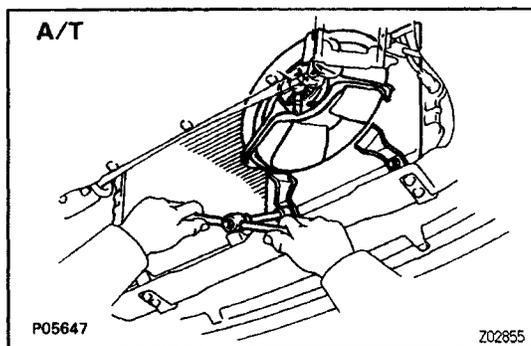
REMOVE NO.1 COOLING FAN

(a) Disconnect the cooling fan connector.



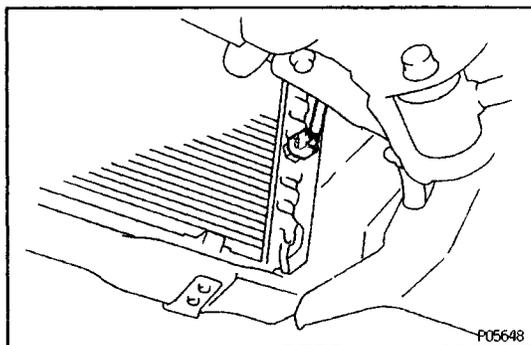
(b) (M/T)

Remove the four bolts and No.2 fan shroud. Remove the three bolts and No.1 cooling fan.



(c) (A/T)

Remove the three bolts and cooling fan.

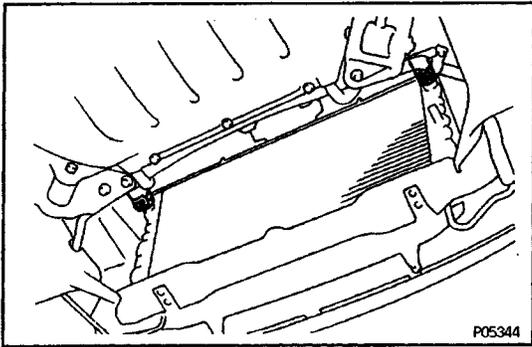


7. (w/ A/C)

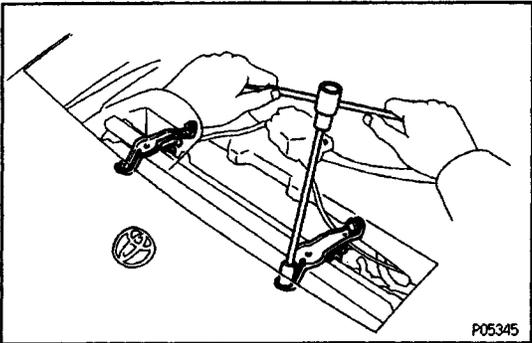
DISCONNECT ECTS CONNECTOR

8. (w/o A/C)

DISCONNECT ENGINE COOLANT TEMPERATURE SWITCH CONNECTOR

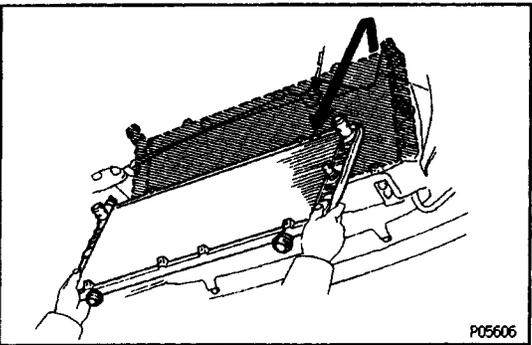


9. DISCONNECT RADIATOR HOSES

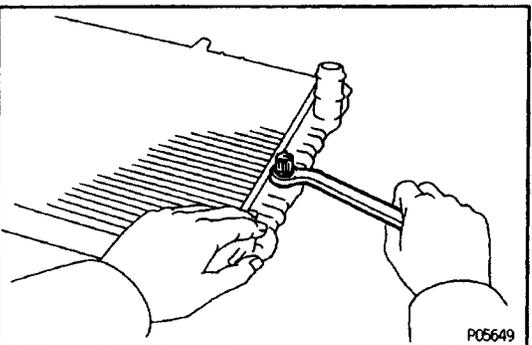


10. REMOVE RADIATOR

- (a) Remove the two bolts and upper support. Remove the two upper supports.



- (b) Remove the radiator.
(c) Remove the two lower radiator supports.



11. (w/ A/C)

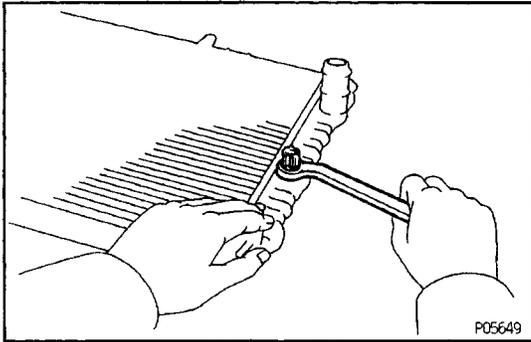
REMOVE ECTS FROM RADIATOR

- (a) Remove the ECTS.
(b) Remove the O-ring from the ECTS.

12. (w/o A/C)

REMOVE ENGINE COOLANT TEMPERATURE SWITCH FROM RADIATOR

- (a) Remove the temperature switch.
(b) Remove the O-ring from the temperature switch.



RADIATOR INSTALLATION

(See Components for Disassembly and Assembly)

1. (w/ A/C)

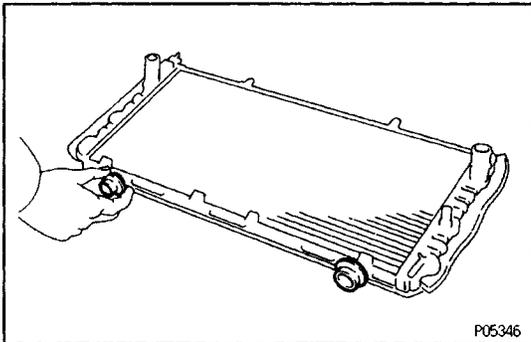
INSTALL ECTS TO RADIATOR

- (a) Install a new O-ring to the ECTS.
- (b) Install the ECTS.

2. (w/o A/C)

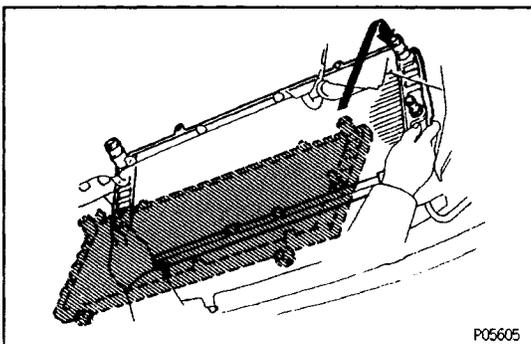
INSTALL ENGINE COOLANT TEMPERATURE SWITCH TO RADIATOR

- (a) Install a O-ring to the temperature switch.
- (b) Install the temperature switch.

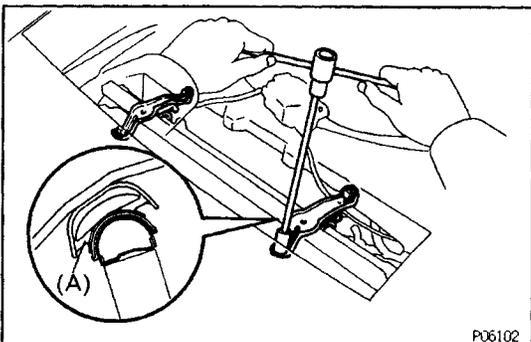


3. INSTALL RADIATOR

- (a) Install the two lower radiator supports to the radiator.



- (b) Place the radiator in position on the body.

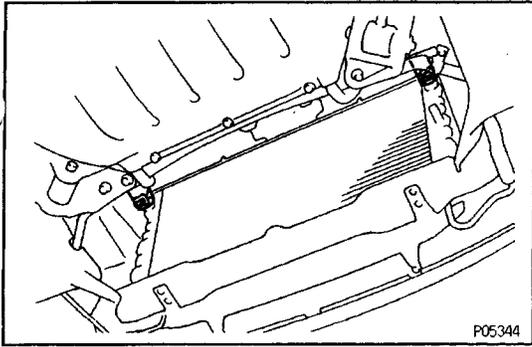


- (c) Install the upper radiator support. Install the two upper supports.

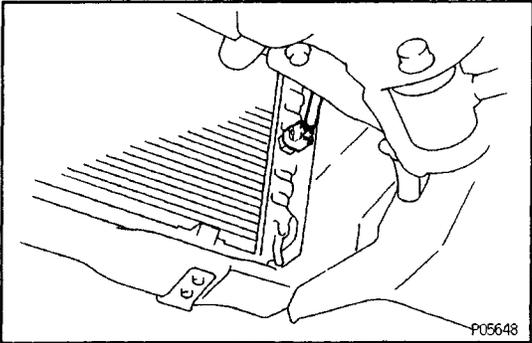
Torque: 13 N-m (130 kgf-cm, 9 ft-lbf)

HINT: After installation, check that the rubber cushion

- (A) of the support is not depressed.



4. CONNECT RADIATOR HOSES

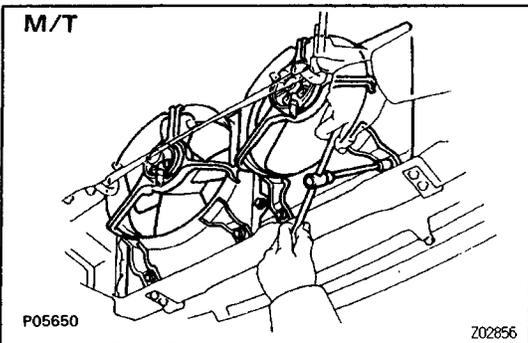


5. (w/ A/C)

CONNECT ECTS CONNECTOR

6. (w/o A/C)

CONNECT ENGINE COOLANT TEMPERATURE SWITCH CONNECTOR

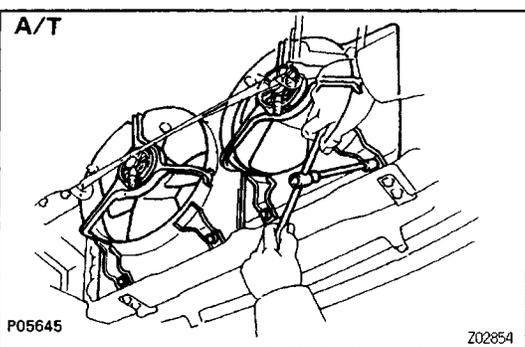


7. (w/ A/C)

INSTALL NO.1 AND NO.2 COOLING FANS

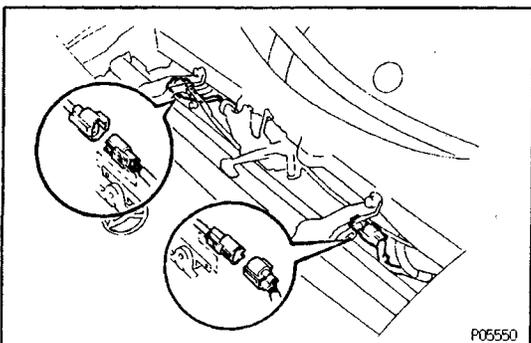
(a) (M/T)

Install the No. 1 cooling fan with the three bolts. Install the No.2 cooling fan with the five bolts.

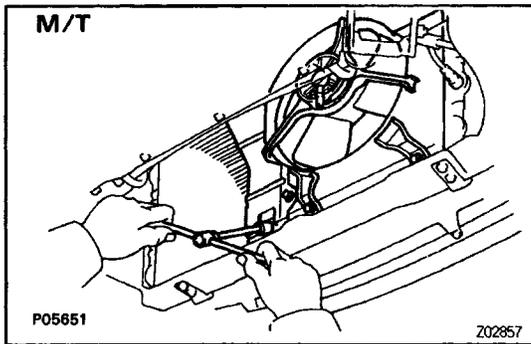


(b) (A/T)

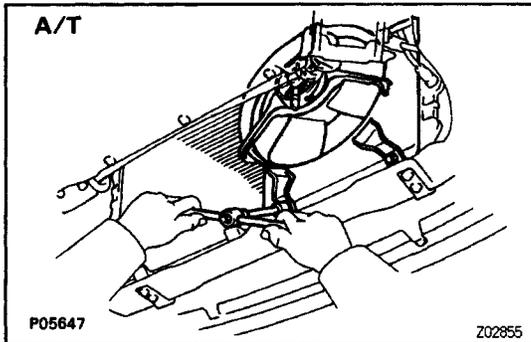
Install the cooling fan with the three bolts. Install the two cooling fans.



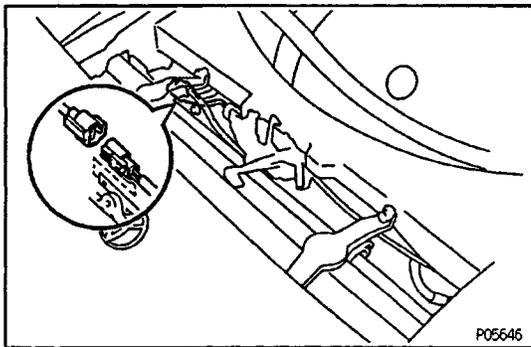
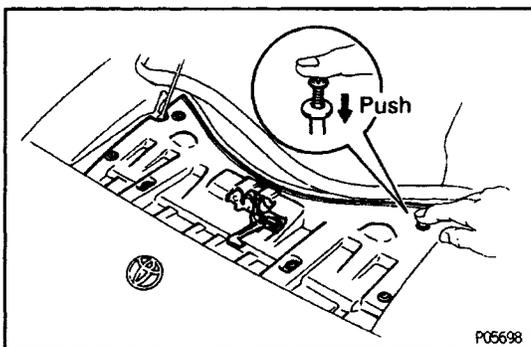
(c) Connect the two cooling fan connectors.

**8. (w/o A/C)****INSTALL NO.1 COOLING FAN****(a) (M/T)**

Install the No. 1 cooling fan with the three bolts. Install the No.2 fan shroud with the five bolts.

**(b) (A/T)**

Install the cooling fan with the three bolts.

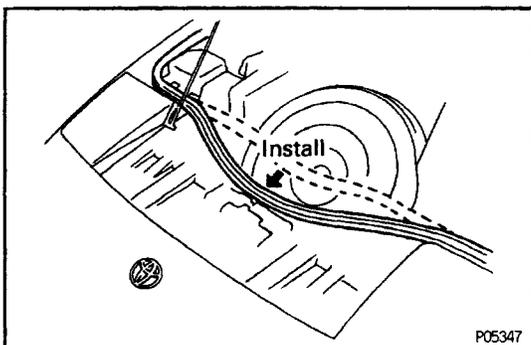
**(c) Connect the cooling fan connector.****9. INSTALL UPPER RADIATOR SUPPORT SEAL**

(a) Temporarily install the hood lock with the RH side bolt.

(b) Place the support seal in position.

(c) Install the hood lock with the two bolts.

(d) Install the seven clips.



(e) Install the hood weatherstrip.

10. INSTALL RADIATOR LOWER AIR DEFLECTOR**11. FILL WITH ENGINE COOLANT****12. CONNECT CABLE TO NEGATIVE TERMINAL OF BATTERY****13. START ENGINE AND CHECK FOR COOLANT LEAKS**