

DAIHATSU

L500, L501

CO

COOLING SYSTEM

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NOTE:

The contents described in the service manual have been explained in the EM section. Please refer to the EM section, as required.

LCC00001-00000

NO. 919B-LE

OUTLINE OF COOLING SYSTEM

TABLE SHOWING SPECIFICATIONS OF COOLING SYSTEM

		L500		L501		
		EF-EL Engine (Australian, Singapore and Hong Kong specifications)		ED-10 Engine (General specifications)	ED-20 Engine (European specifications)	
		MT	AT	MT	MT	AT
Coolant capacity (Including 350 cm ³ for reserve tank) (dm ³)		3.05	3.25	3.15	3.15	3.05
Radiator	Heat radiating rate (kcal/h)	20000	26500	20000	18100	19700
	Core dimensions (Width x height) (mm)	NSR	NWR	NSR	SR	NSR
	Fin pitch	325 x 350	325 x 350	325 x 350	328 x 350	328 x 350
		2.5/2	2.5/2	2.5/2	2.5/2	2.5/2
Radiator fan motor	Motor type	Direct current ferrite motor	←	←	←	←
	(W)	80	80	80	45	80
	Fan type	Axial-flow fan	←	←	←	←
	(Diameter of fan - number of blades)	(φ300 - 5)	(φ300 - 5)	(φ300 - 5)	(φ300 - 4)	(φ300 - 5)
Thermostat	Valve opening temperature (°C)	82	82	82	88	88
	Valve lift (mm/°C)	8/95	8/95	8/95	8/100	8/100
Radiator fan switch	ON (°C)	92	92	92	98	98
	OFF (°C)	87	87	87	93	93
Radiator cap	Radiator cap opening pressure (kPa)	88.2	88.2	88.2	88.2	88.2

LCO00002-00000

PRECAUTIONS

- As regards water to be used as cooling water, use soft water which does not contain salts of minerals, calcium, magnesium and so forth.
- If the coolant gets to the vehicle body, immediately flush away the coolant using water.
- Never open the radiator cap when the cooling water is still hot.
- The inside of the radiator is under a pressurized condition when the cooling water is hot. Therefore, if the radiator cap should be removed, the cooling water will blow off, possibly causing injuries such as scald.

LC000003-00000



If the coolant level is near the low level or below the low level, add the coolant up to the full level.

NOTE:

- If no coolant is present in the reserve tank or the coolant level is very low, check for water leakage, using a radiator cap tester.
- Here, the coolant refers to the mixture of water and antifreeze of a reliable brand that has been mixed in accordance with the instructions of the antifreeze manufacturer.



LC000004-00001

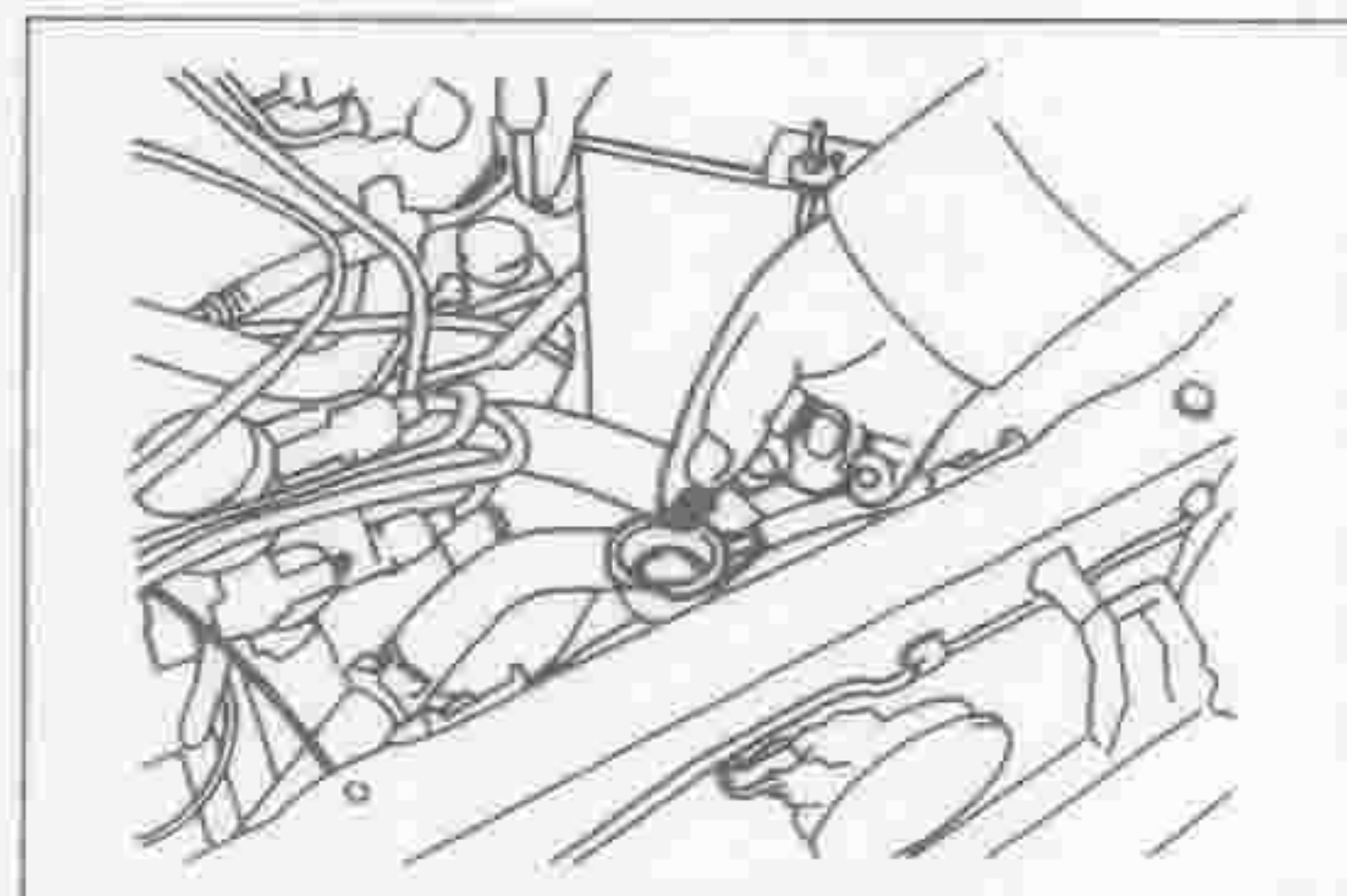
2. Check of coolant quality

There should be no excessive deposits of rust or water scales around the radiator cap or the radiator filler hole. Also, the coolant should be free of oil.

Change the coolant if it is excessively dirty.

CAUTION:

- Never open the radiator cap when the engine is still hot. Failure to observe this caution will cause you to get scalded.



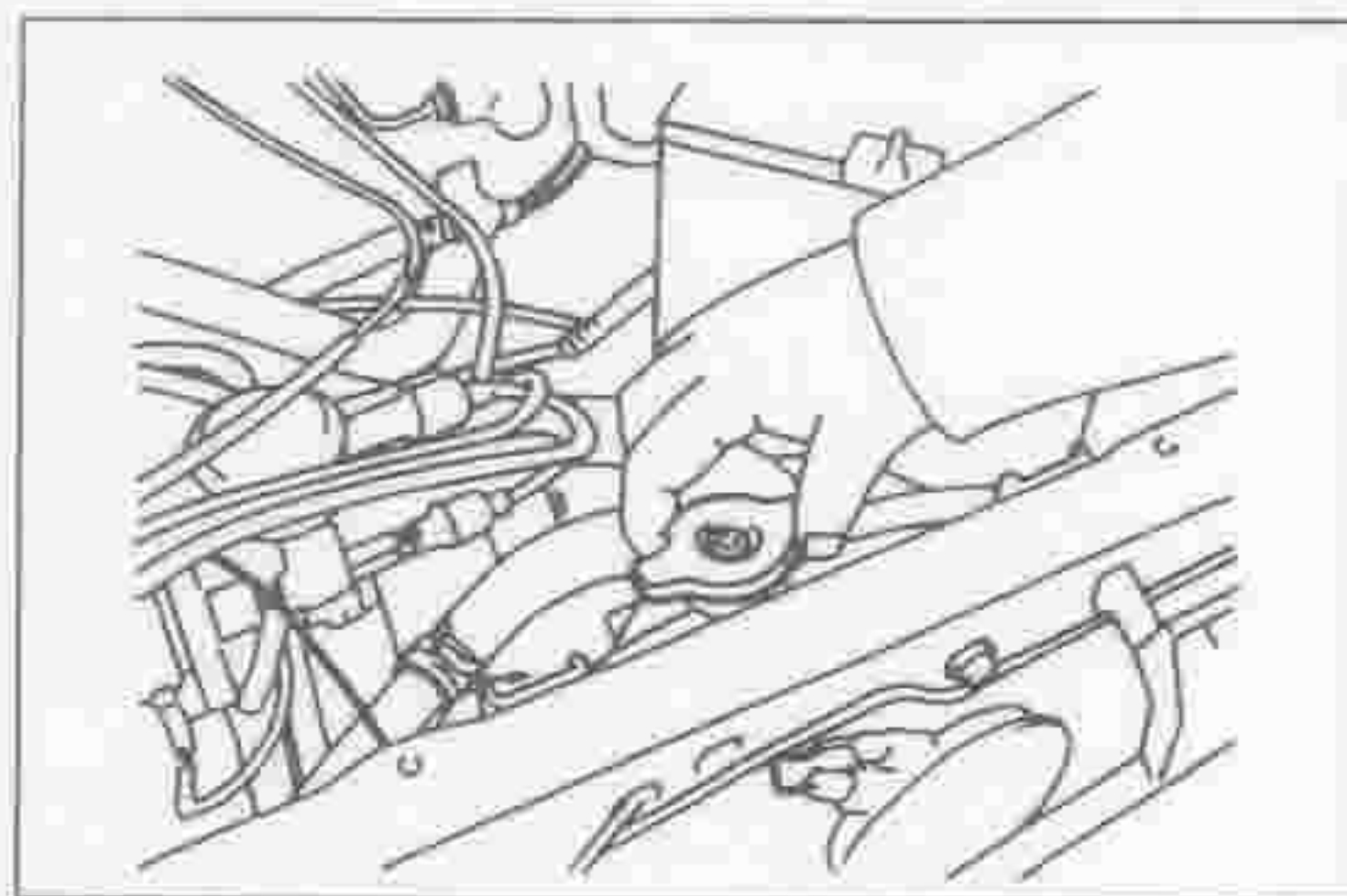
LC000005-00002

3. Change of engine coolant

(1) Remove the radiator cap.

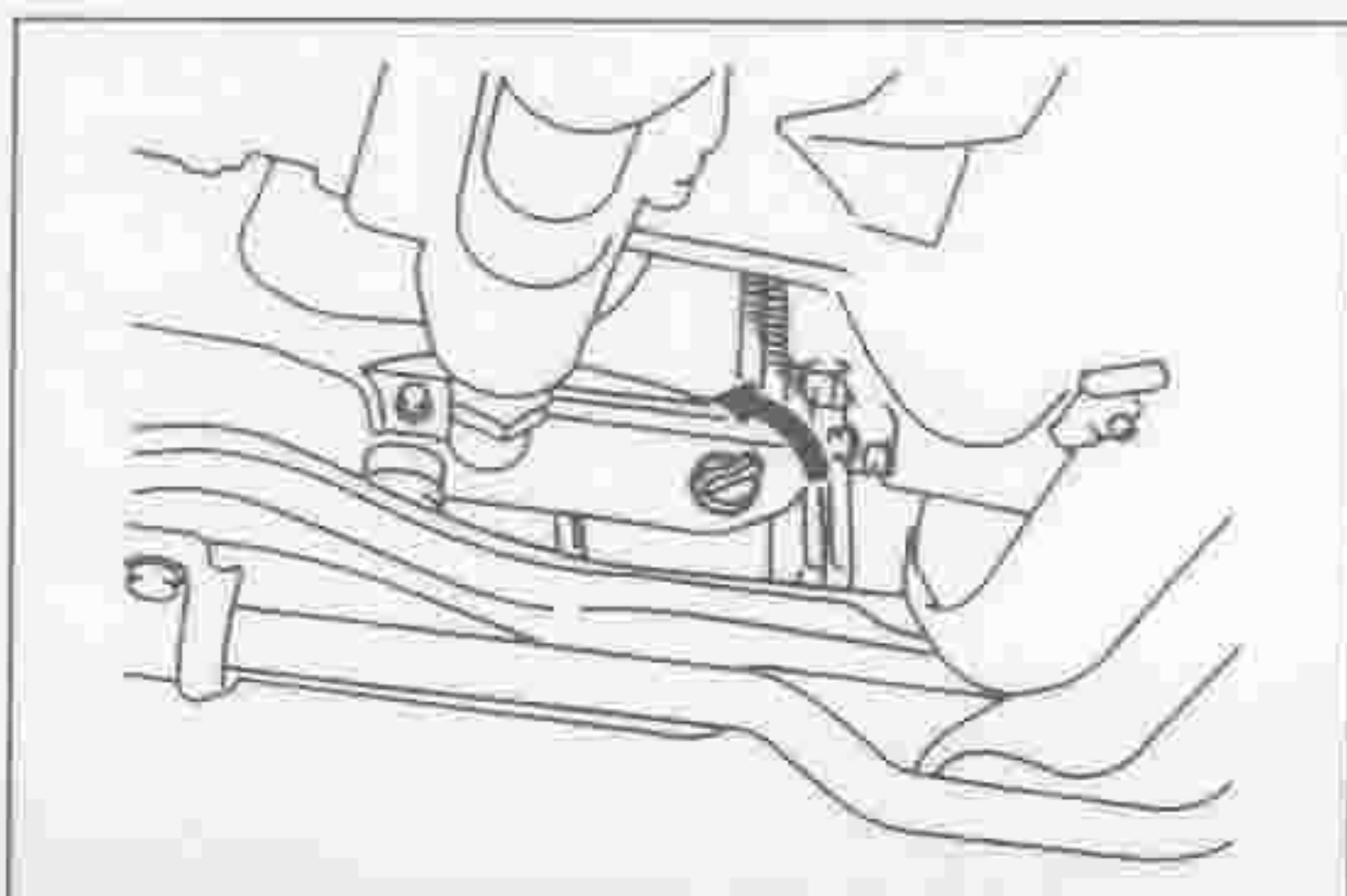
CAUTION:

- Never open the radiator cap and/or the drain plug when the engine is still hot. Failure to observe this caution will cause you to get scalded.



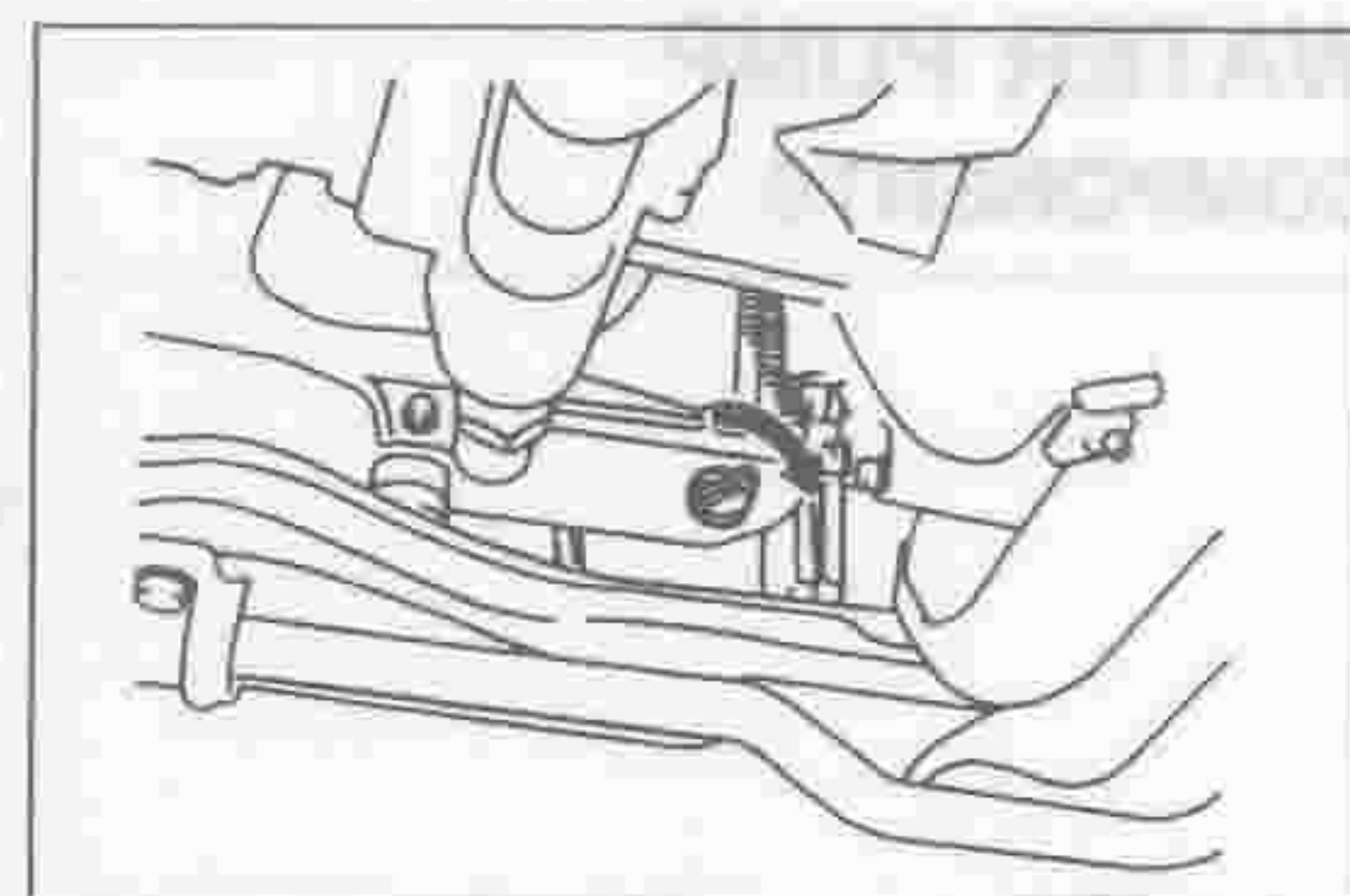
LC000006-00003

- (2) Place a suitable container below the radiator drain plug.
- (3) Drain the coolant by loosening the drain plug.
- (4) Close the drain plug
- (5) Fill the system with water.
- (6) Start the engine, and stop it.
- (7) Repeat the steps (1) through (5) two or three times.



LC000007-00004

- (8) Drain the coolant by removing the drain plug.
- (9) Replace the drain plug O-ring with a new one.
- (10) Tighten the drain plug.



LC000008-00005

- (11) Drain the coolant from the reserve tank.

LC000009-00000

- (12) Fill the radiator and reserve tank with antifreeze solution in accordance with the instructions of the manufacturer of the antifreeze solution.

CAUTION:

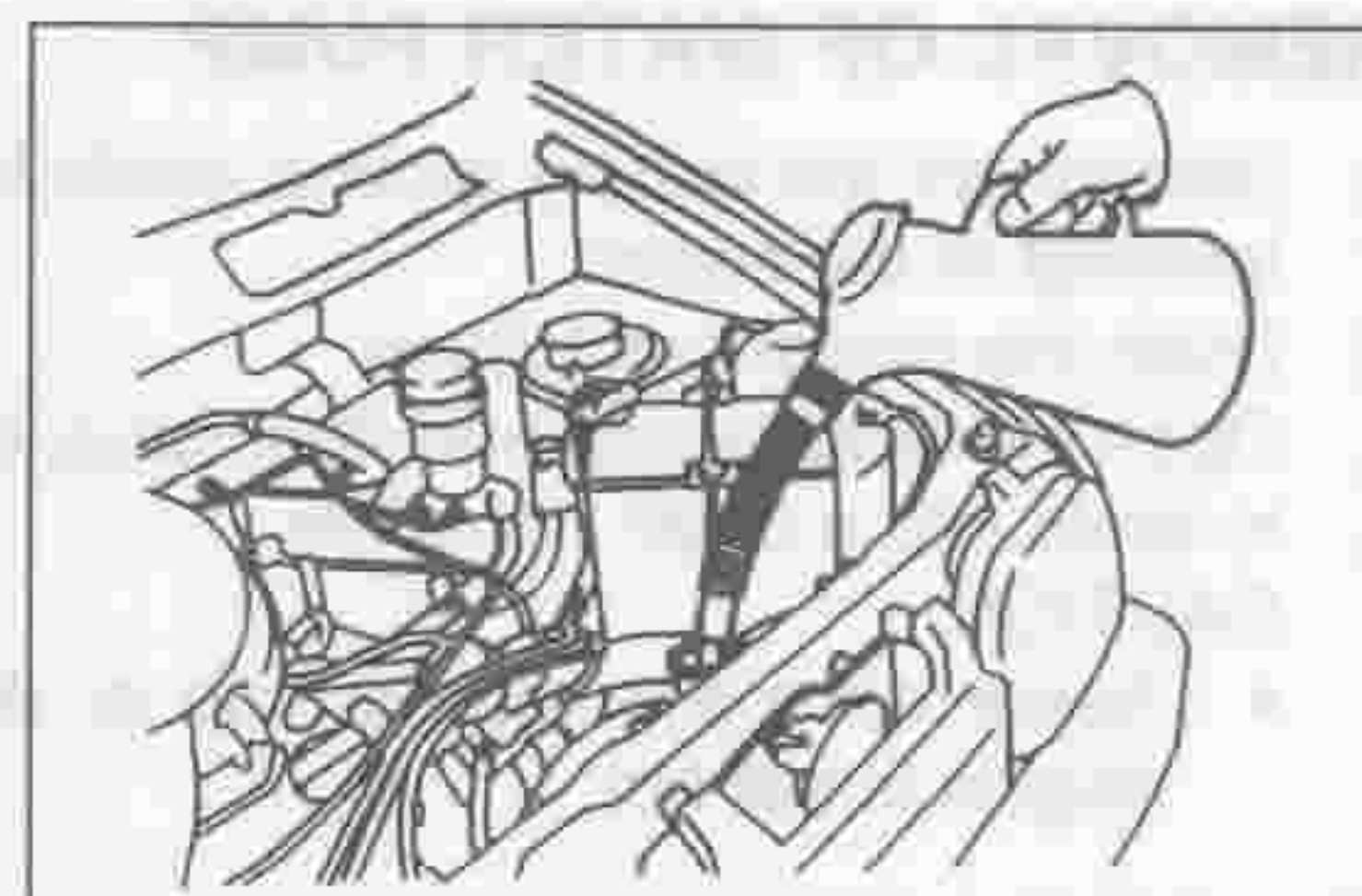
- Be sure to use a reliable brand of ethylene-glycol base antifreeze solution.

Coolant Capacity

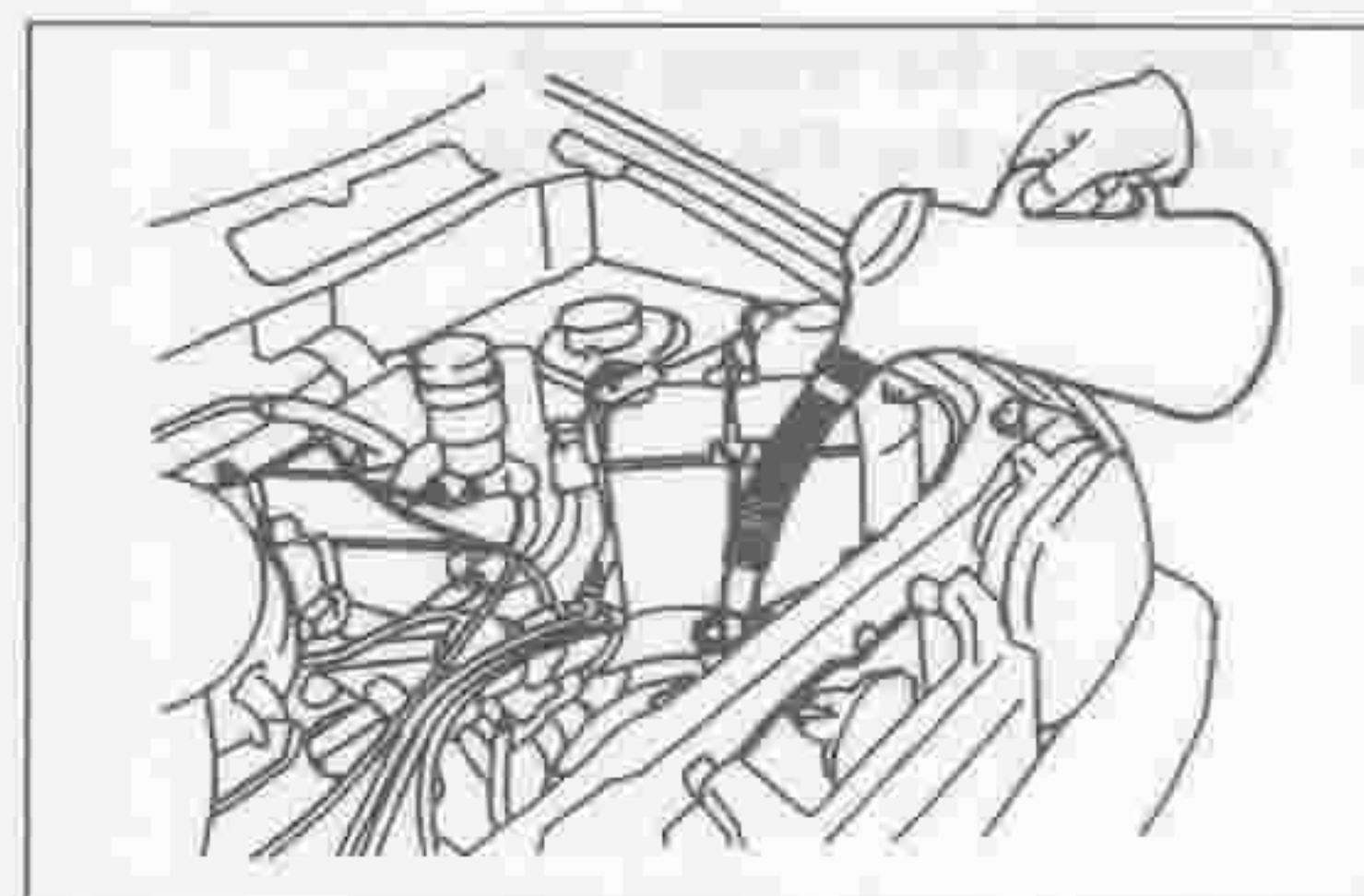
	MT	AT
EF-EL E/G	3.05 dm ³	3.25 dm ³
ED-10 E/G	3.15 dm ³	—
ED-20 E/G	3.15 dm ³	3.05 dm ³

[Including 350 cm³ (350 cc) for reserve tank]

- (13) Fill the system with water.
- (14) Start the engine. Check to see if the coolant level in the radiator drops.
If the coolant level drops, add water to the radiator.
- (15) Install the radiator cap and reserve tank cap.



LC000010-00006



LC000011-00007

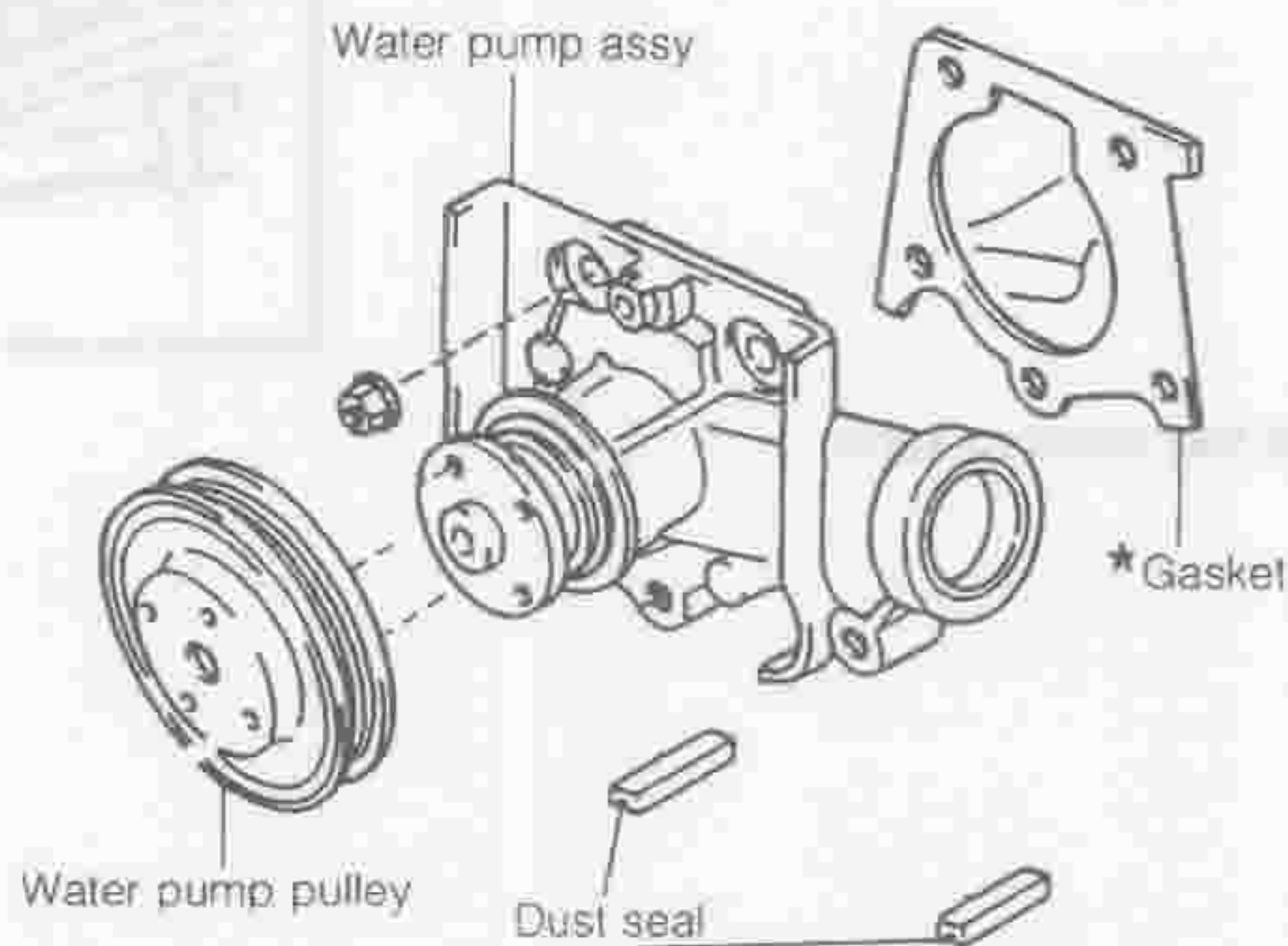
- (16) Warm up the engine, until the radiator fan motor starts to rotate. Afterwards, allow the coolant to cool down to the atmospheric temperature. Recheck the coolant level at the reserve tank. Add coolant to the full level, as required.
If no coolant remains at all in the reserve tank, recheck the coolant level in the radiator. Replenish the radiator with water, as required. Replenish the reserve tank with coolant up to the full level.

NOTE:

- Here, the coolant refers to the mixture of water and antifreeze that has been mixed in accordance with the instructions of the antifreeze manufacturer.

LC000012-00000

WATER PUMP COMPONENTS



★ : Non-reusable parts

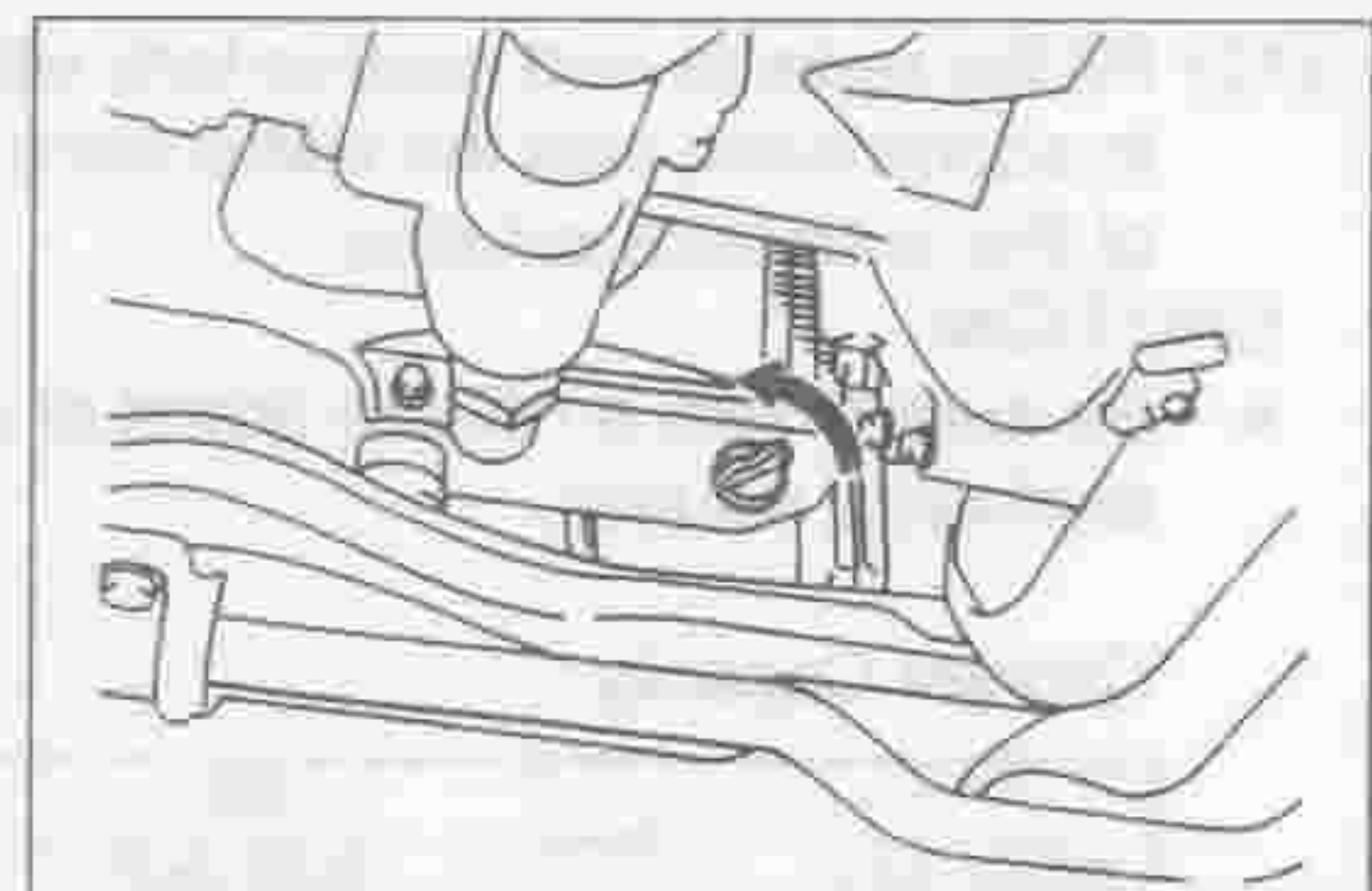
LCO00013-00008

REMOVAL OF WATER PUMP

1. Disconnect the battery ground cable from the negative (-) terminal of the battery.
2. Drain the coolant as follows.
Open the radiator cap and drain plug, and allow the coolant to drain into a clean container.

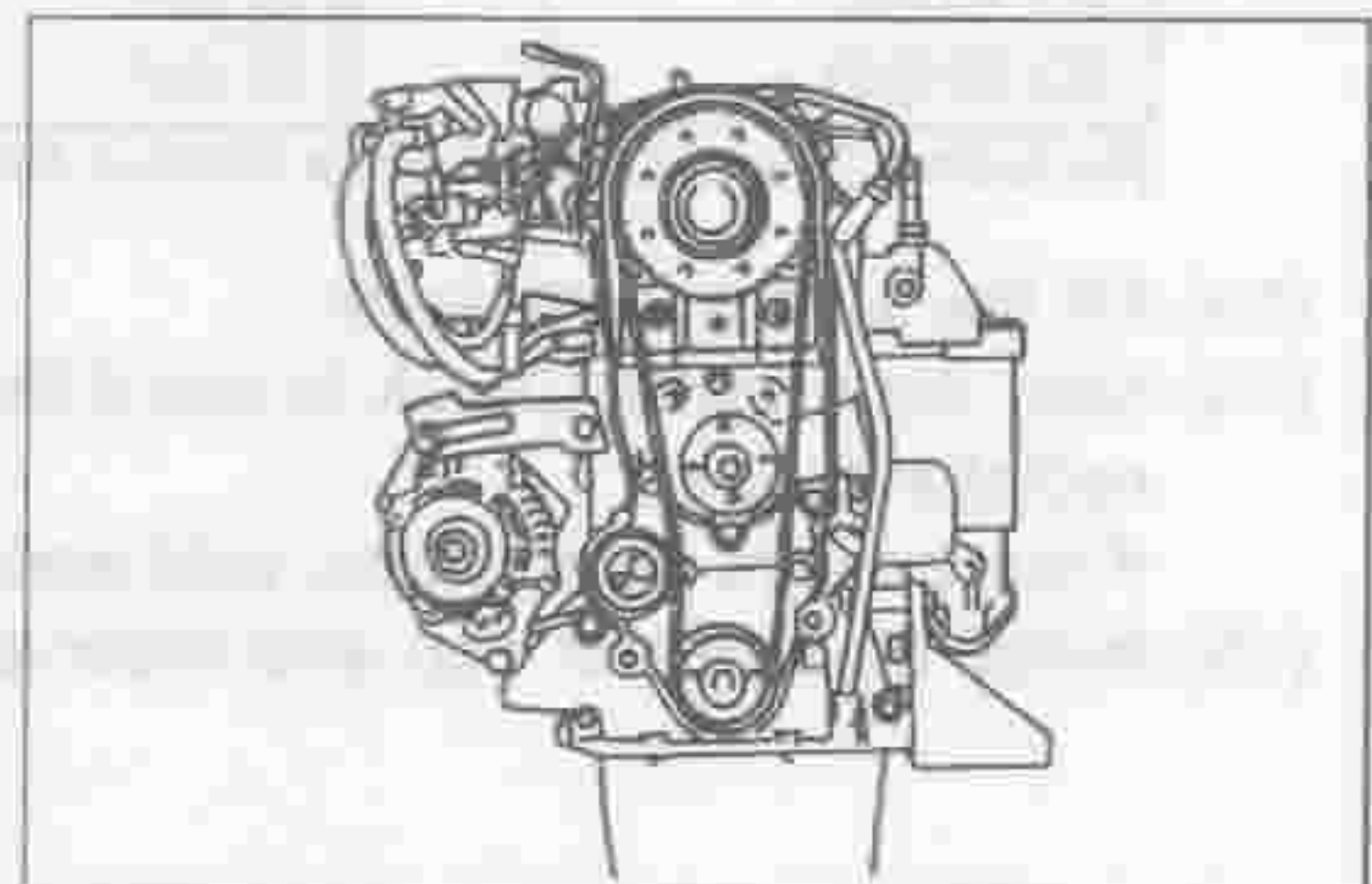
CAUTION:

- Never open the radiator cap or drain plug, when the engine is still hot.



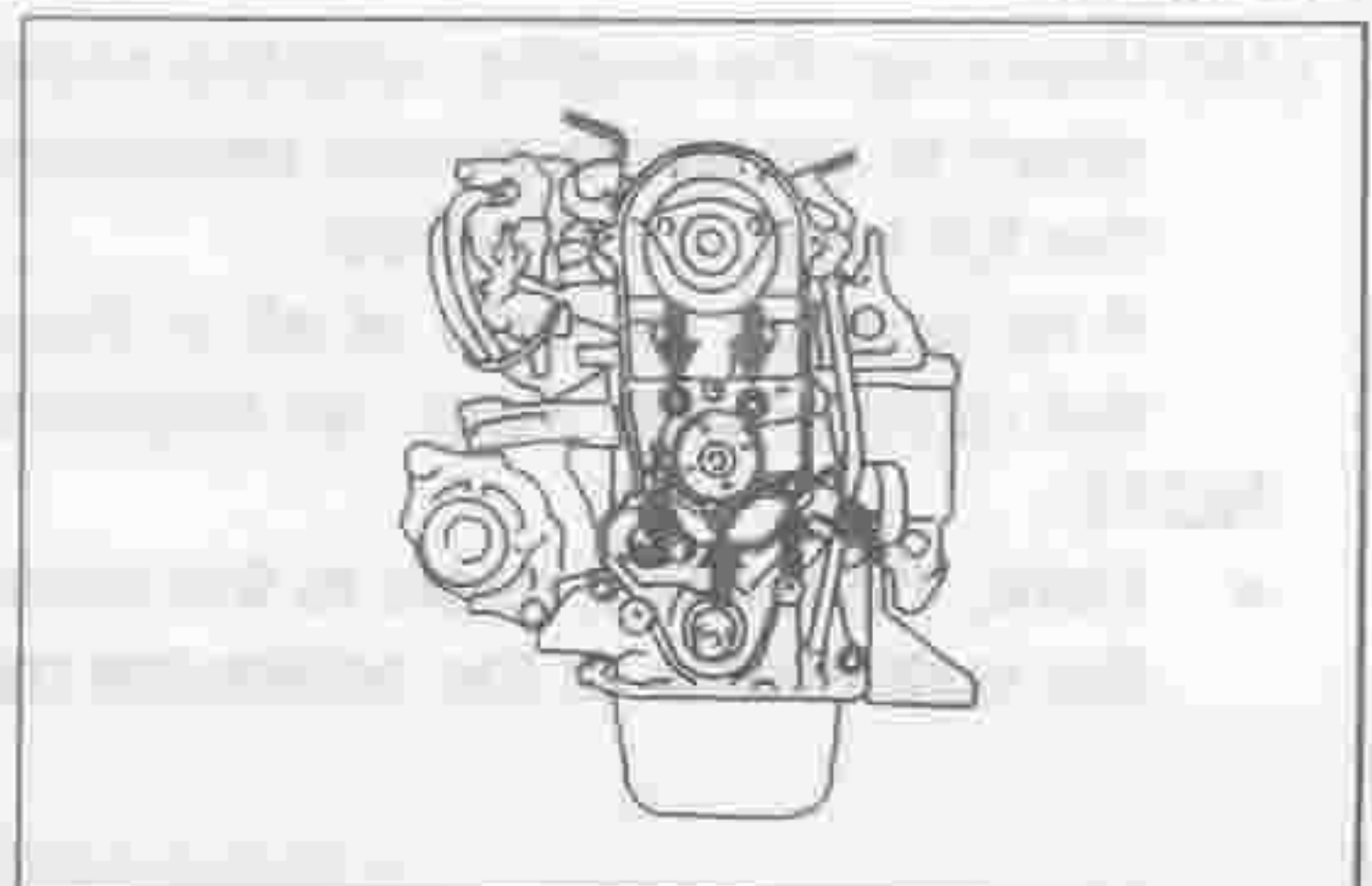
LCO00014-00009

3. Remove the timing belt.
(Refer to the EM section.)



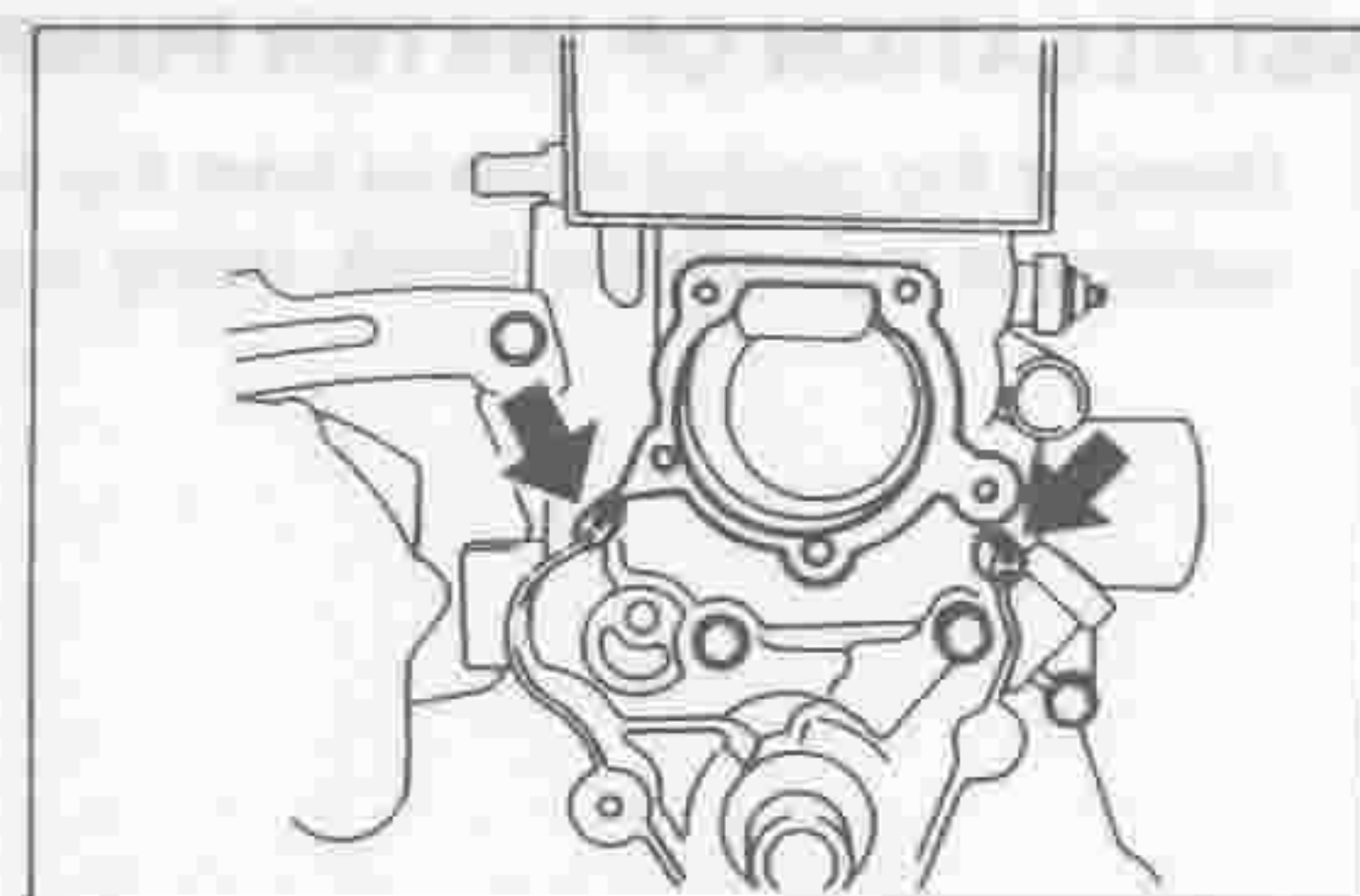
LCO00015-00010

4. Remove the oil level gauge guide by removing the attaching bolt.
5. Remove the water pump by removing the attaching bolts and nuts of the water pump.



LCO00015-00011

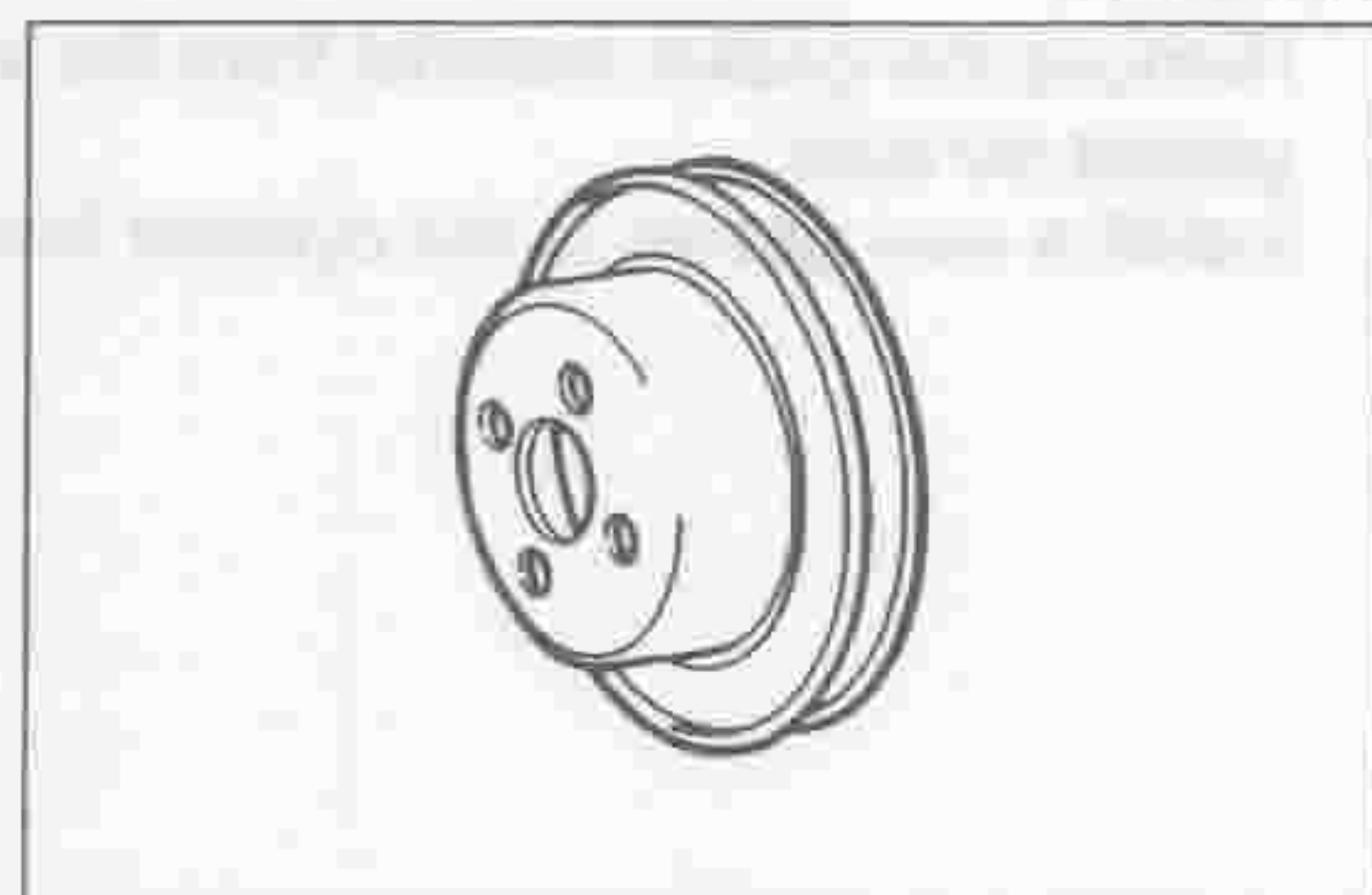
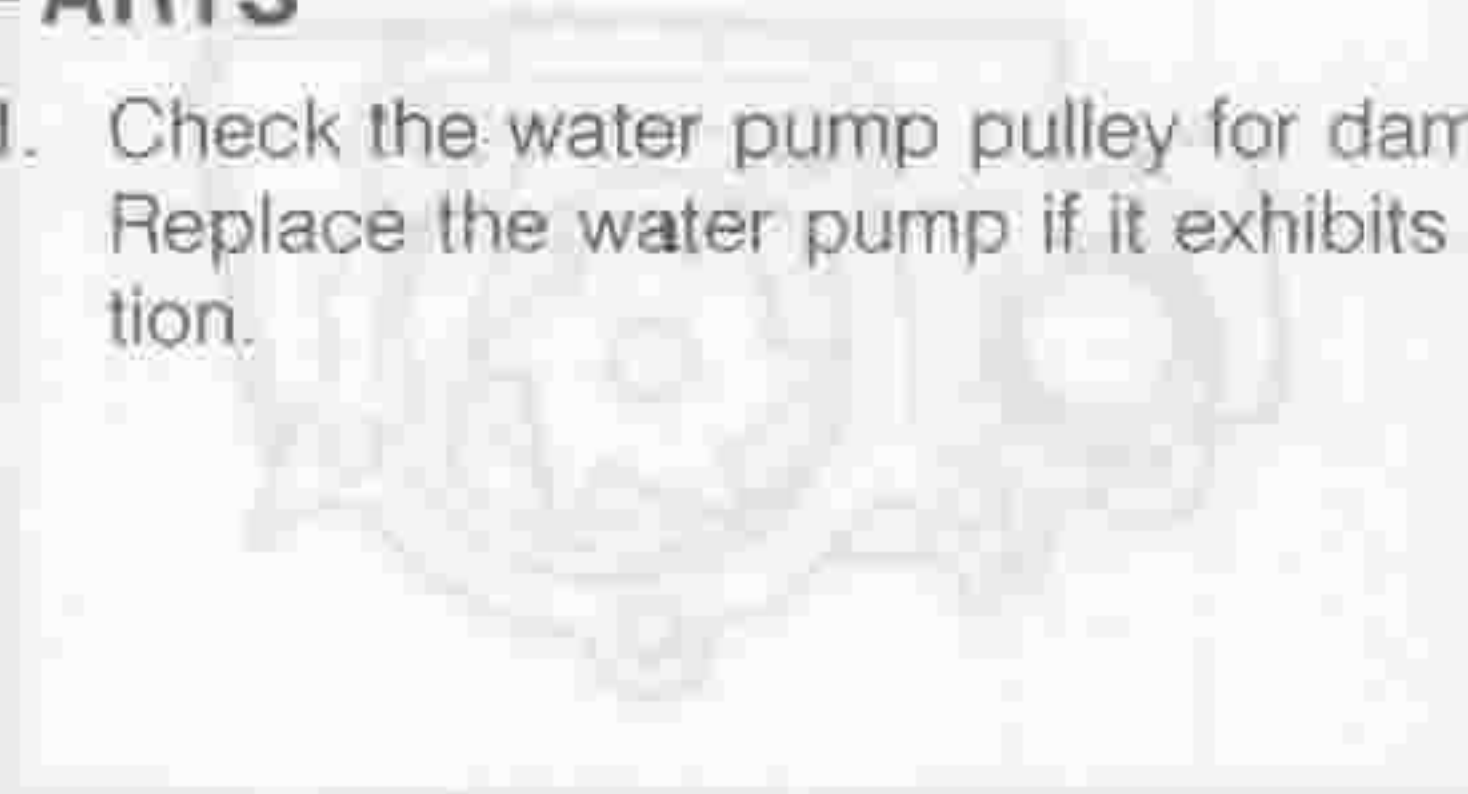
6. Remove the dust seal.
7. Remove the gasket material from cylinder block.



LCO00017-00012

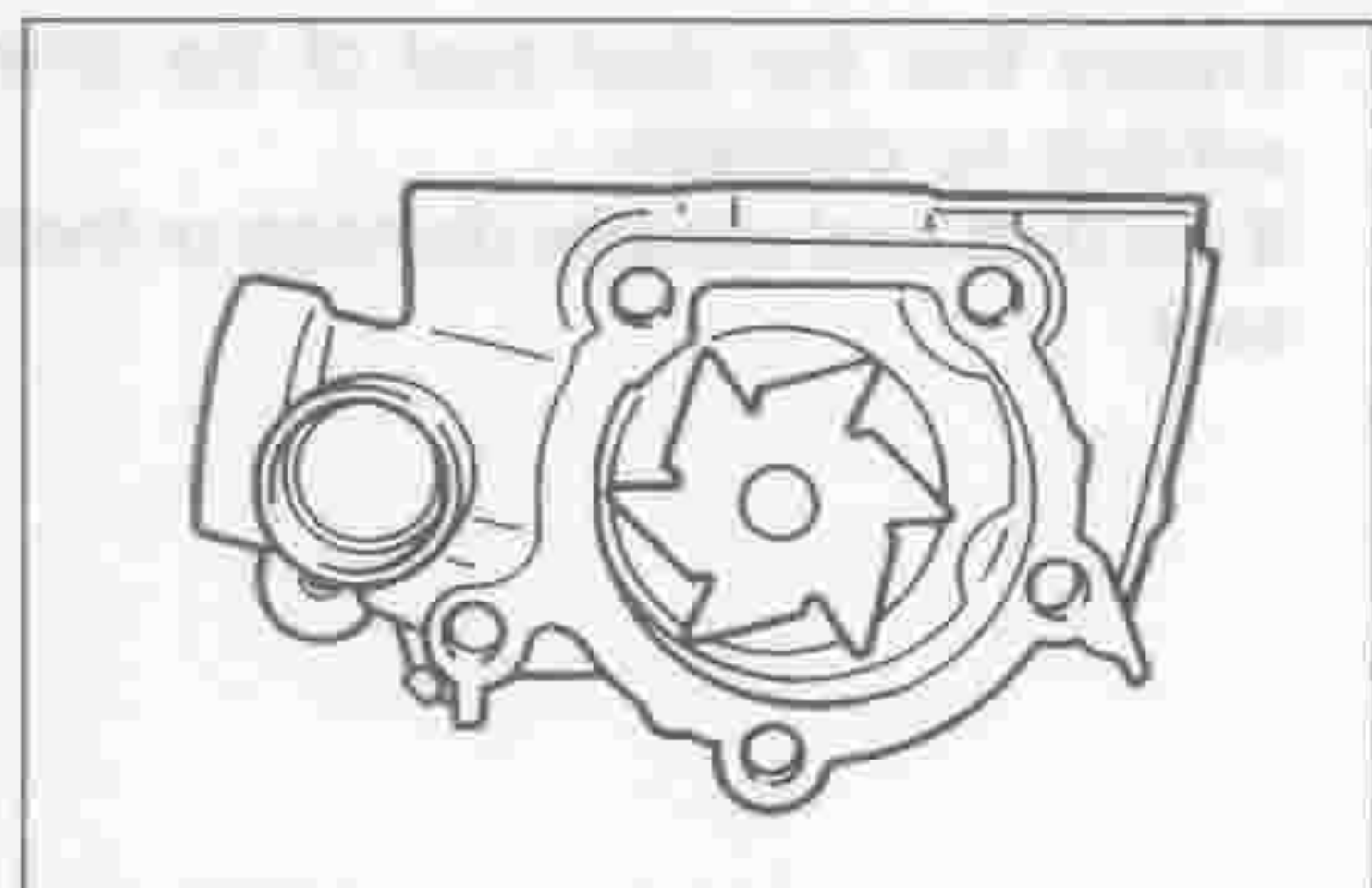
INSPECTION OF WATER PUMP-RELATED PARTS

1. Check the water pump pulley for damage or deformation. Replace the water pump if it exhibits damage or deformation.



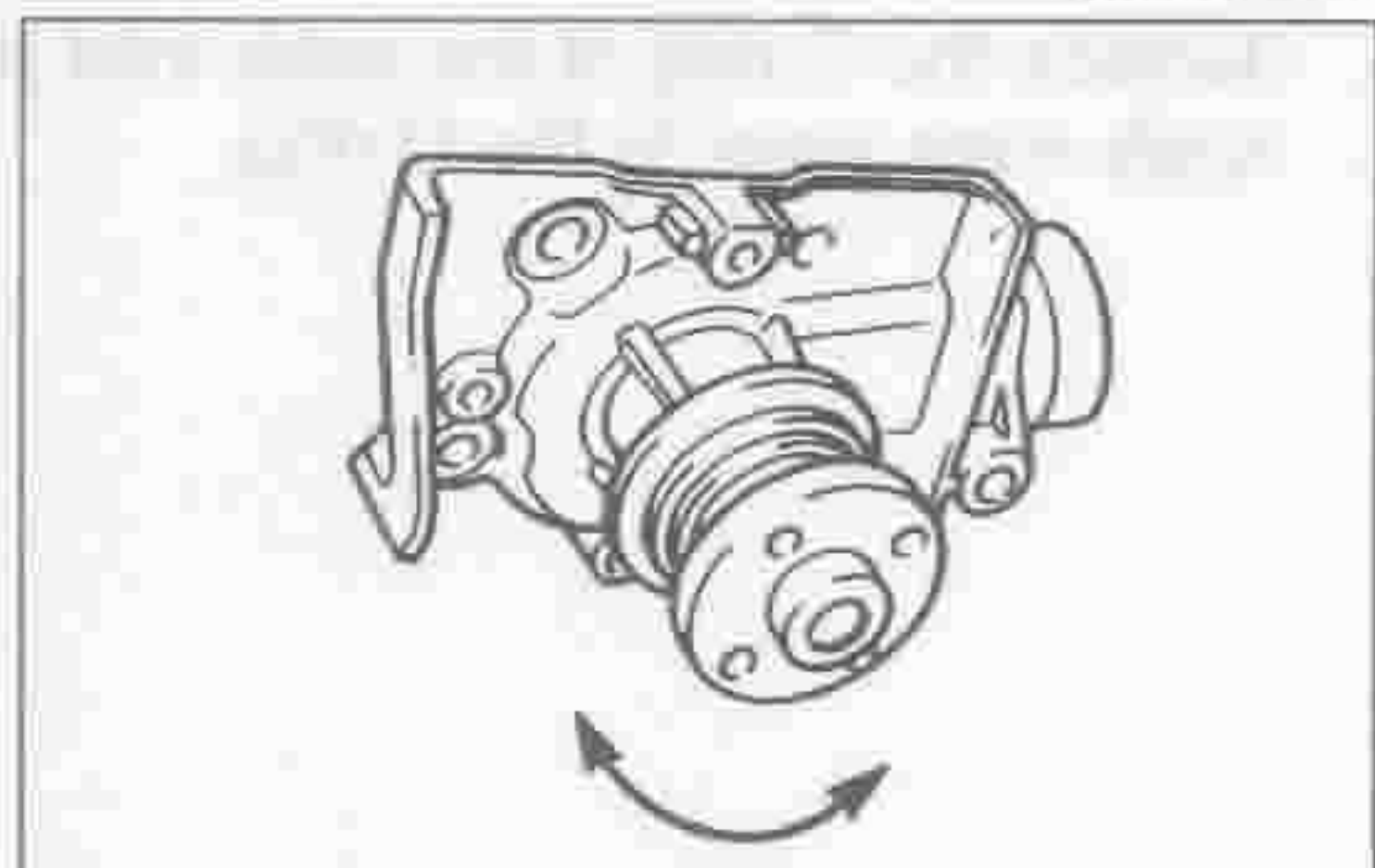
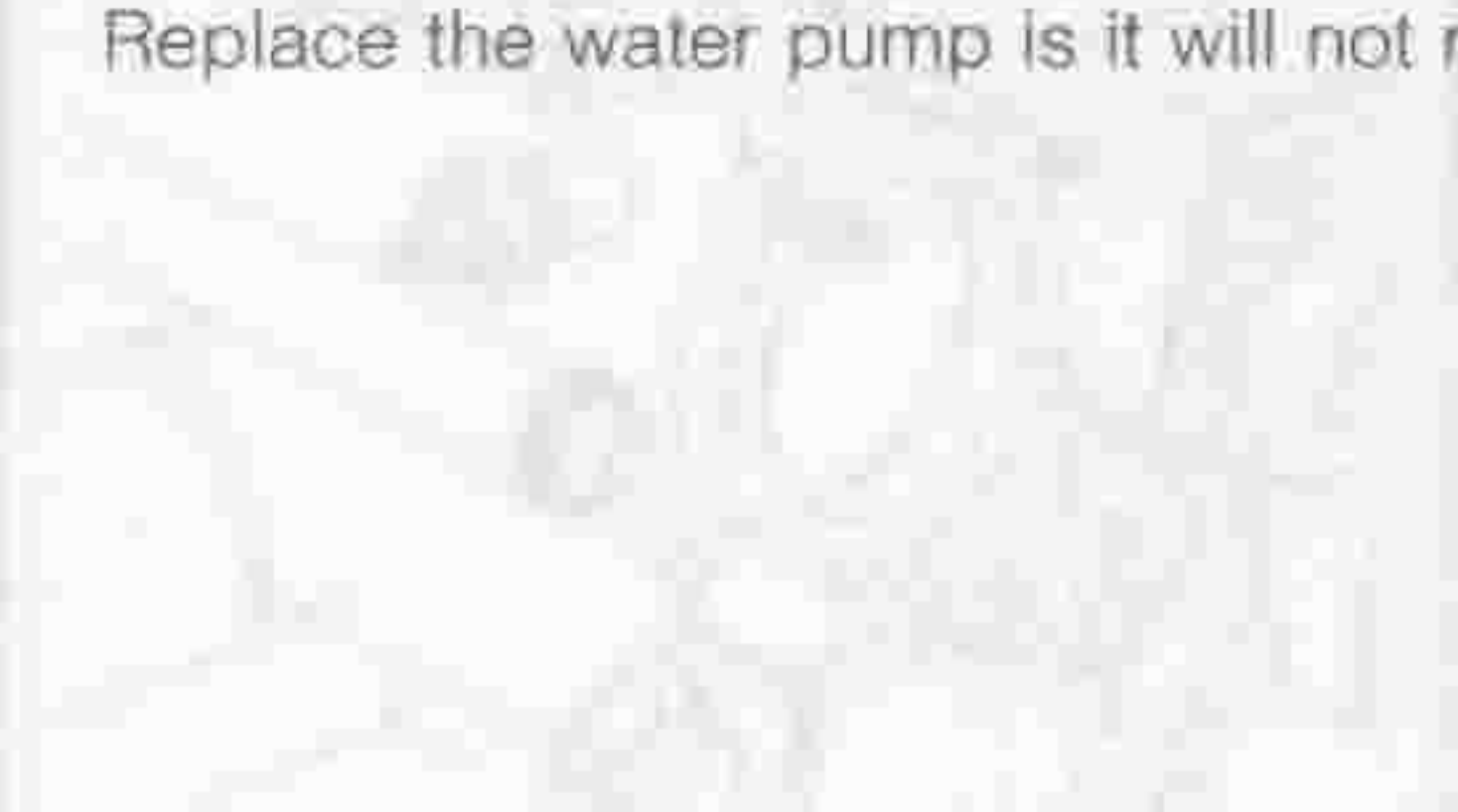
LCO00018-00013

2. Visually inspect the water pump rotor for damage or deformation. Replace the water pump if the water pump rotor exhibits damage or deformation.



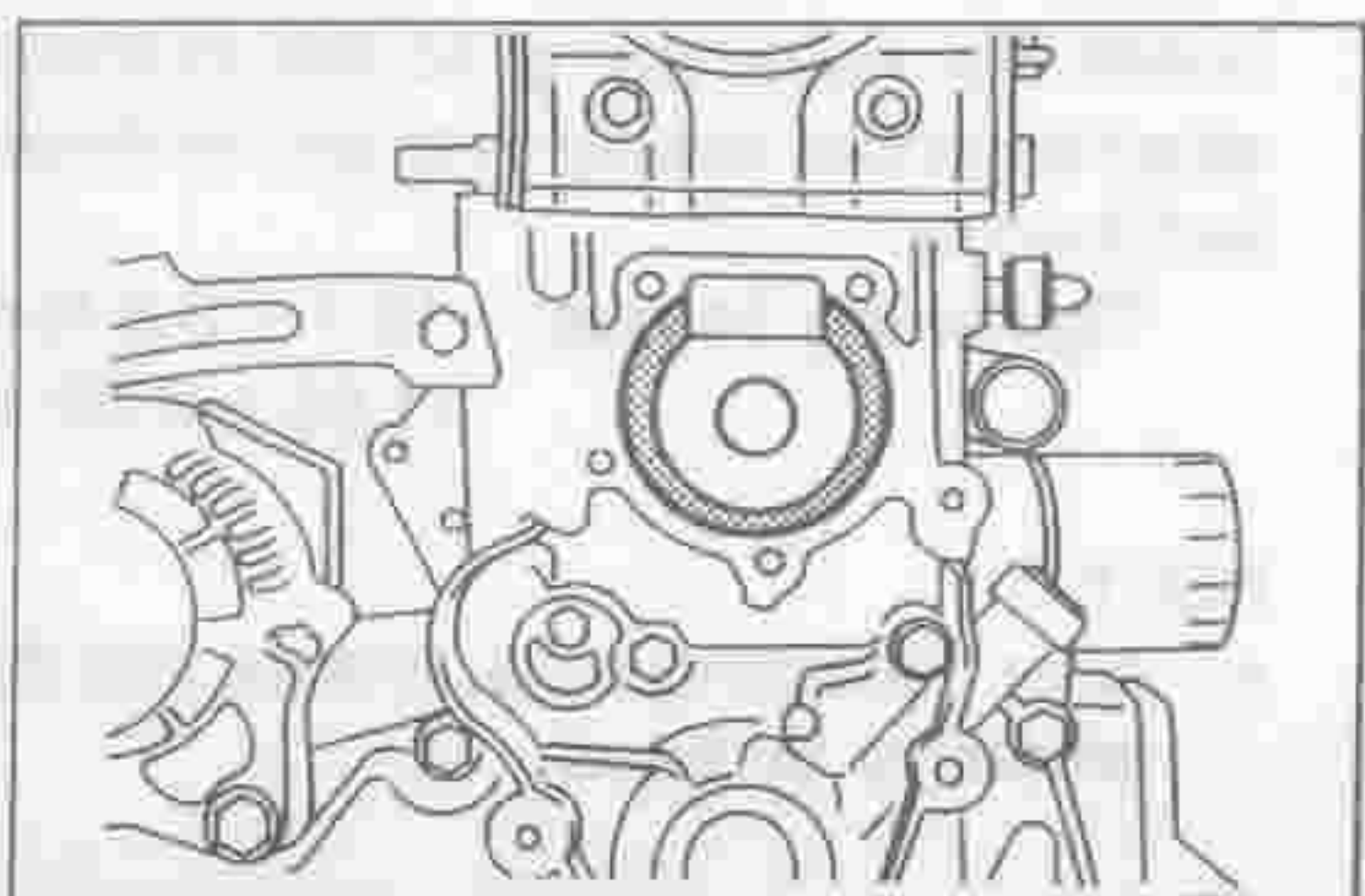
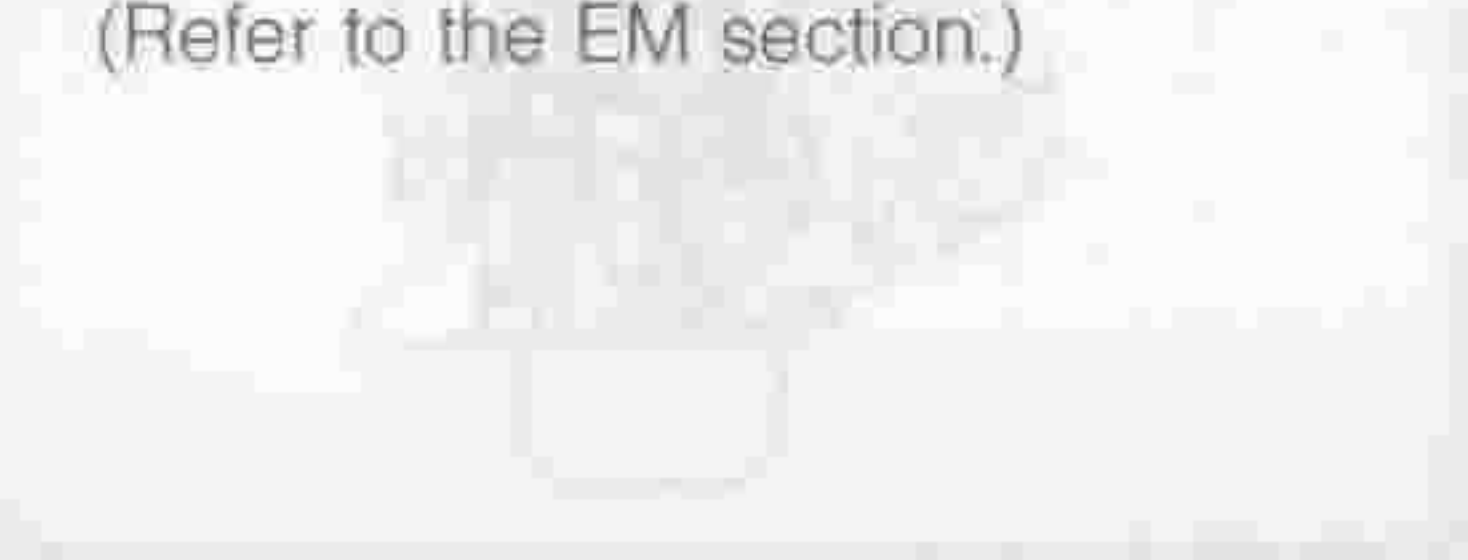
LCO00019-00014

3. Ensure that the water pump rotates smoothly by hand. Replace the water pump if it will not rotate smoothly.



LCO00020-00015

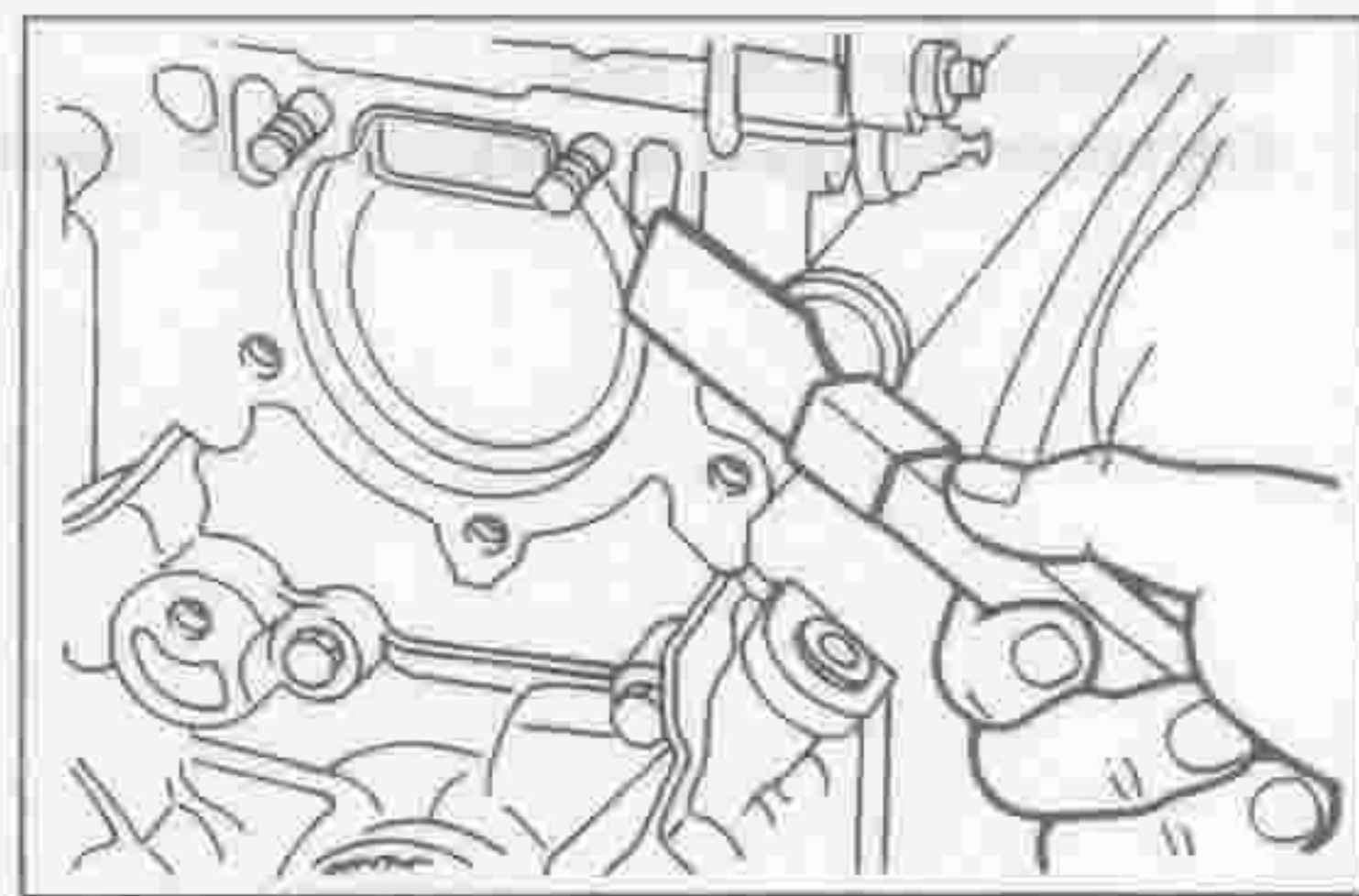
4. Check the water pump cover section of the cylinder block for damage or wear. Replace the cylinder block if the water pump cover section exhibits damage or wear. (Refer to the EM section.)



LCO00021-00016

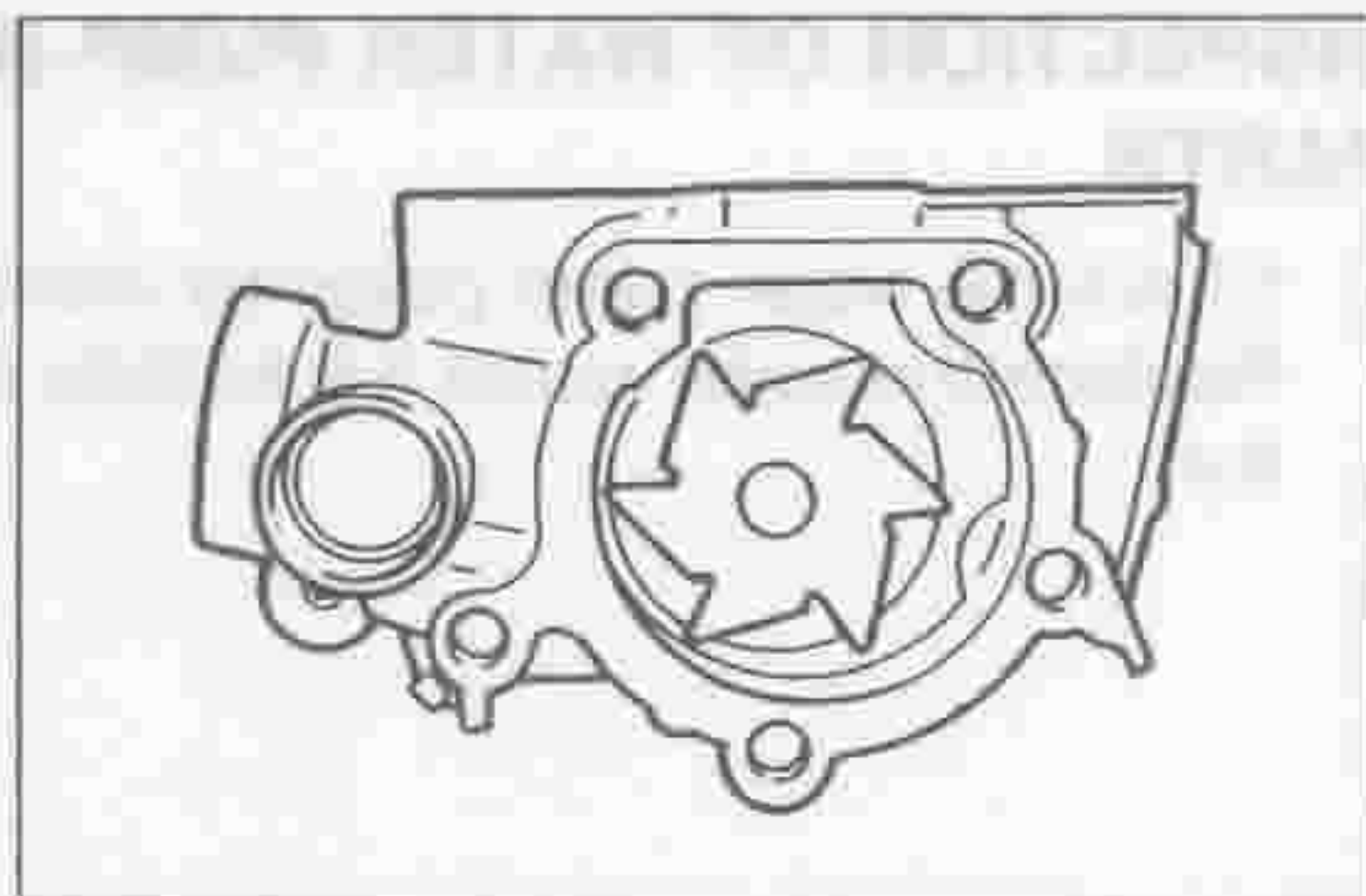
INSTALLATION OF WATER PUMP

1. Remove the gasket material from the water pump installing surface of the cylinder block, using a gasket scraper.



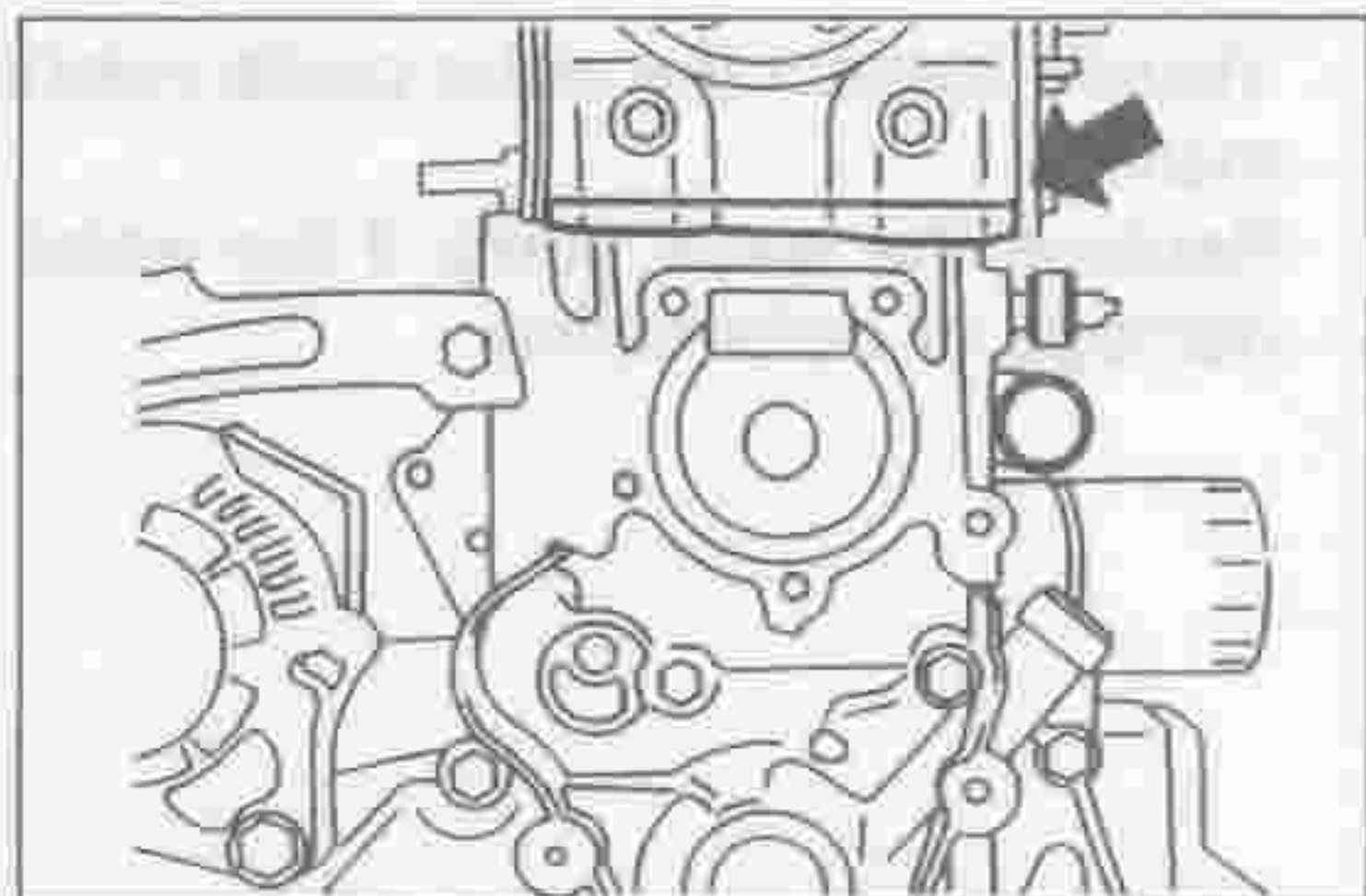
LC000022-00017

2. Remove the gasket material from the water pump, using a gasket scraper.
3. Install a new gasket to the cylinder block.



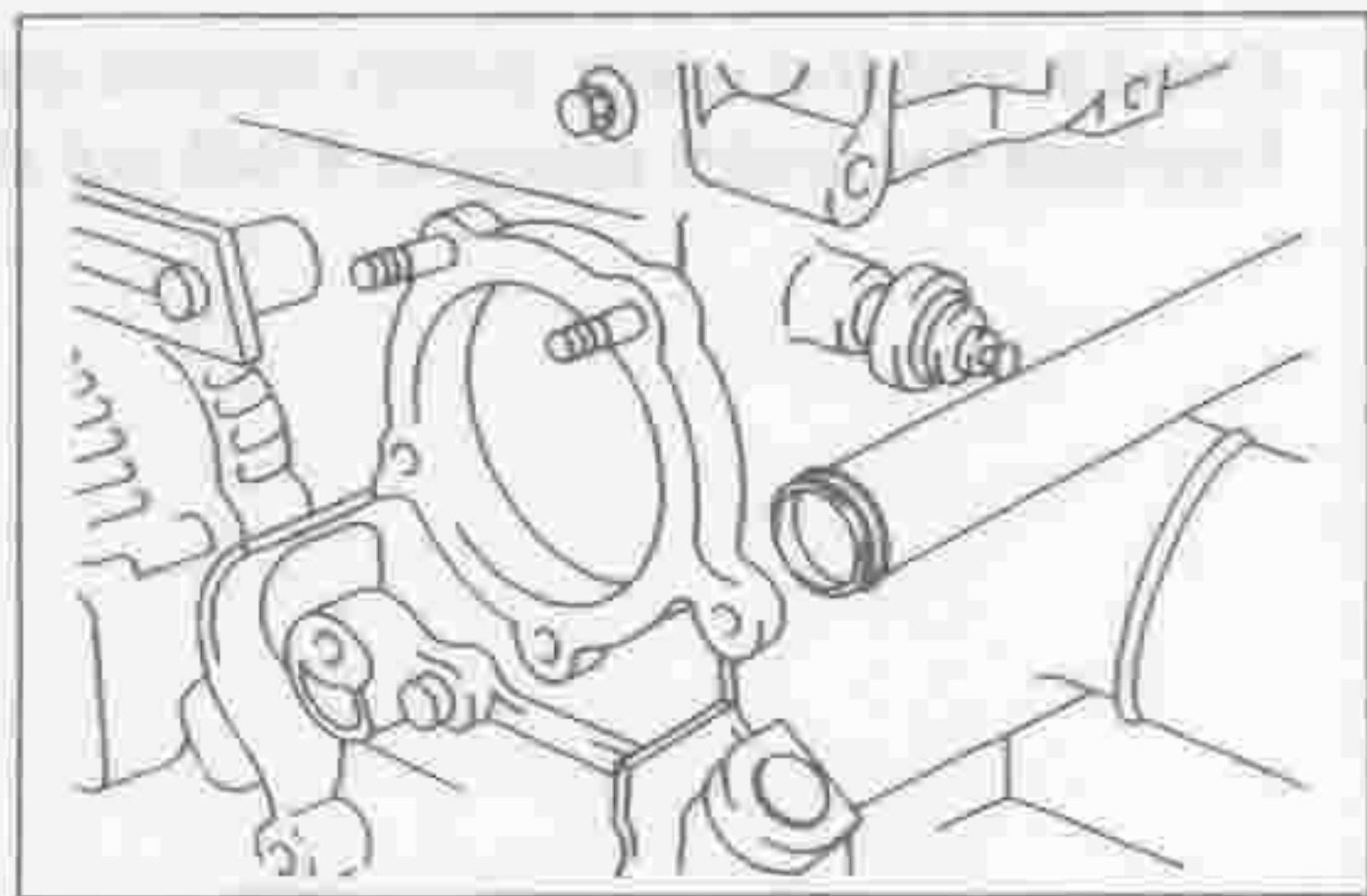
LC000023-00018

4. Ensure that the dust seal of the timing belt cover No. 2 exhibits no damage. If the dust seal exhibits damage or the like, replace the dust seal.



LC000024-00019

5. Replace the O-ring of the water inlet pipe.
6. Apply soap water to the O-ring.



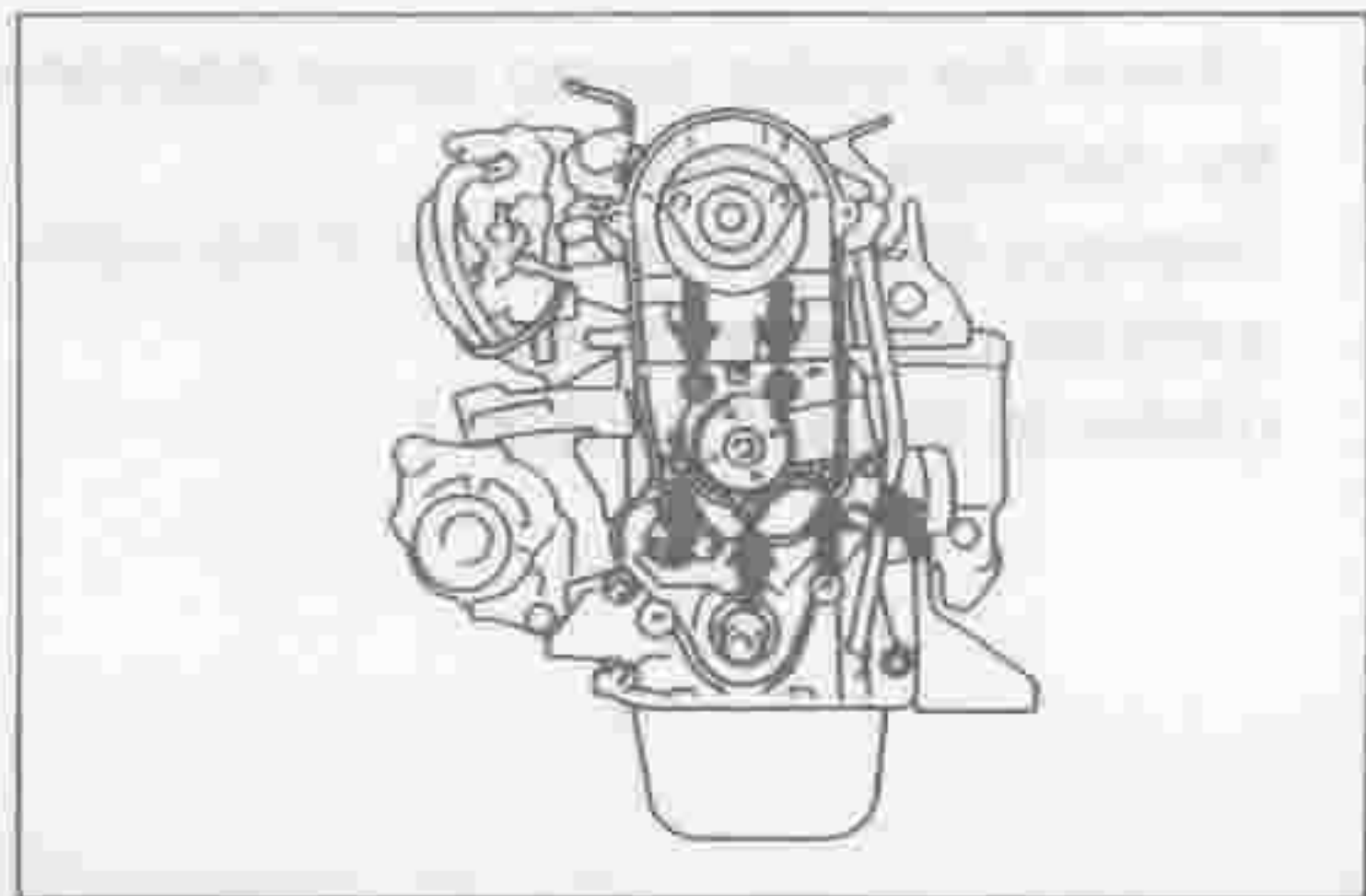
LC000025-00020

7. Install the water pump to the cylinder block. Tighten the attaching bolts evenly over two or three stages to the specified torque.

Tightening Torque: 19.1 ± 3.8 N·m
(1.95 ± 0.39 kgf·m)

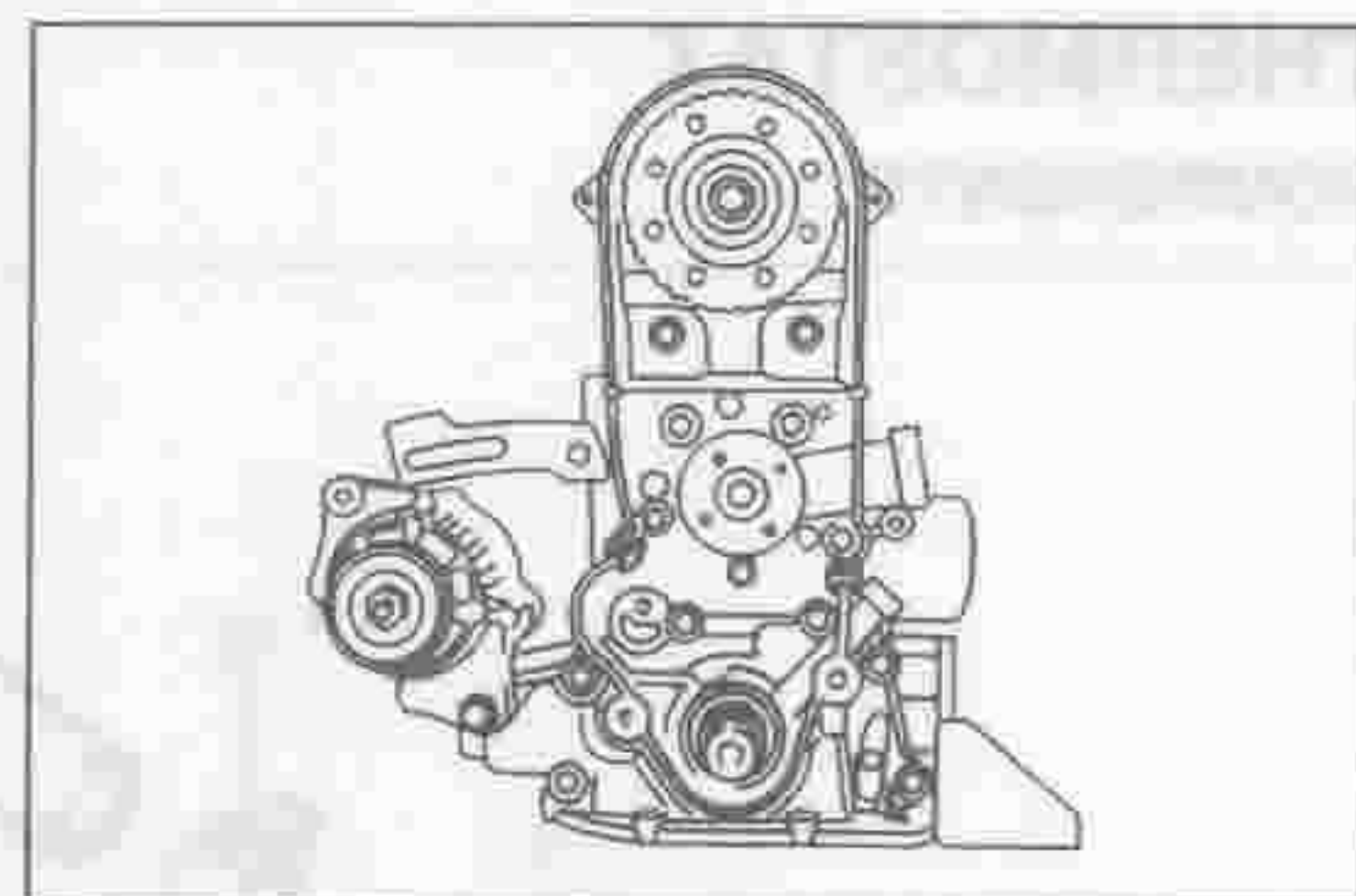
NOTE:

- After tightening bolts, ensure that the water pump rotates smoothly by hand.



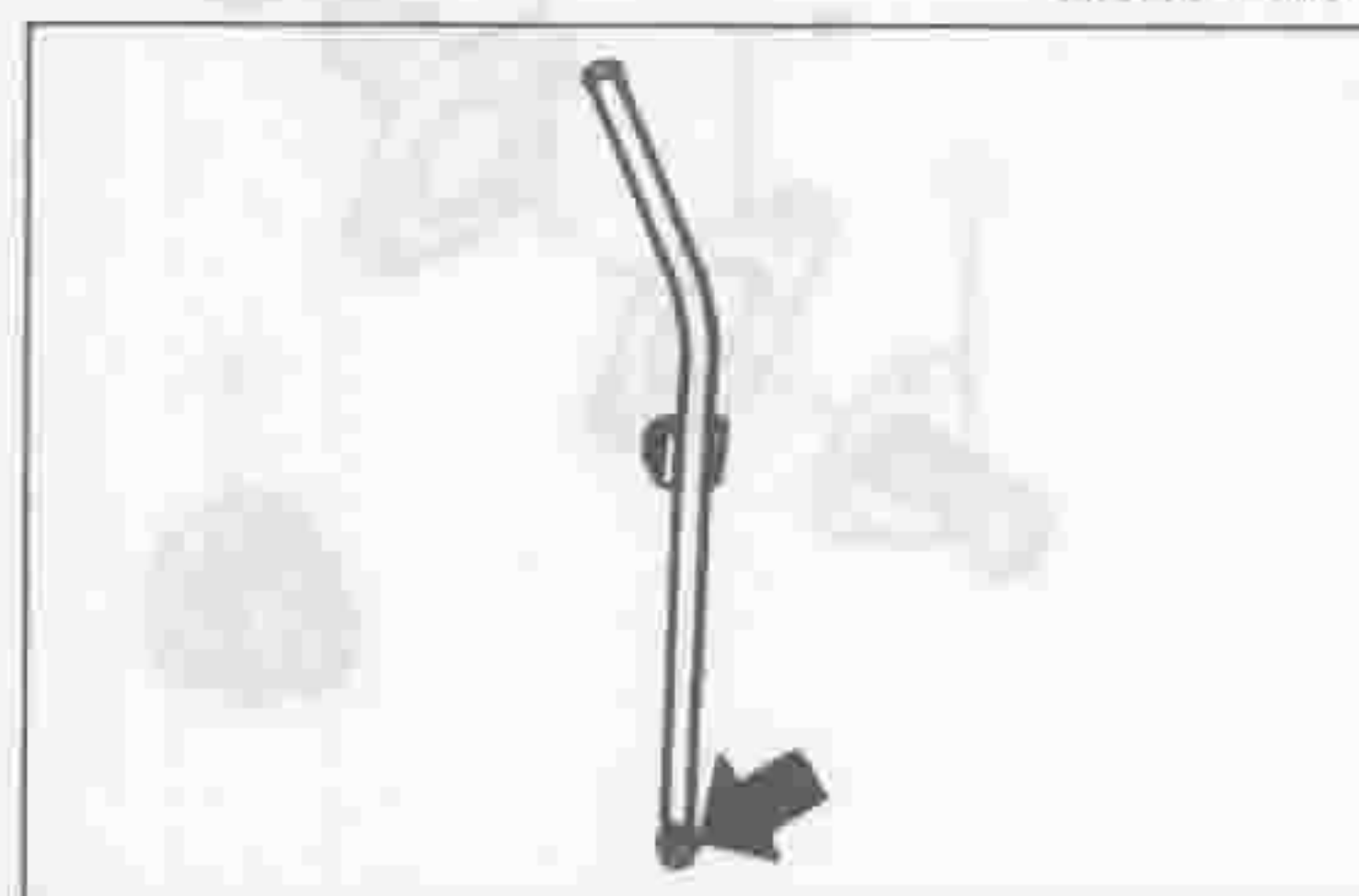
LC000026-00021

8. Install the dust seal between oil pump and water pump.



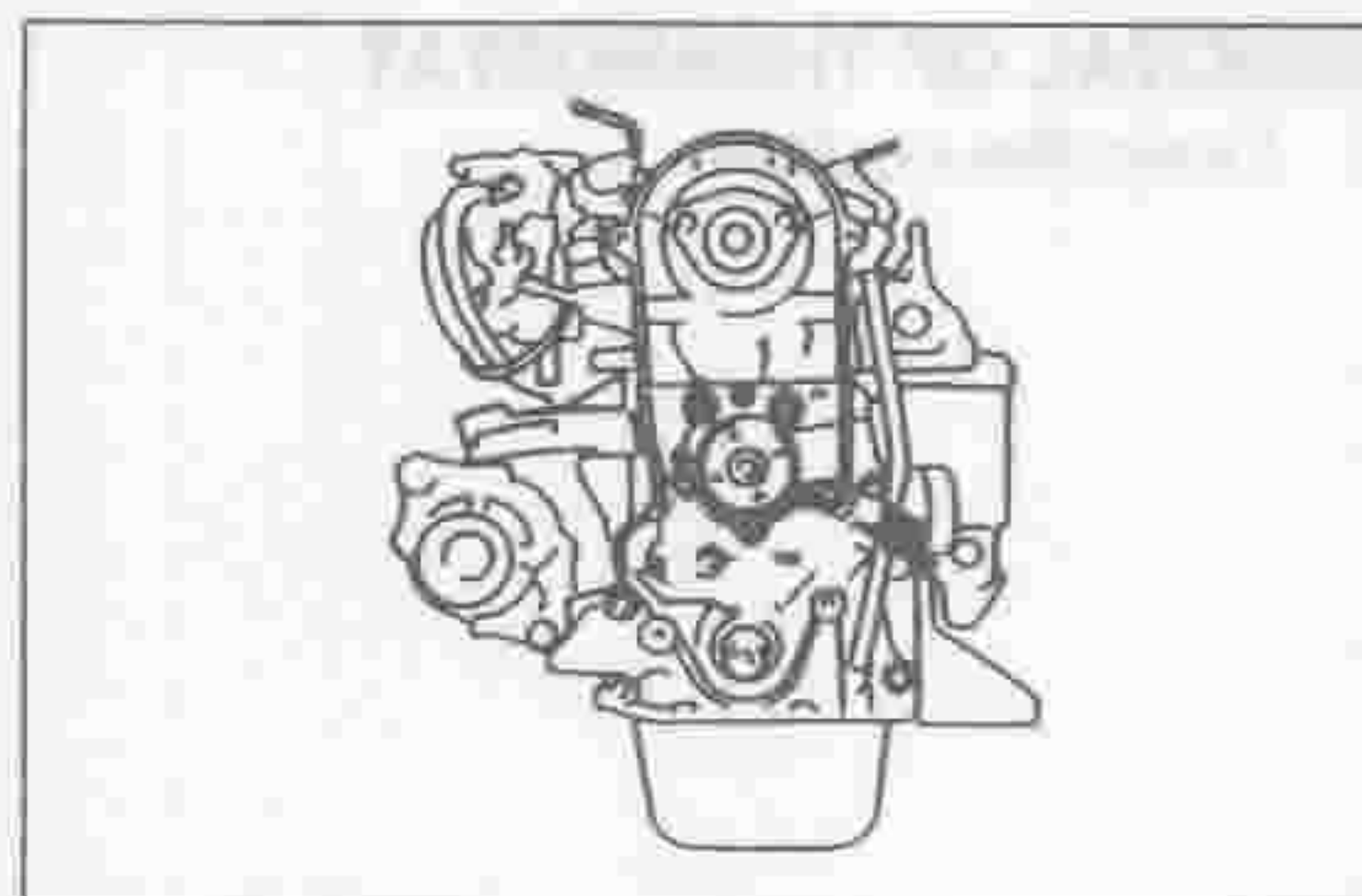
LCO00027-00022

9. Replace the O-ring of the oil level gauge guide.



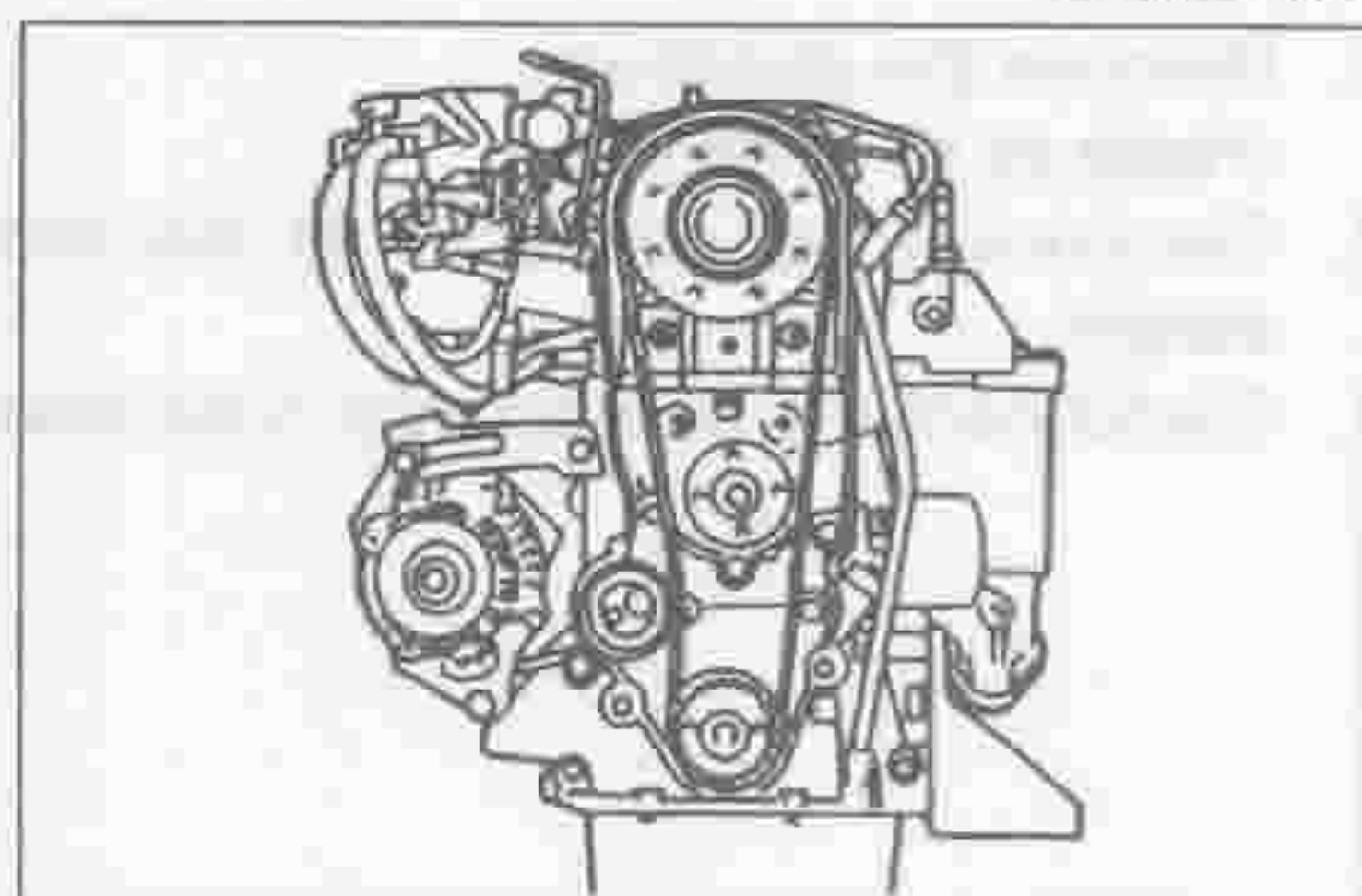
LCO00028-00023

10. Install the oil level gauge guide and tighten the attaching bolt.



LCO00029-00024

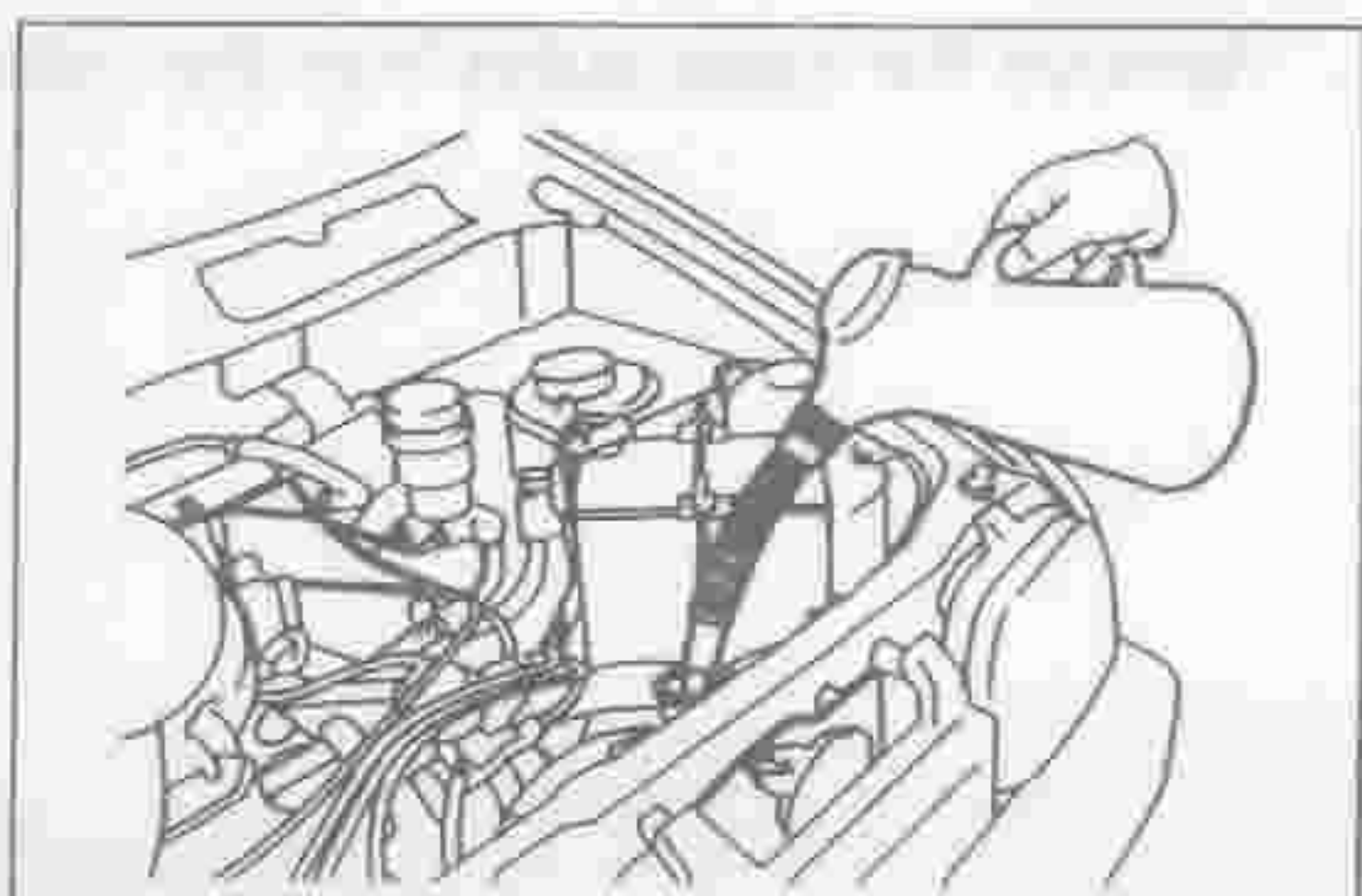
11. Install the timing belt.
(Refer to the EM section.)



LCO00030-00025

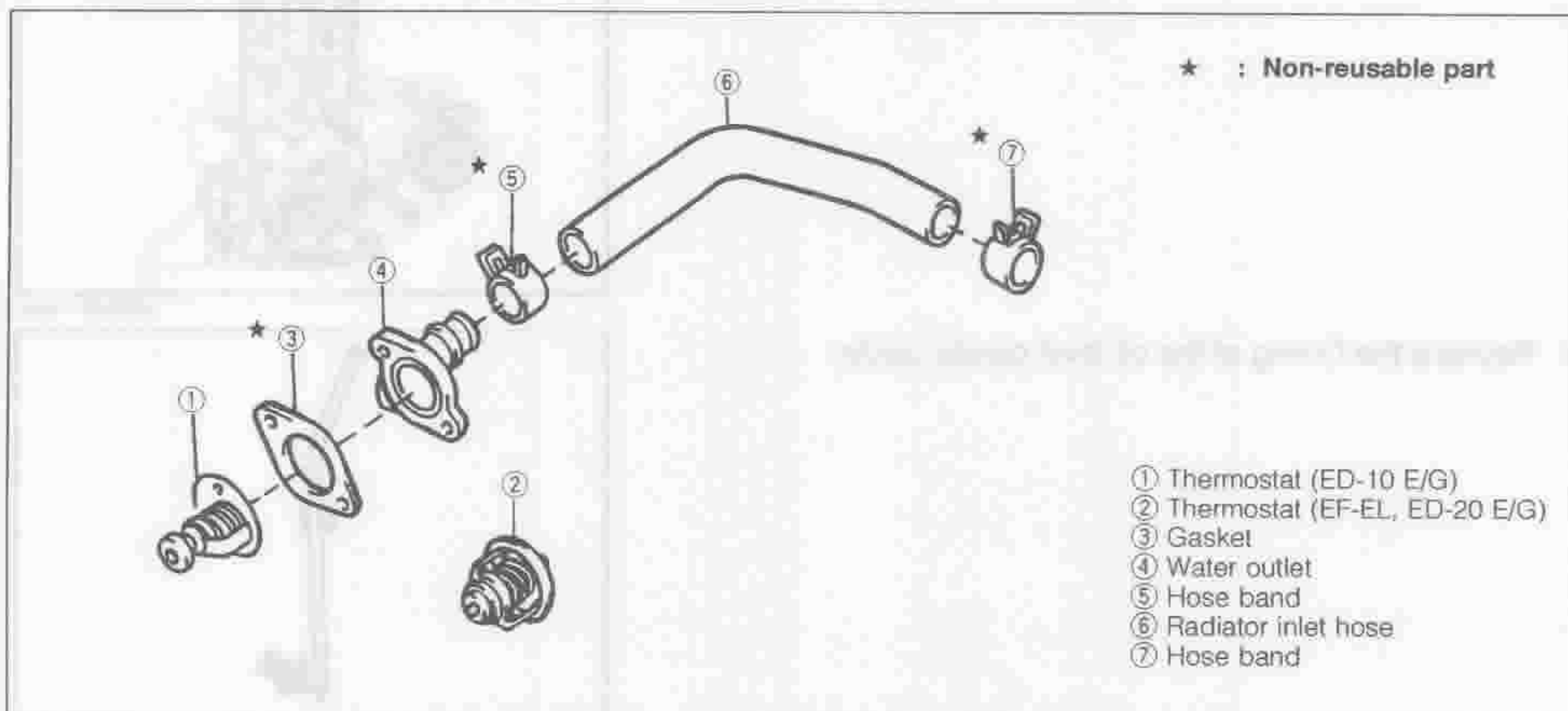
12. Fill coolant.

13. Start the engine. Ensure that no water leakage is present.



LCO00031-00026

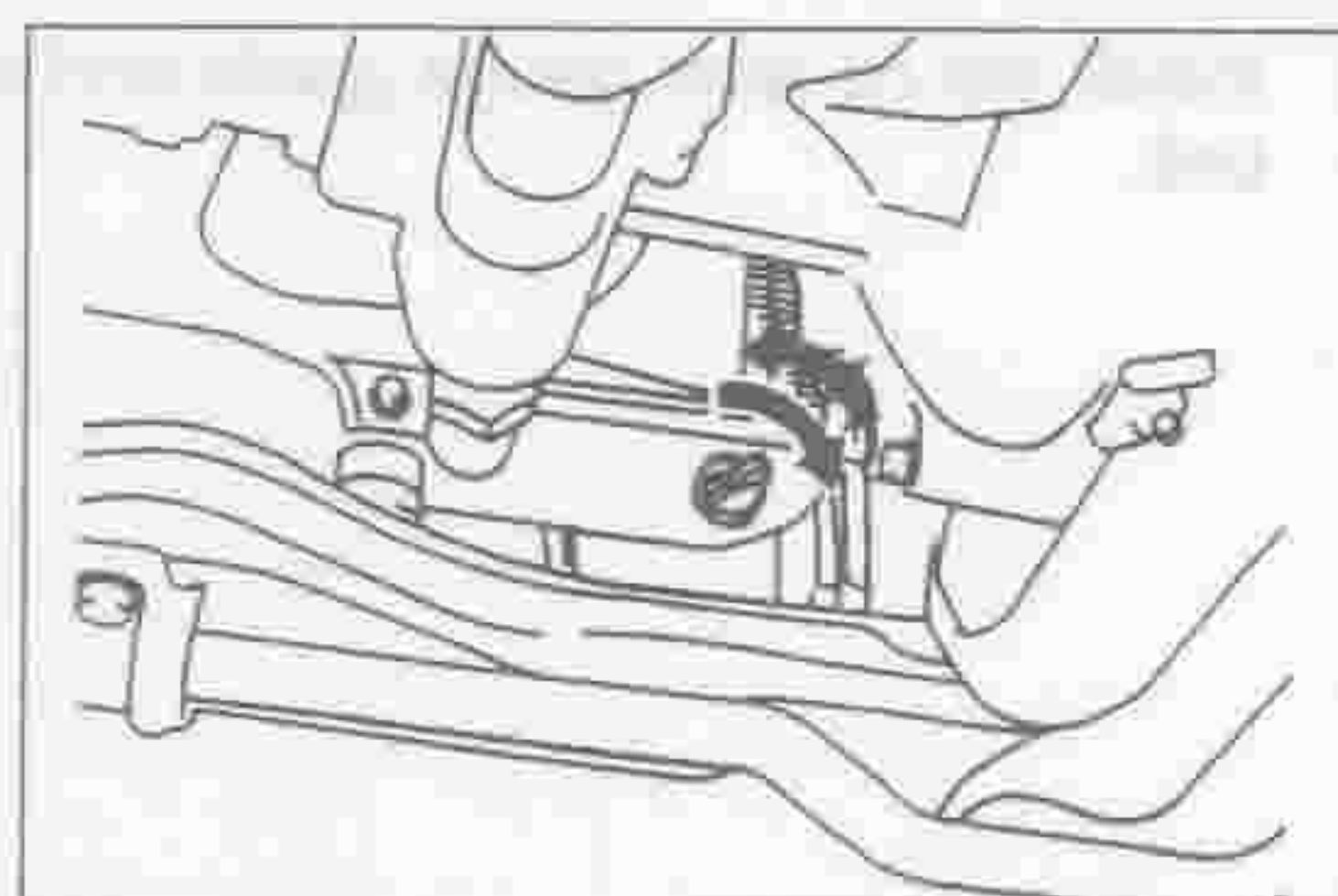
THERMOSTAT COMPONENTS



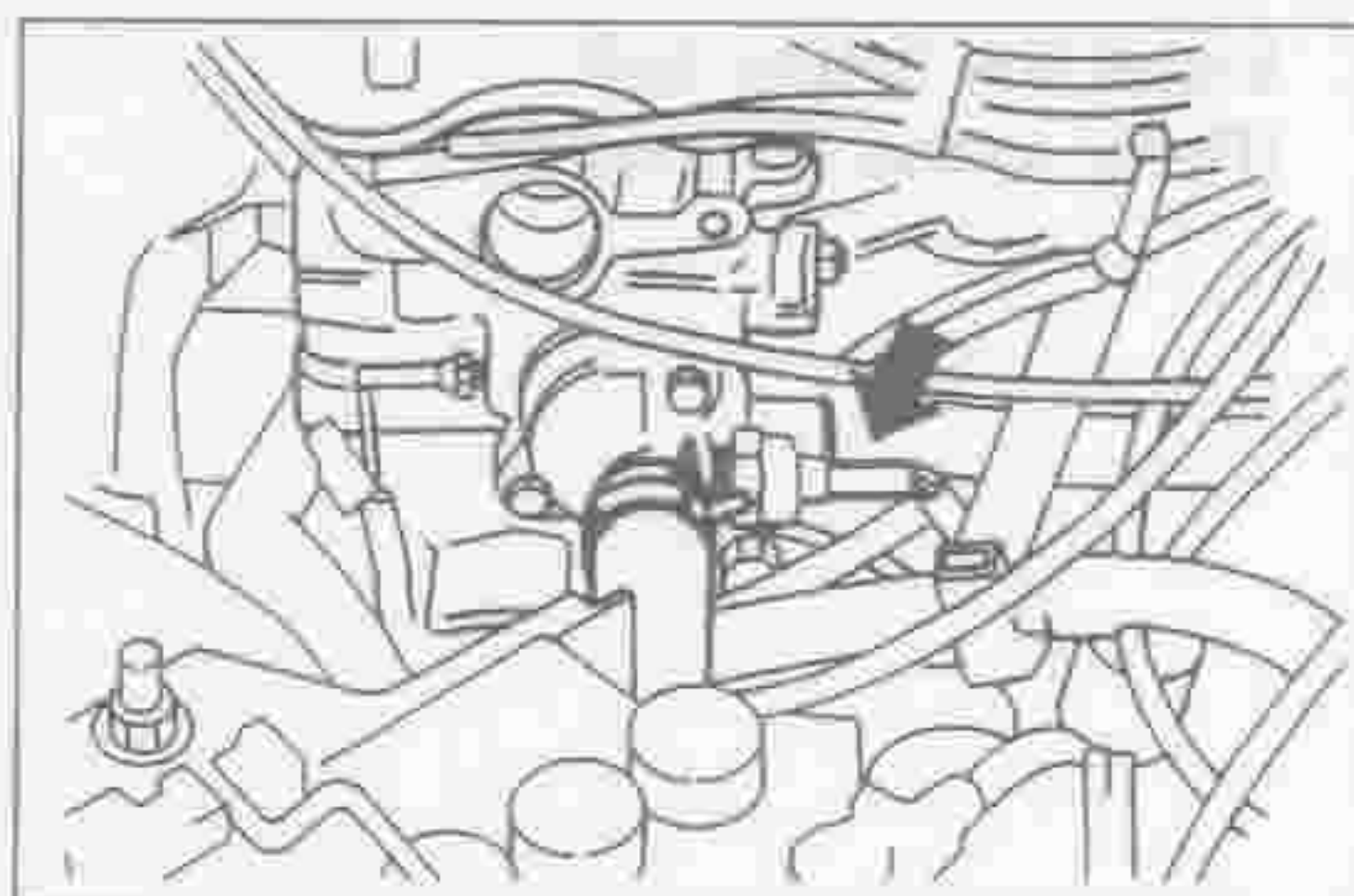
LC000032-00027

REMOVAL OF THERMOSTAT

1. Drain the coolant.
2. Remove the distributor.
(Refer to IG section.)
3. Disconnect the connector of the radiator thermo control switch.
4. Disconnect the radiator inlet hose from the water outlet.
5. Remove the water outlet from the cylinder head.



LC000033-00028

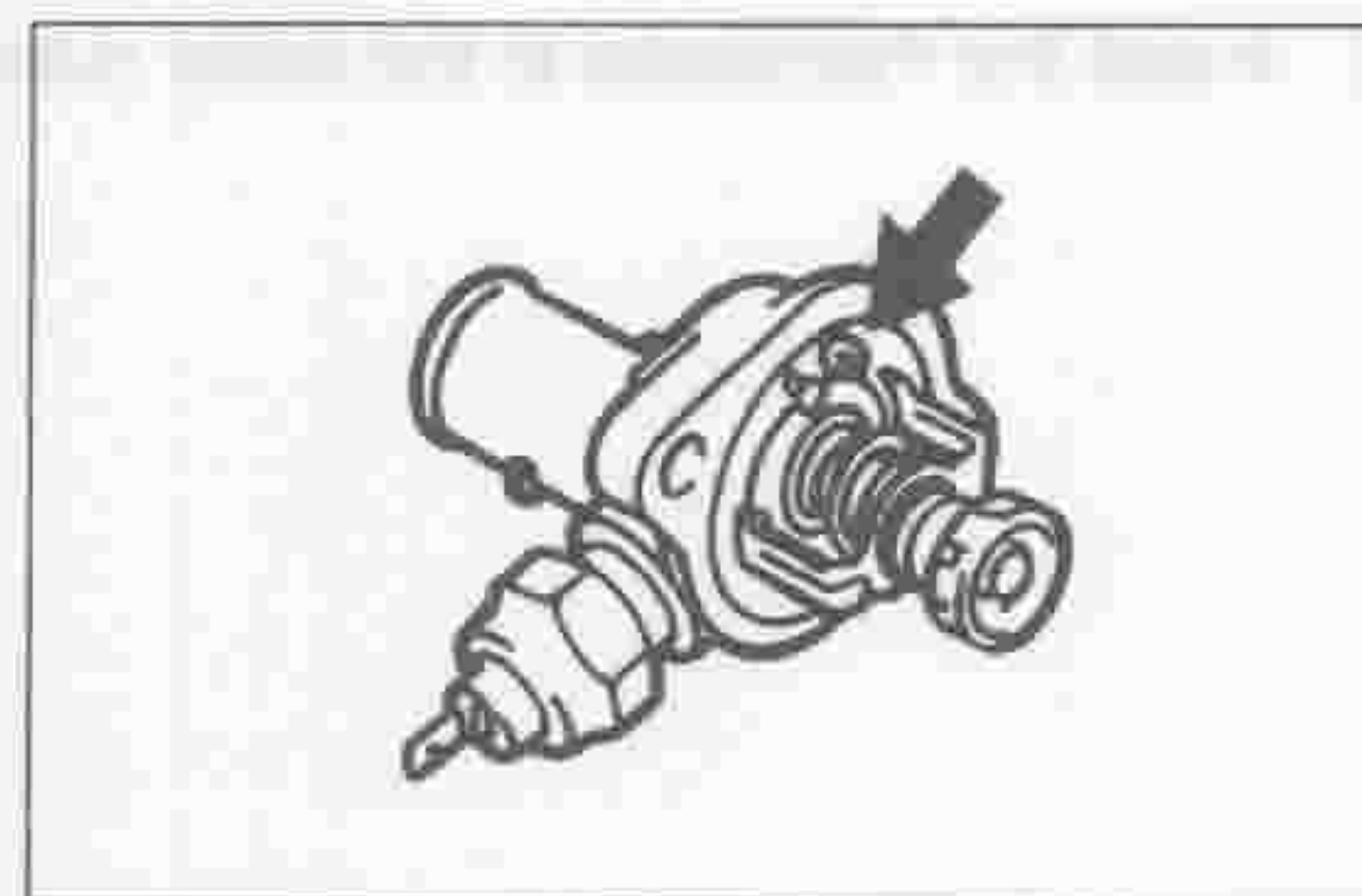


LC000034-00029



LC000035-00030

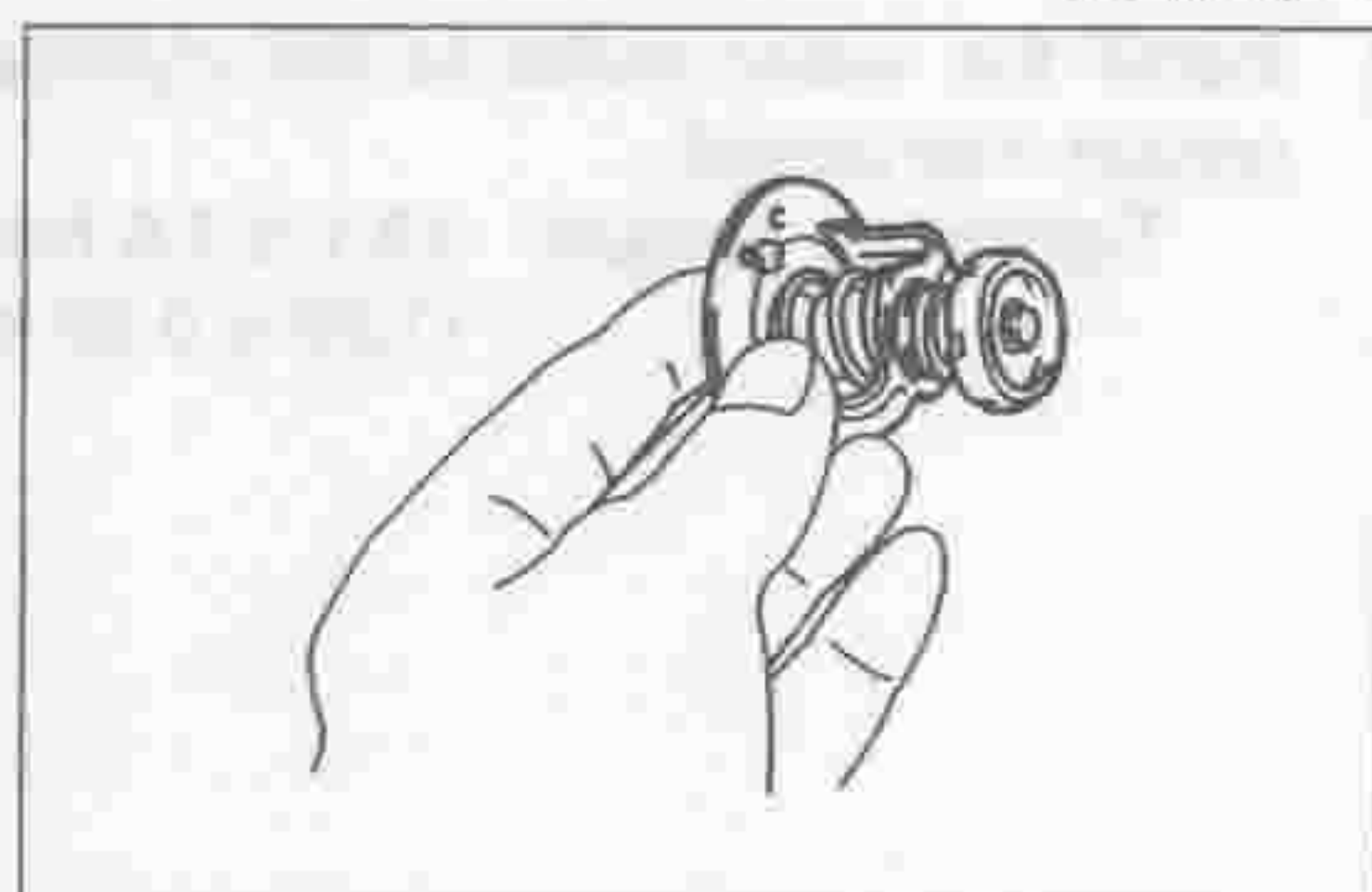
6. Remove the thermostat from the water outlet by removing a screw.



LCO00036-00031

INSPECTION OF THERMOSTAT

1. Ensure that the bypass valve and jiggle pin operate smoothly.

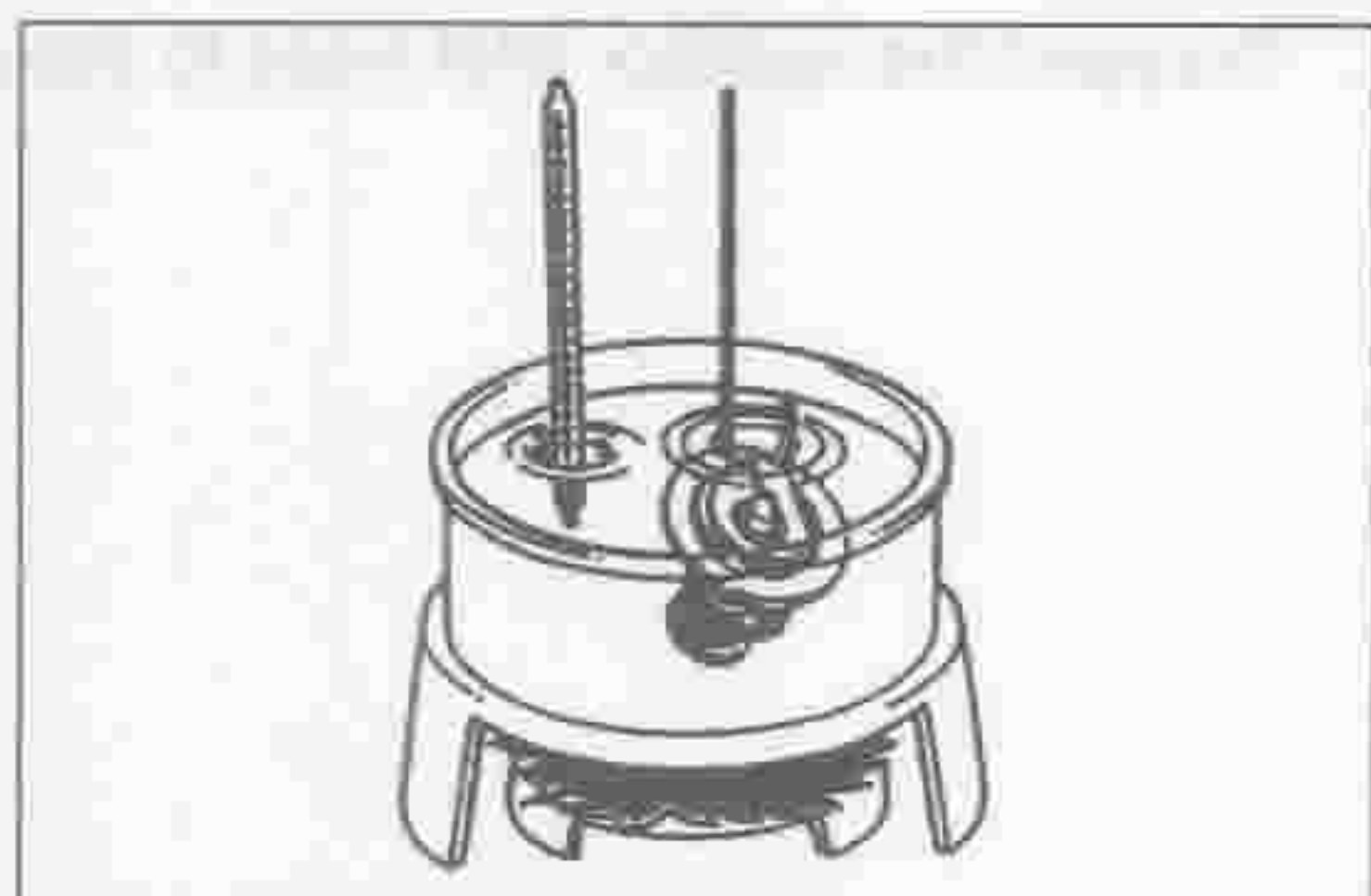


LCO00037-00032

2. Check of thermostat valve opening temperature
(1) Immerse the thermostat in water, as indicated in the right figure. Heat the water gradually. Ensure that the temperature at which the valve begins to open conforms to the specified value.

Specified Valve Opening Temperature:

Engine	Opening temperature (°C)
EF-EL, ED-10	82
ED-20	88

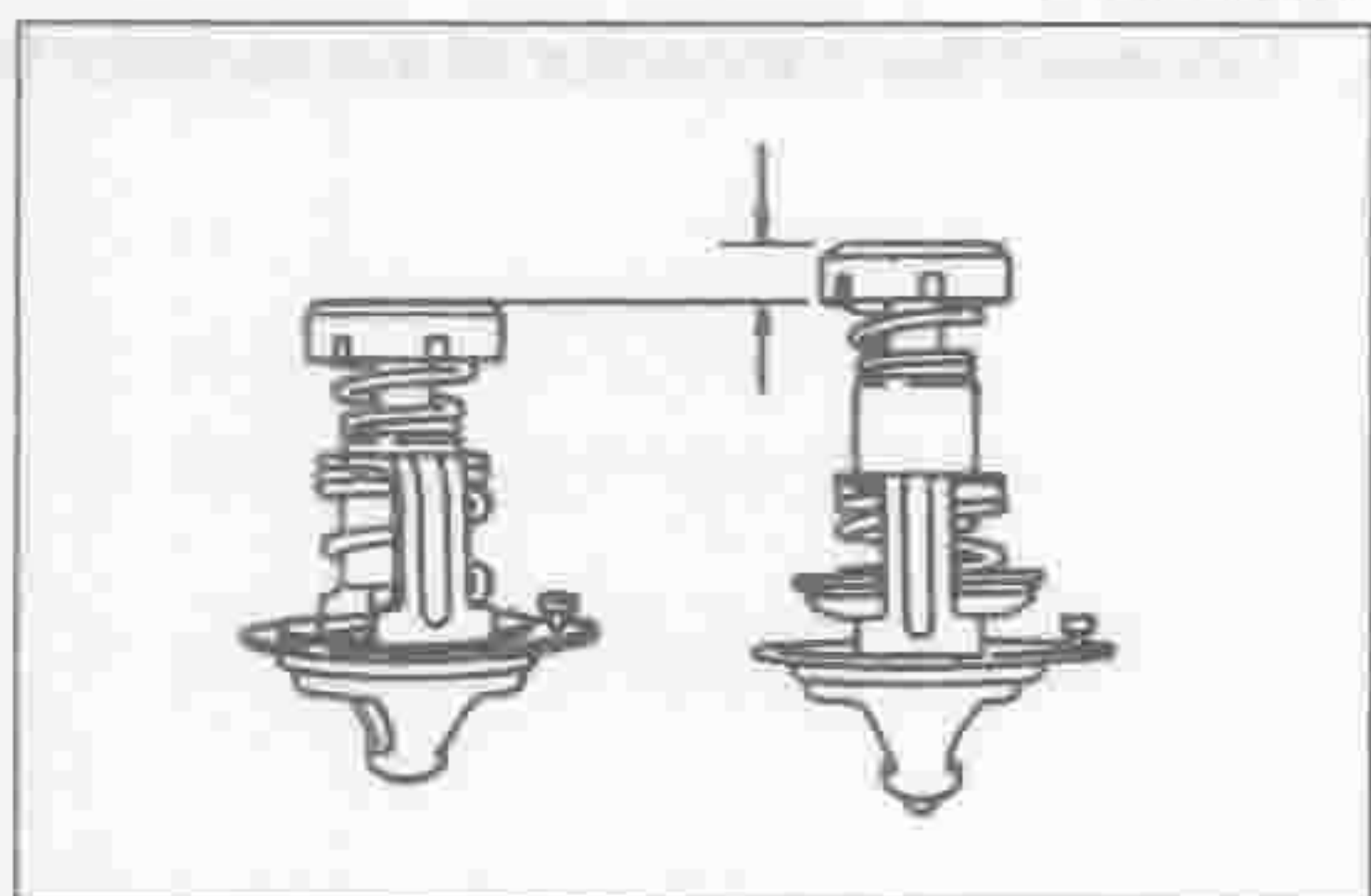


LCO00038-00033

If the temperature fails to conform to the specification, replace the thermostat with a new one.

- (2) Under the condition described in the step (1), heat the water to 95°C (EF-EL, ED-10) or 100°C (ED-20). At this time, ensure that the valve lift is the specified value or more.

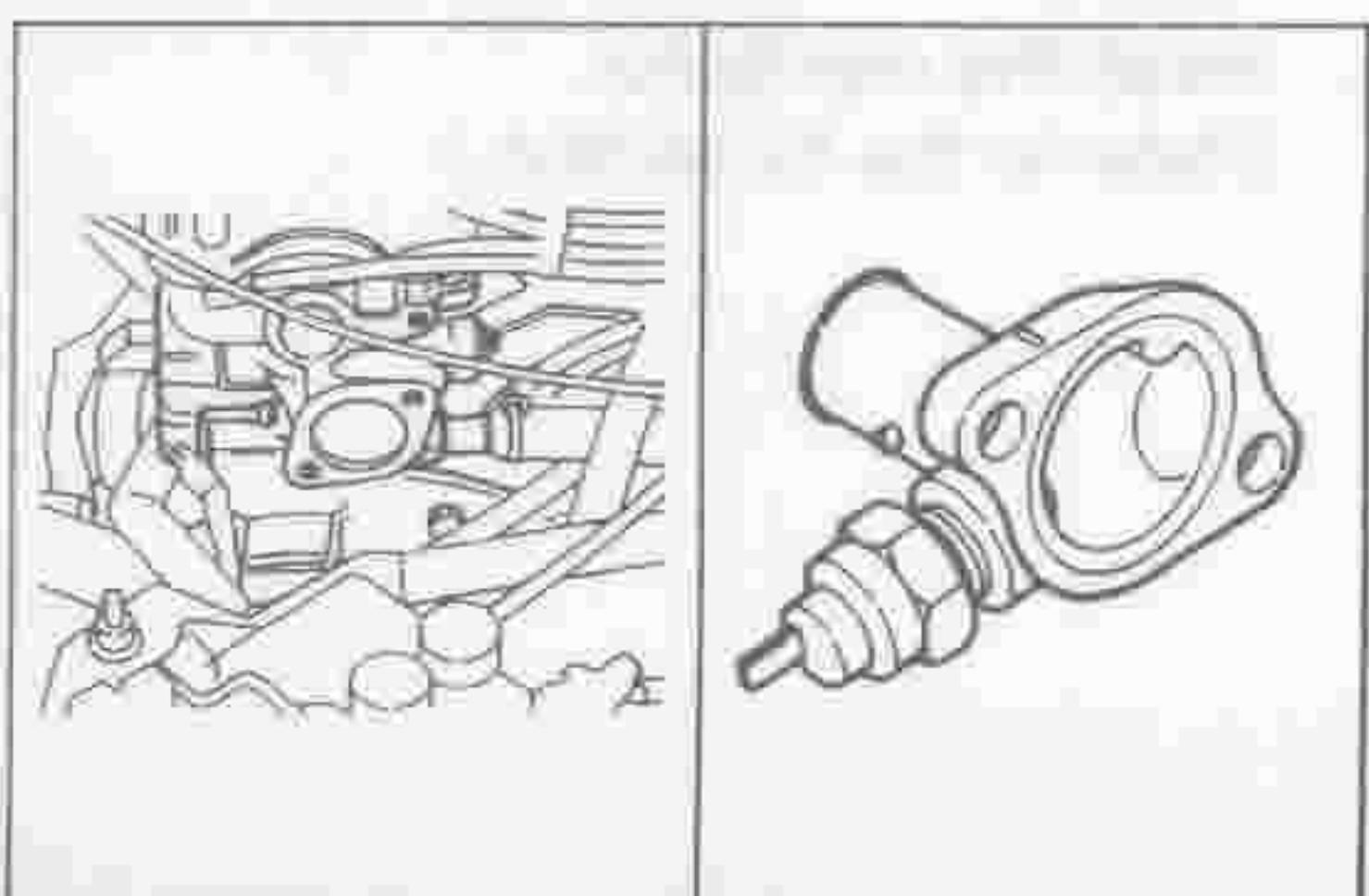
Specified Value: 8.0 mm



LCO00039-00034

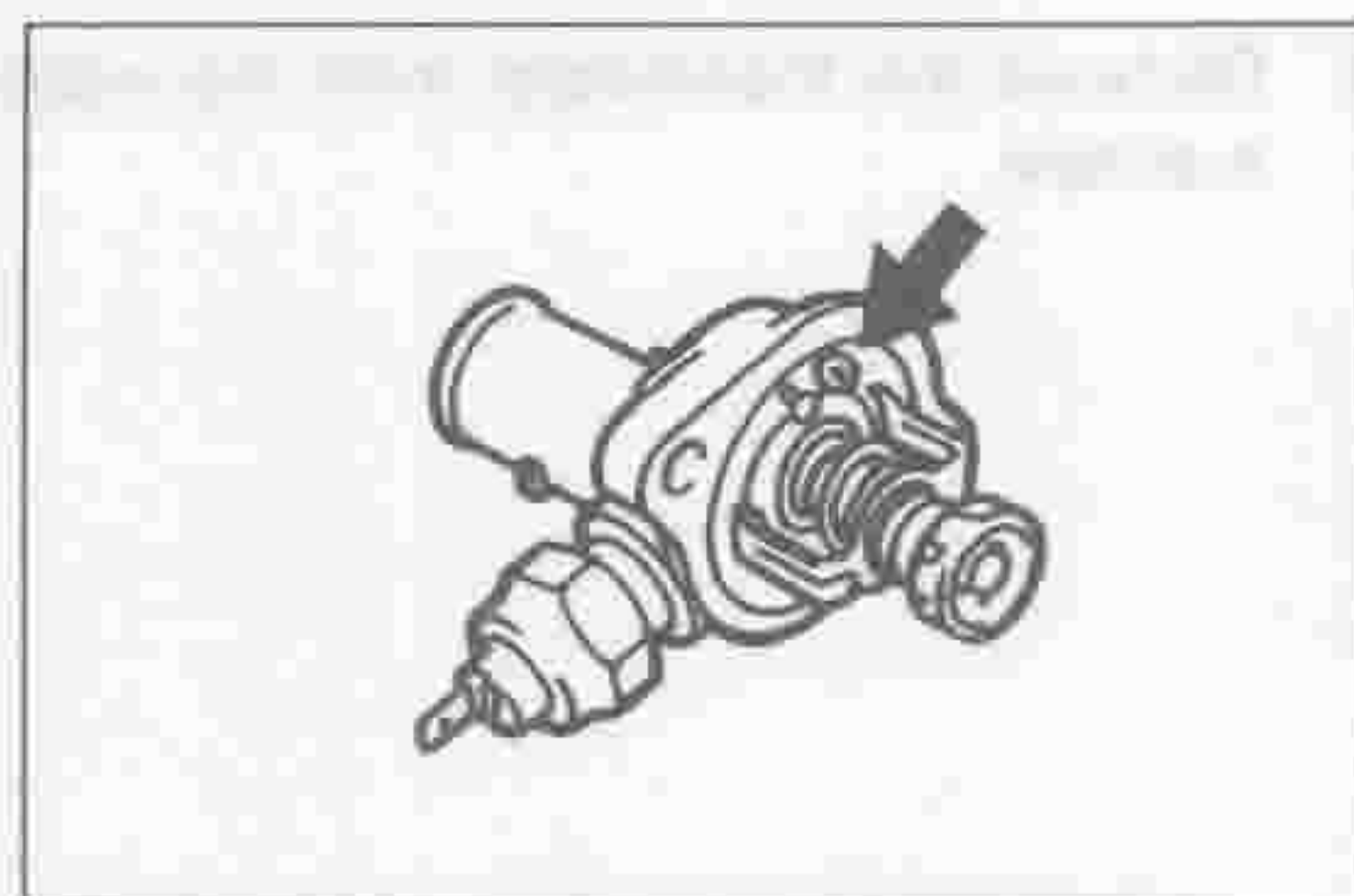
INSTALLATION OF THERMOSTAT

1. Clean the cylinder head and water outlet by removing the gasket material from them.



LCO00040-00035

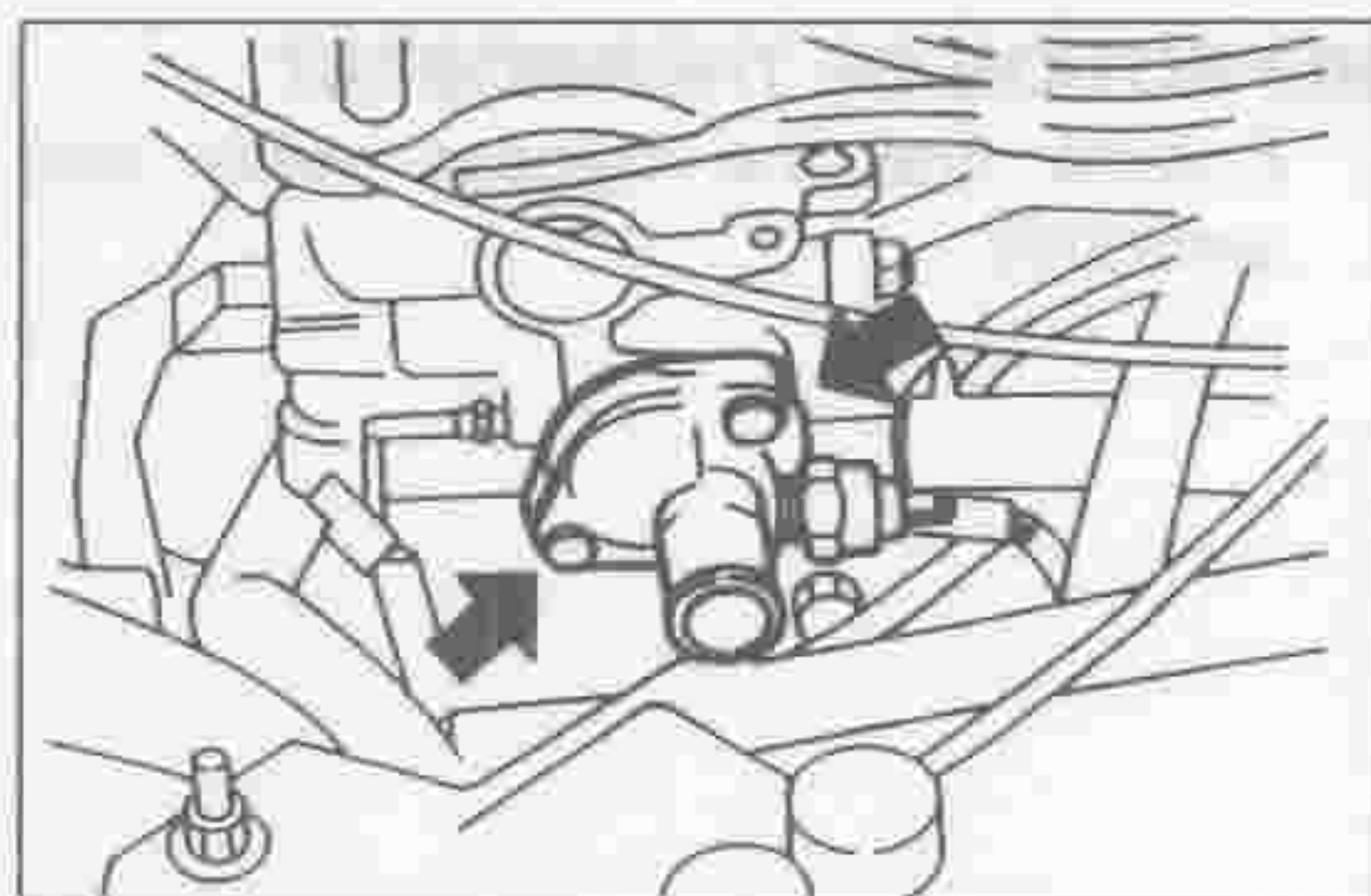
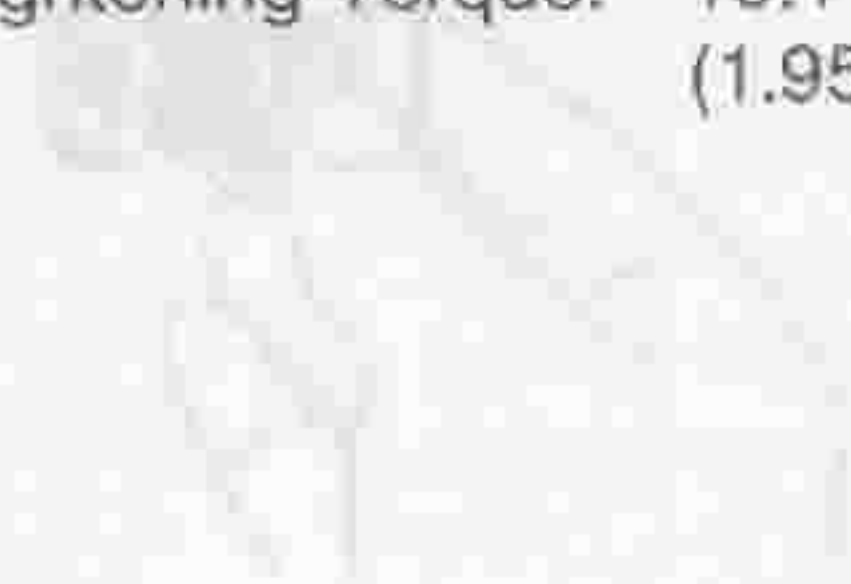
2. Install the thermostat to the water outlet.



LC000041-00036

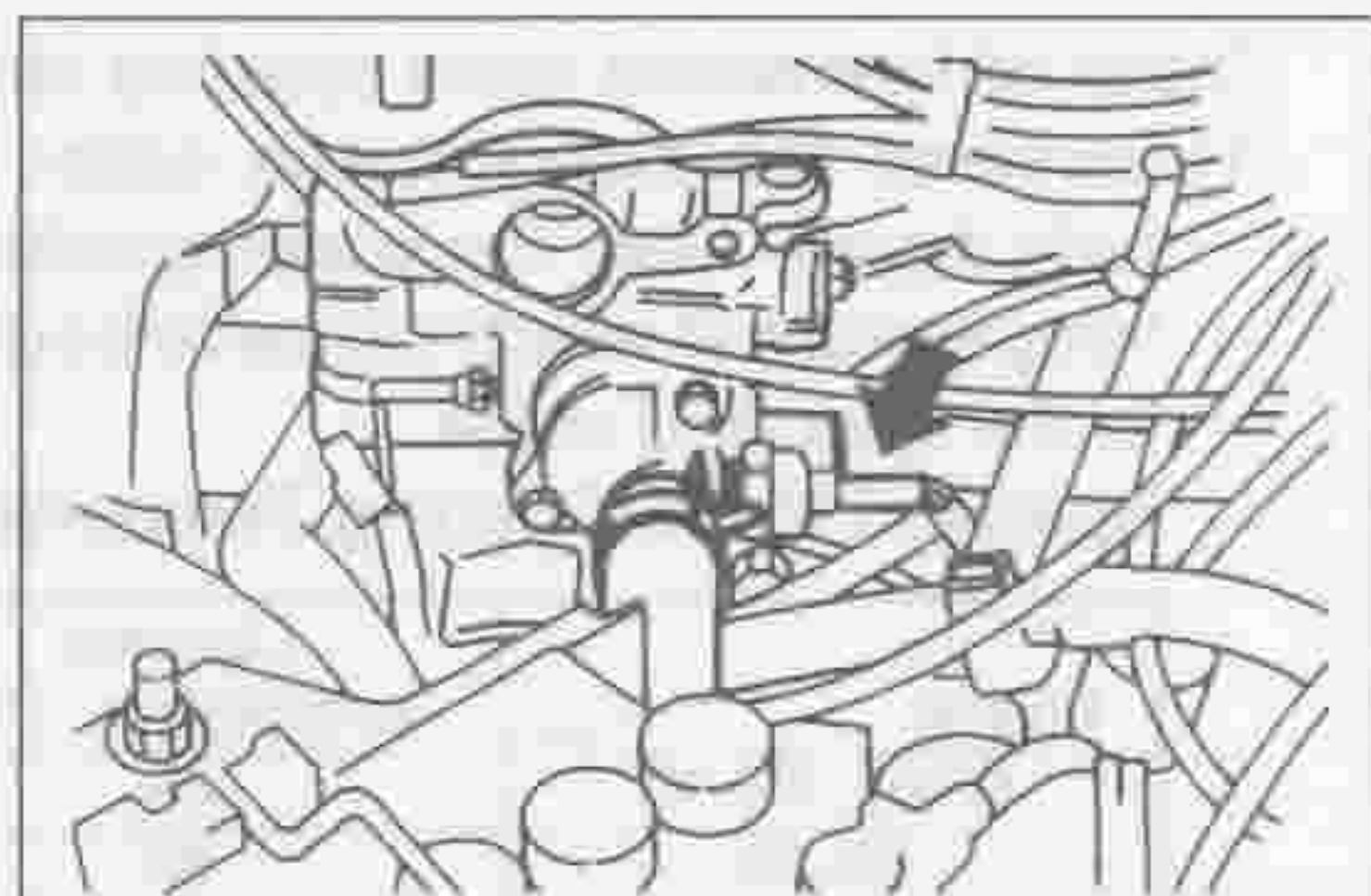
3. Install the water outlet to the cylinder head with a new gasket interposed.

Tightening Torque: $19.1 \pm 3.8 \text{ N}\cdot\text{m}$
 $(1.95 \pm 0.39 \text{ kgf}\cdot\text{m})$



LC000042-00037

4. Connect the radiator inlet hose to the water outlet.



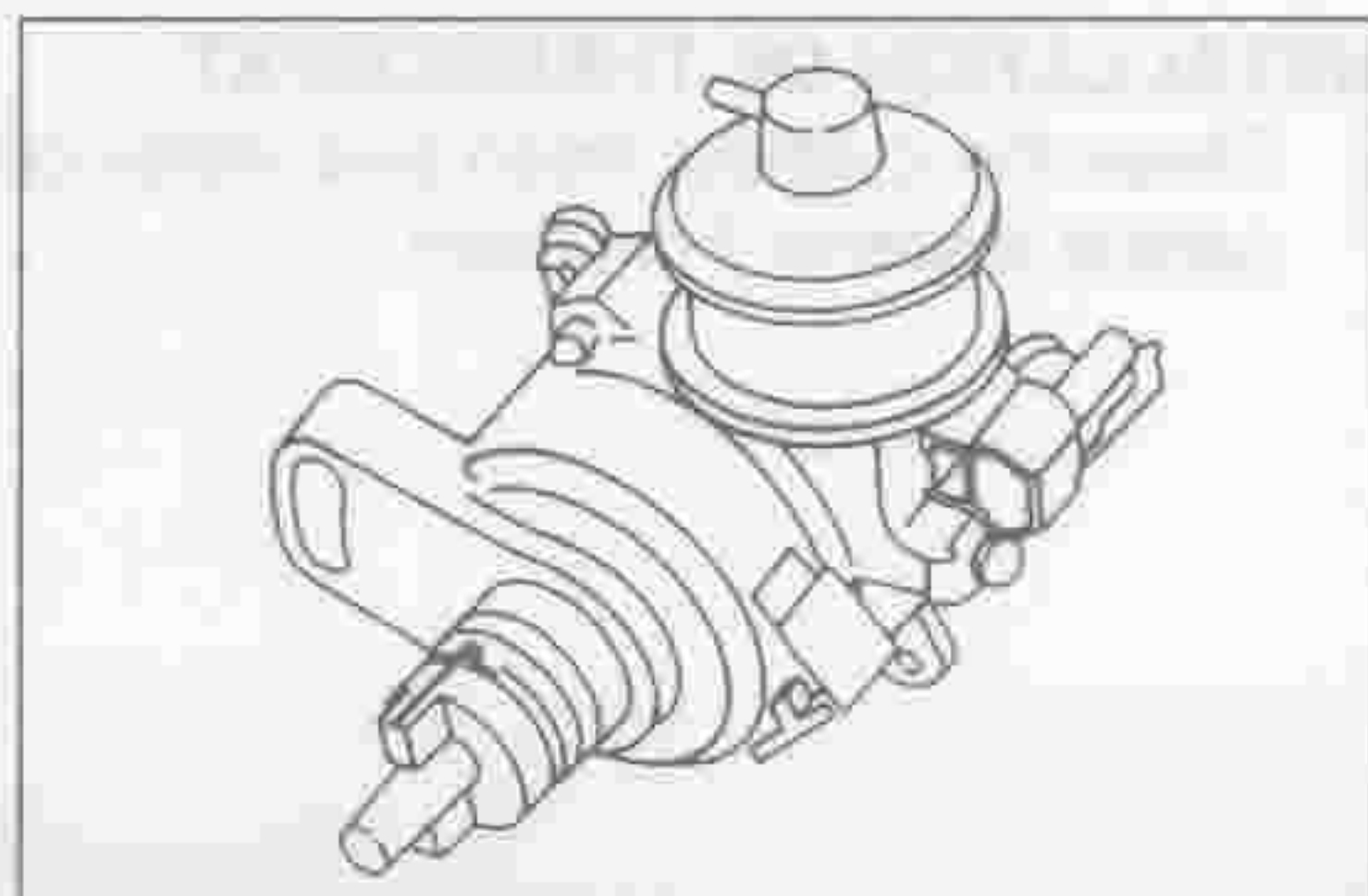
LC000043-00038

5. Connect the connector of the radiator thermo control switch.



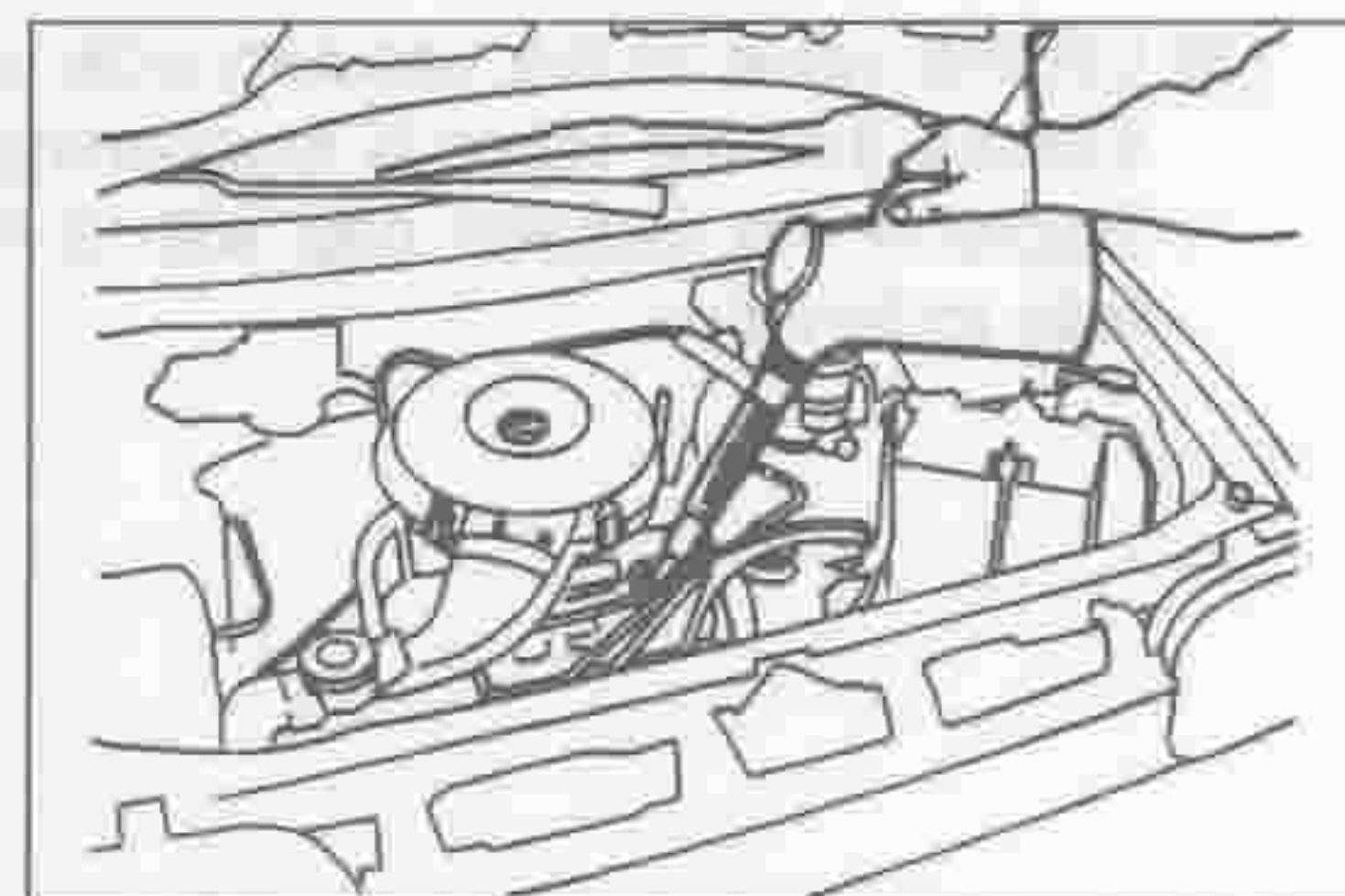
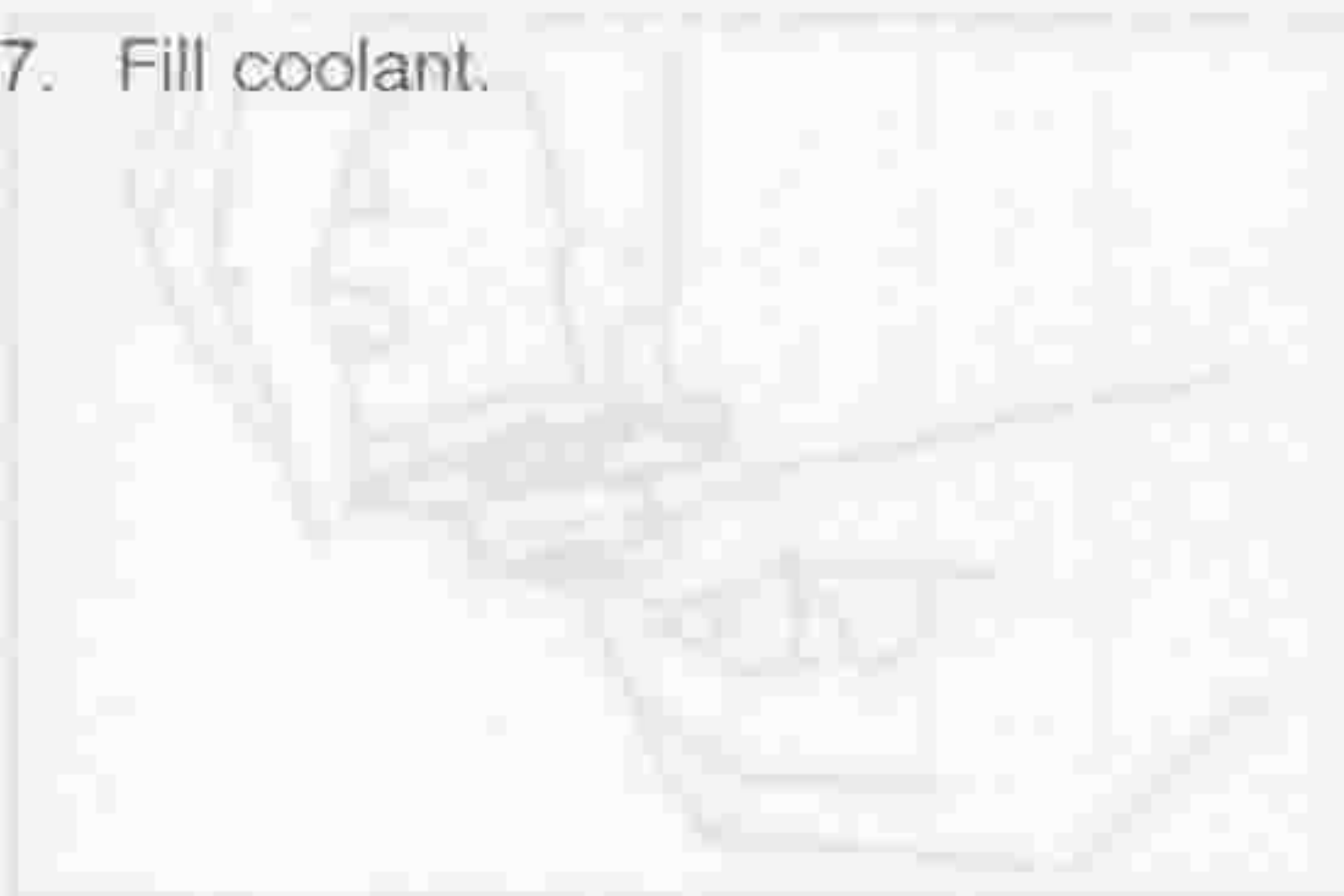
LC000044-00000

6. Install the distributor.
 (Refer to the IG section.)



LC000045-00039

7. Fill coolant.



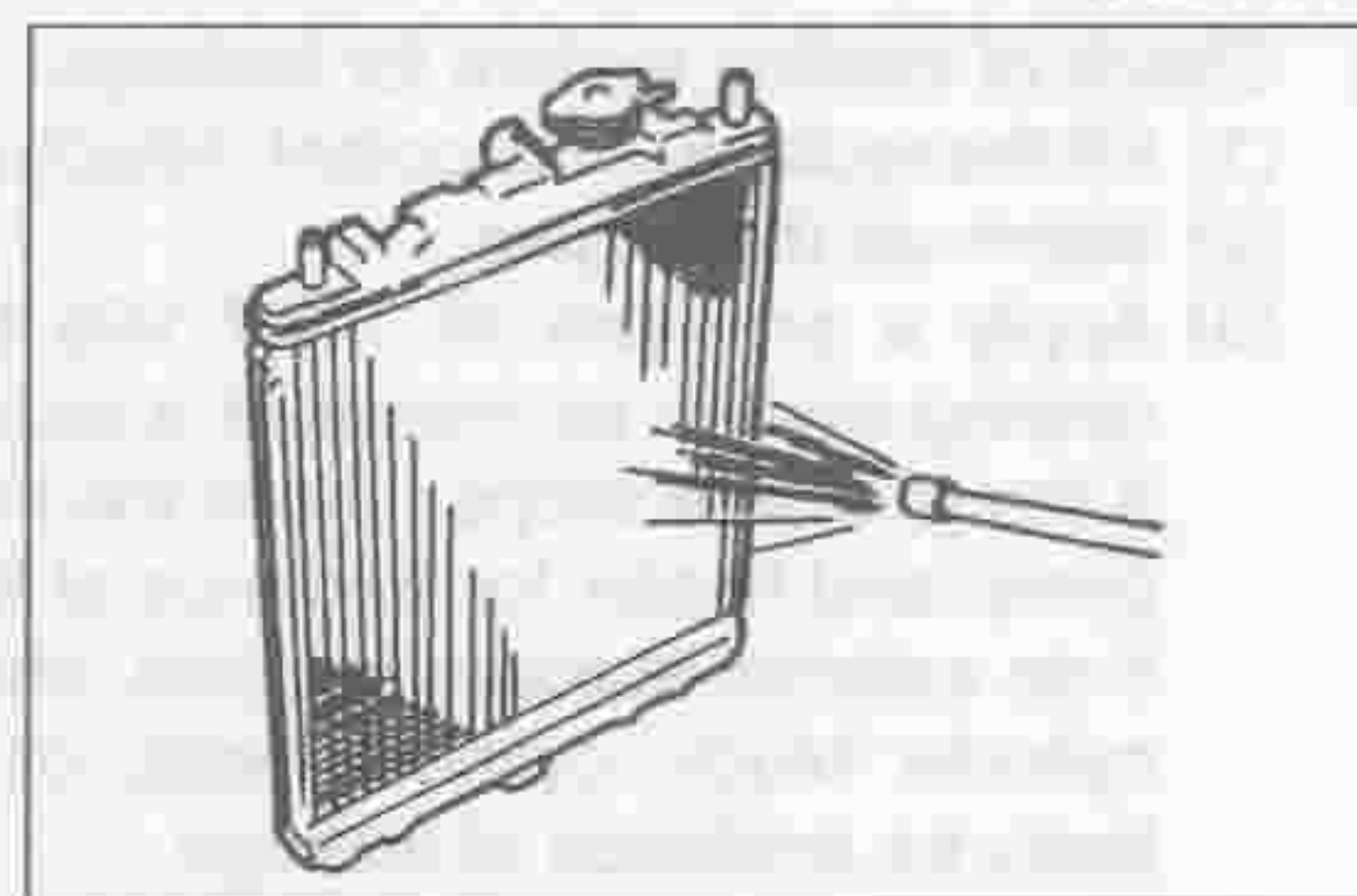
LC000046-00040

RADIATOR**CLEANING OF RADIATOR**

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

CAUTION:

- When using a high-pressure type cleaner, be very careful not to deform the radiator core fins.
- Keep a distance of more than 40 - 50 cm between the radiator core and the cleaner nozzle when the cleaner nozzle pressure is 2.9 - 4.9 MPa (30 - 50 kgf/cm²).
- Also, the injection angle of pressurized water should be right angles to the radiator.
- Failure to observe this caution will cause the radiator fins to be deformed.



LC000047-00041

INSPECTION OF RADIATOR

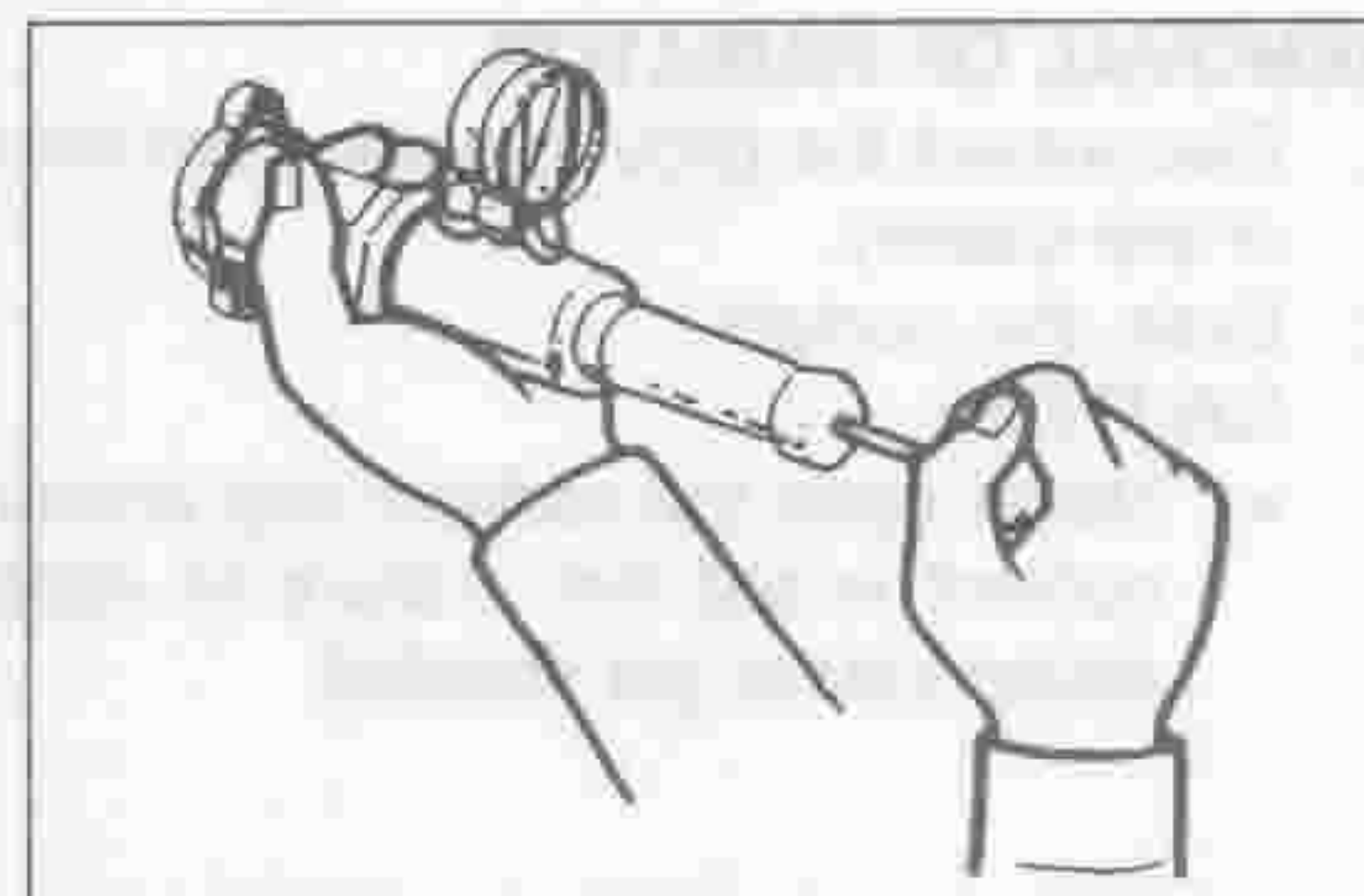
1. Check of radiator cap

- (1) Check the radiator cap by means of a radiator cap tester to see if the relief valve opens at a pressure of 58.8 - 103 kPa (0.6 - 1.05 kgf/cm²).

If the radiator cap fails to conform to the specification, replace the radiator cap.

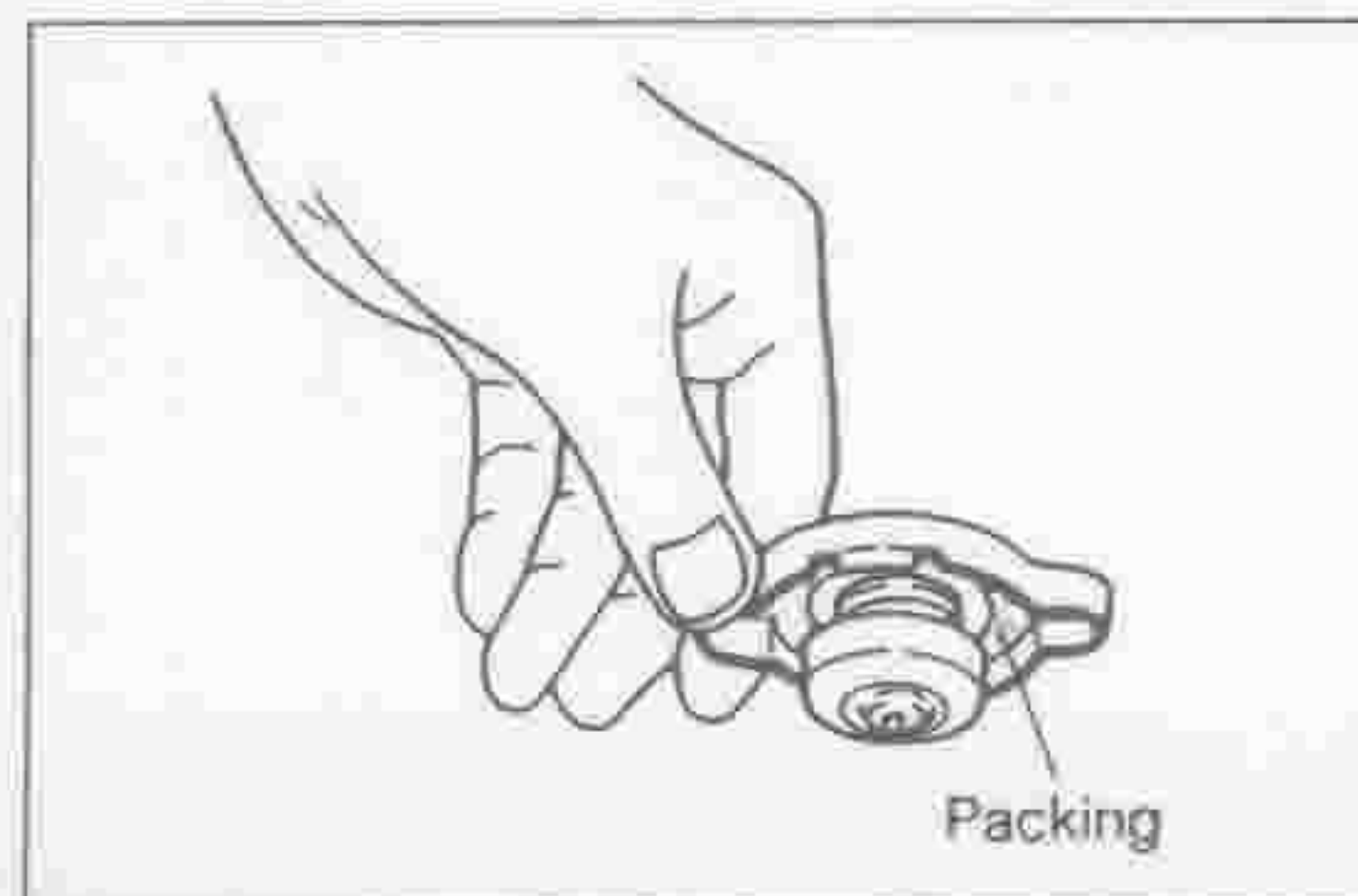
CAUTION:

- Never open the radiator cap when the engine is still hot. Failure to observe this caution will cause you to get scalded.



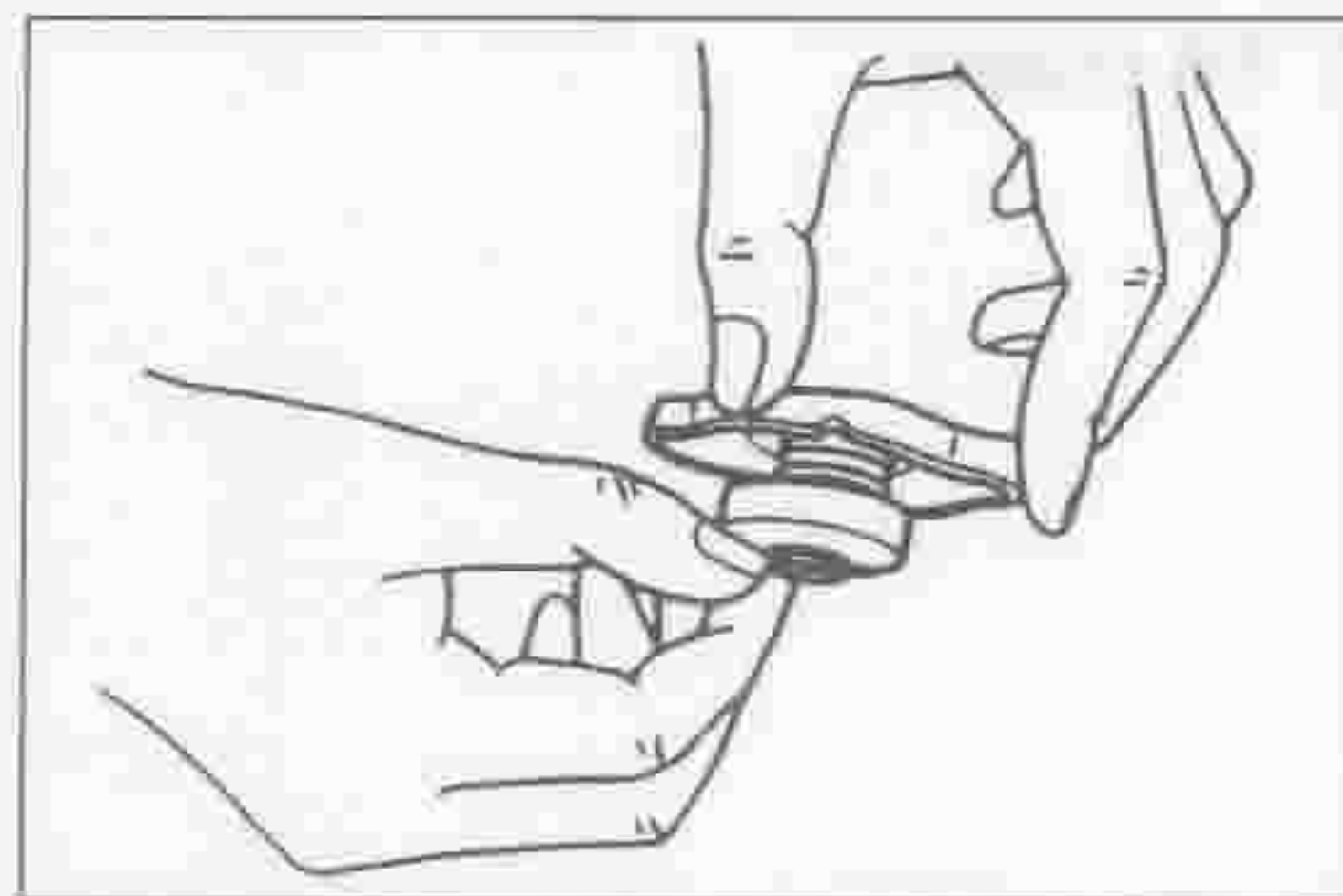
LC000048-00042

- (2) Check the seal packing of the radiator cap for damage. Replace the radiator cap with a new one, if any damage exists.



LC000049-00043

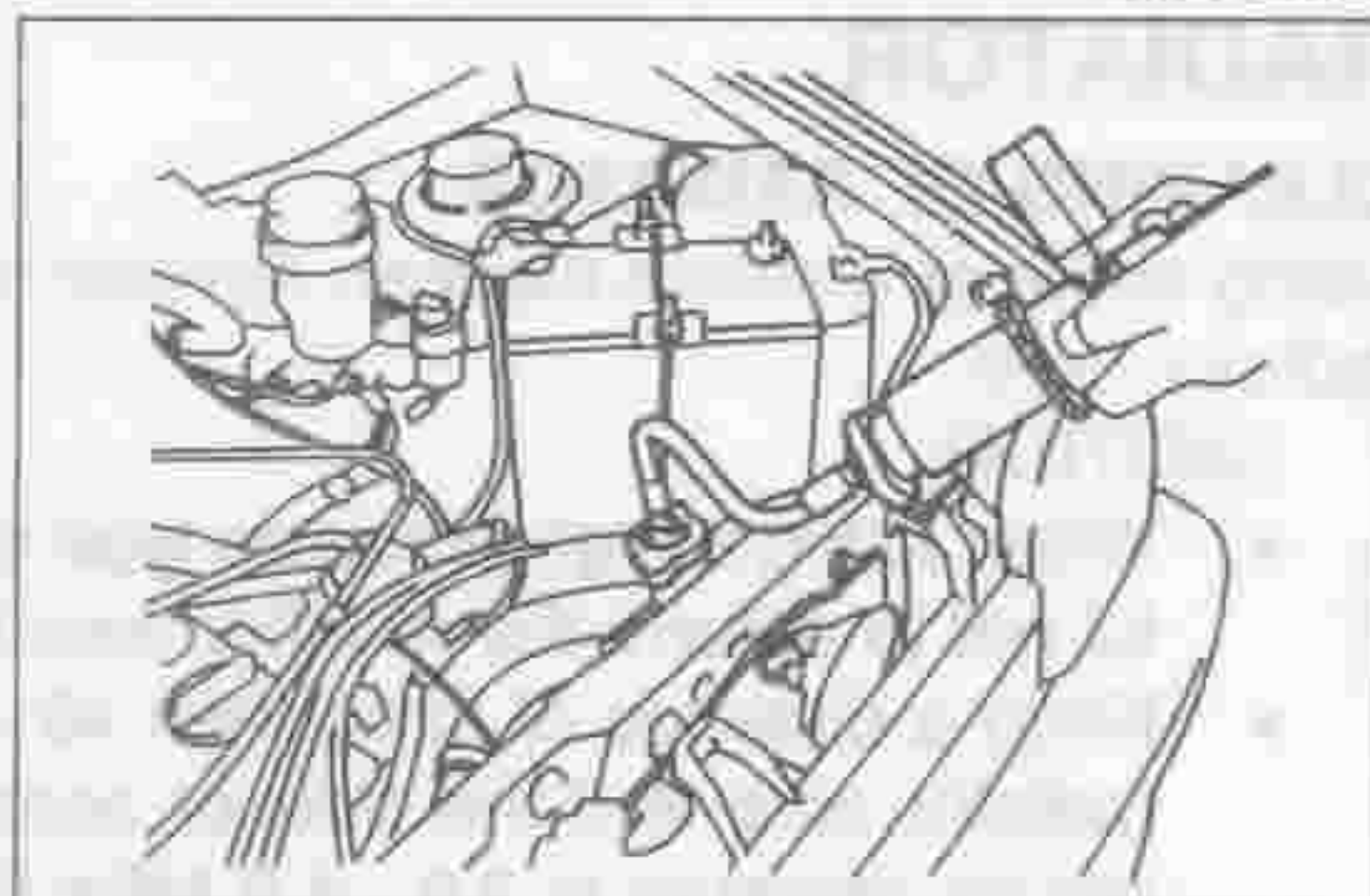
- (3) Lift the valve at the vacuum side with your fingers. Ensure that the valve is functioning properly. Replace the radiator cap with a new one, if the valve fails to function.



LC000050-00044

2. Check of cooling system for leakage

- (1) Fill the radiator with coolant. Attach a radiator cap tester.
- (2) Warm up the engine.
- (3) Apply a pressure of 117.7 kPa (1.2 kgf/cm²) to the cooling system by means of a radiator tester. If the pressure drops, check the hoses, radiator, water pump and heater for evidence of leakage. If no external leakage is found, check the heater core, cylinder block, cylinder head, oil cooler and throttle body for evidence of leakage.



LC000051-00045

Check the hoses for deterioration, cracks, bulge or damage.

Replace the defective part(s) if necessary.

- (4) Remove the radiator cap tester from the radiator.

CAUTION:

- Never open the radiator cap and/or drain cap when the coolant is still hot. Failure to observe this caution will cause you to get scalded.

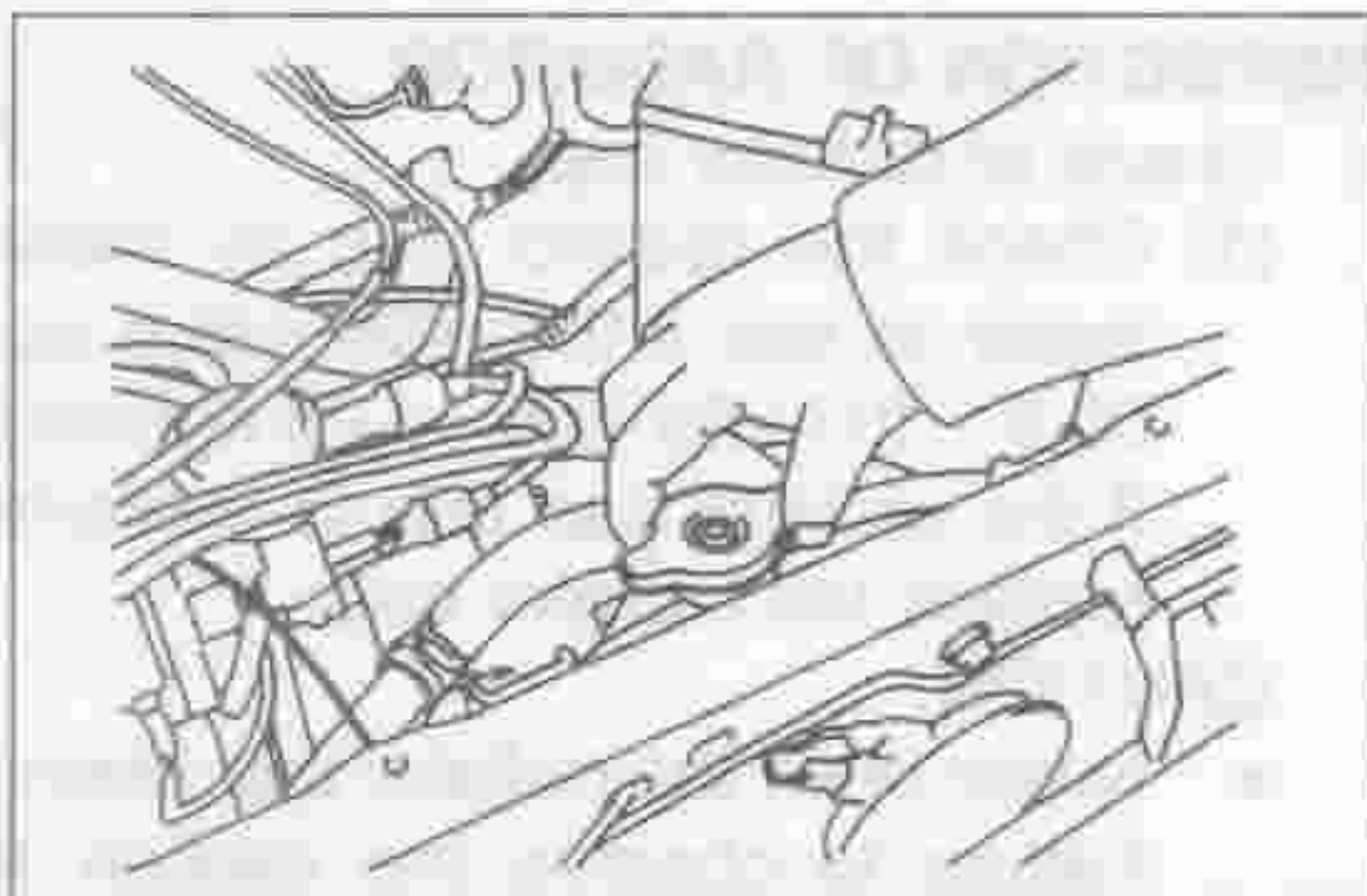
- (5) Secure the radiator cap.

REMOVAL OF RADIATOR

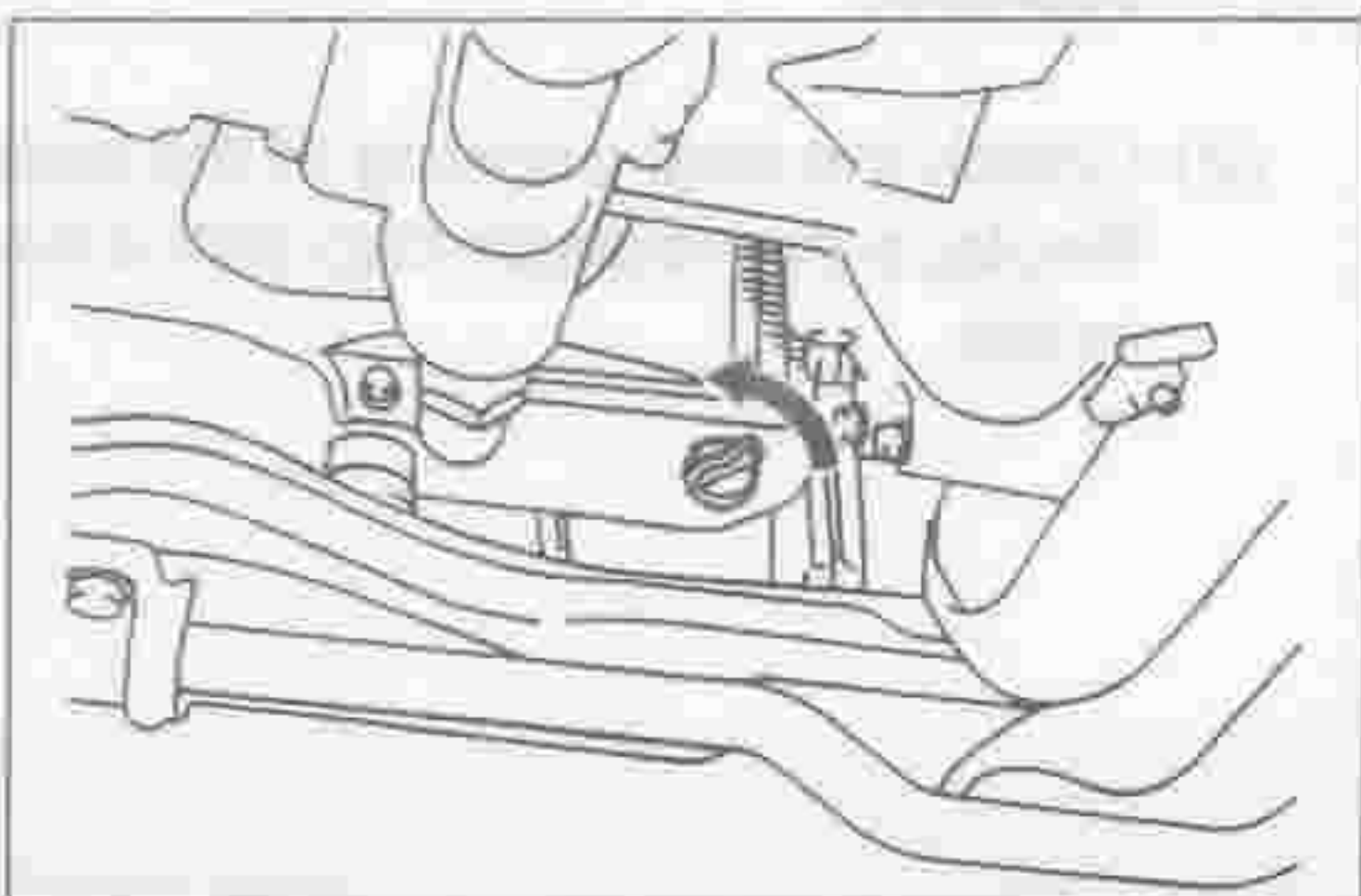
1. Disconnect the ground cable from the negative (-) terminal of the battery.
2. Drain the coolant.

CAUTION:

- Never open the radiator cap and/or drain cap when the coolant is still hot. Failure to observe this caution will cause you to get scalded.



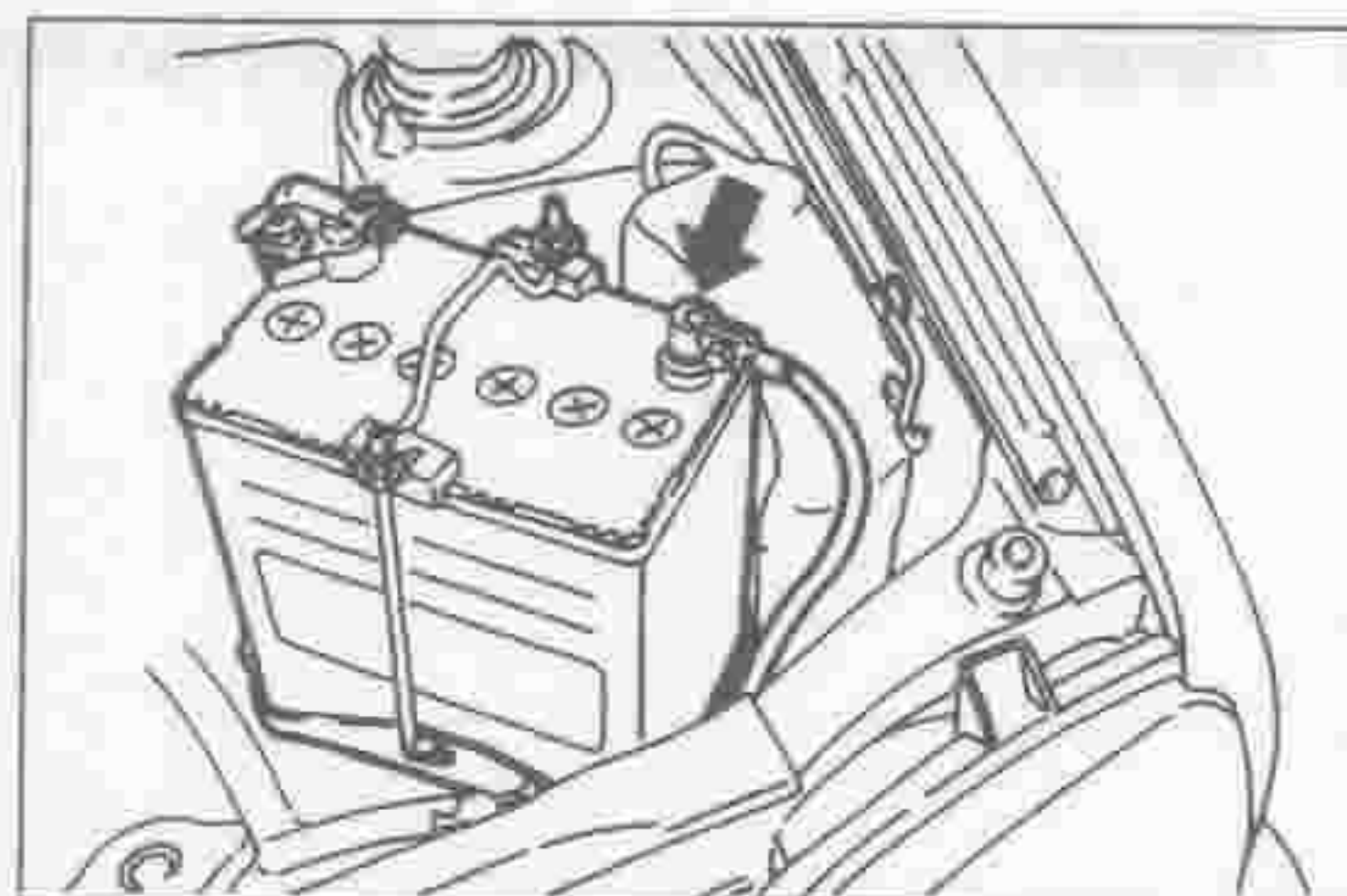
LC000052-00046



LC000000-00047

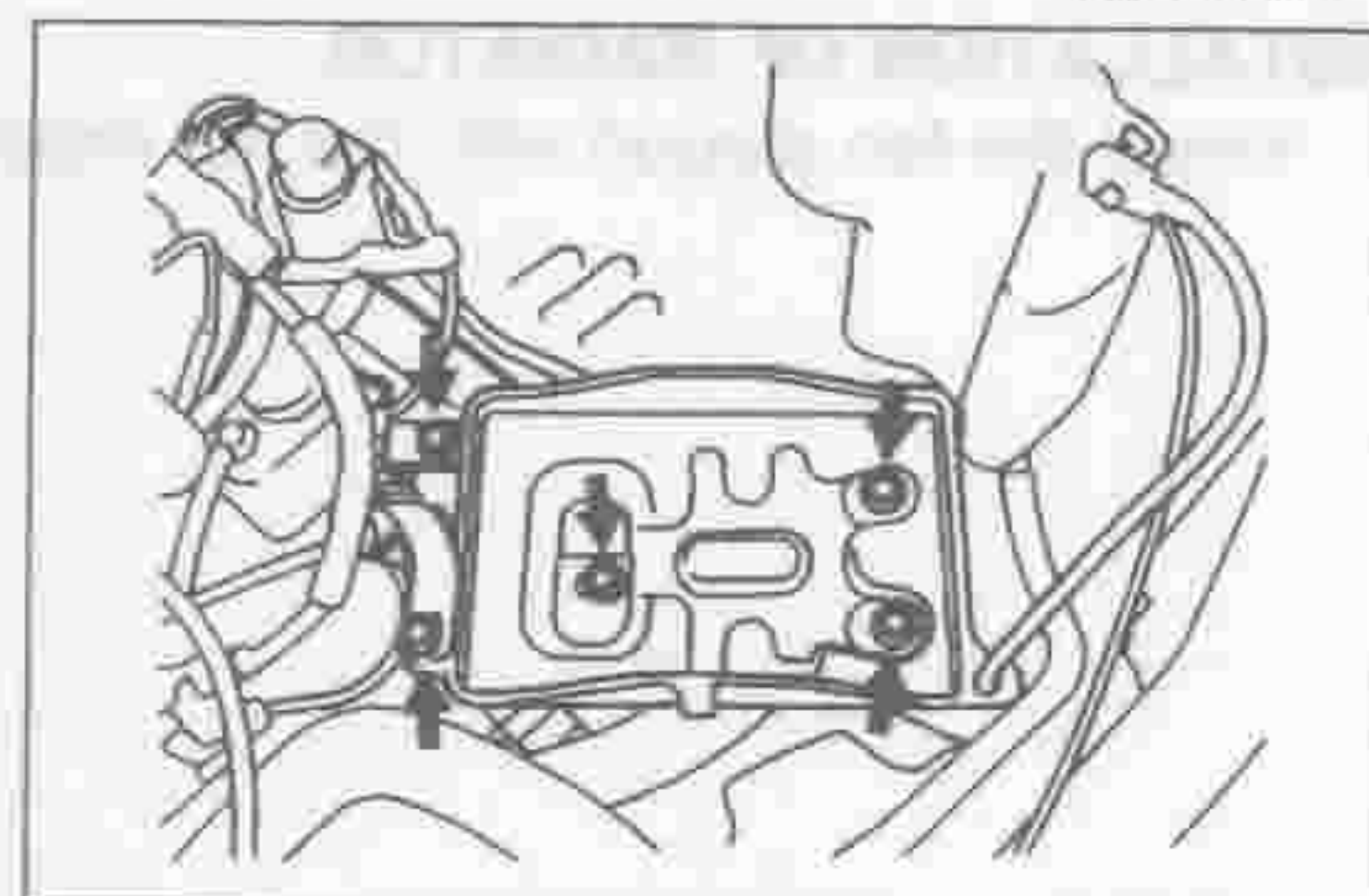
3. Removal of battery

- (1) Disconnect the positive cable from the positive (+) terminal of the battery.
- (2) Detach the hold-down clamp.
- (3) Remove the battery.



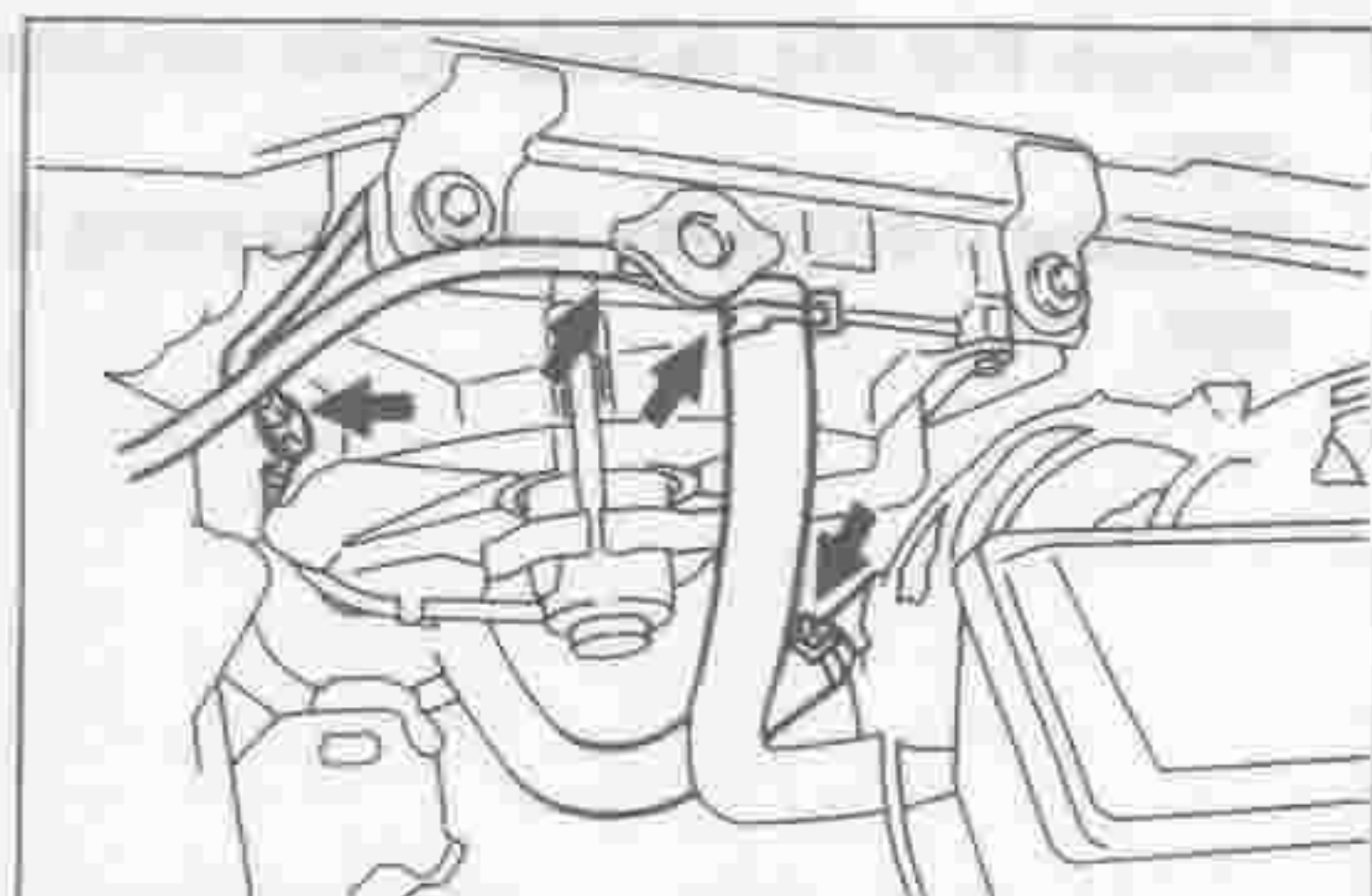
LC000053-00048

- (4) Remove the battery tray.



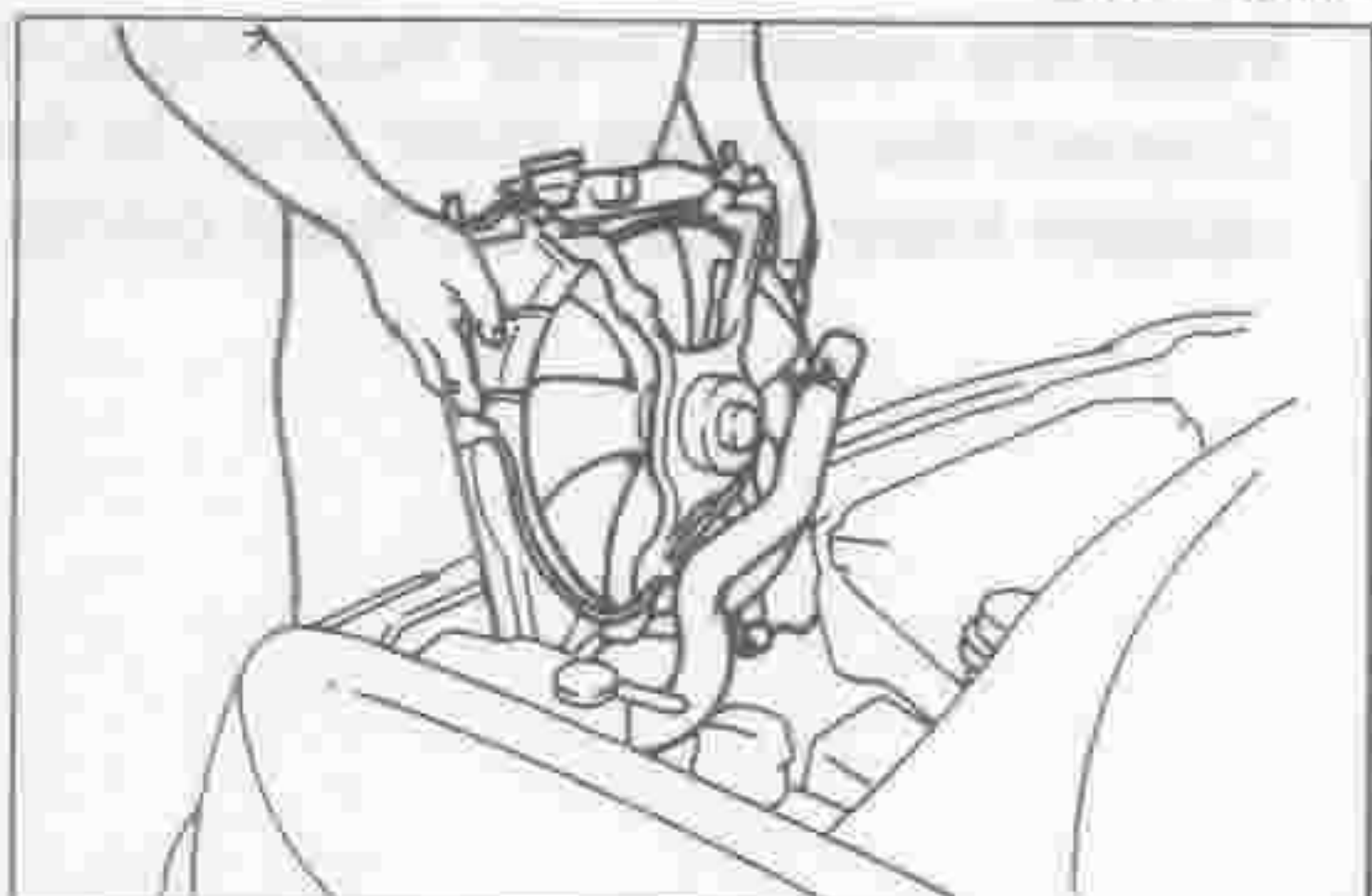
LC000054-00049

4. Disconnect the radiator hoses.
5. Disconnect the reserve tank hose from the radiator.
6. Disconnect the connector of the radiator cooling fan motor.



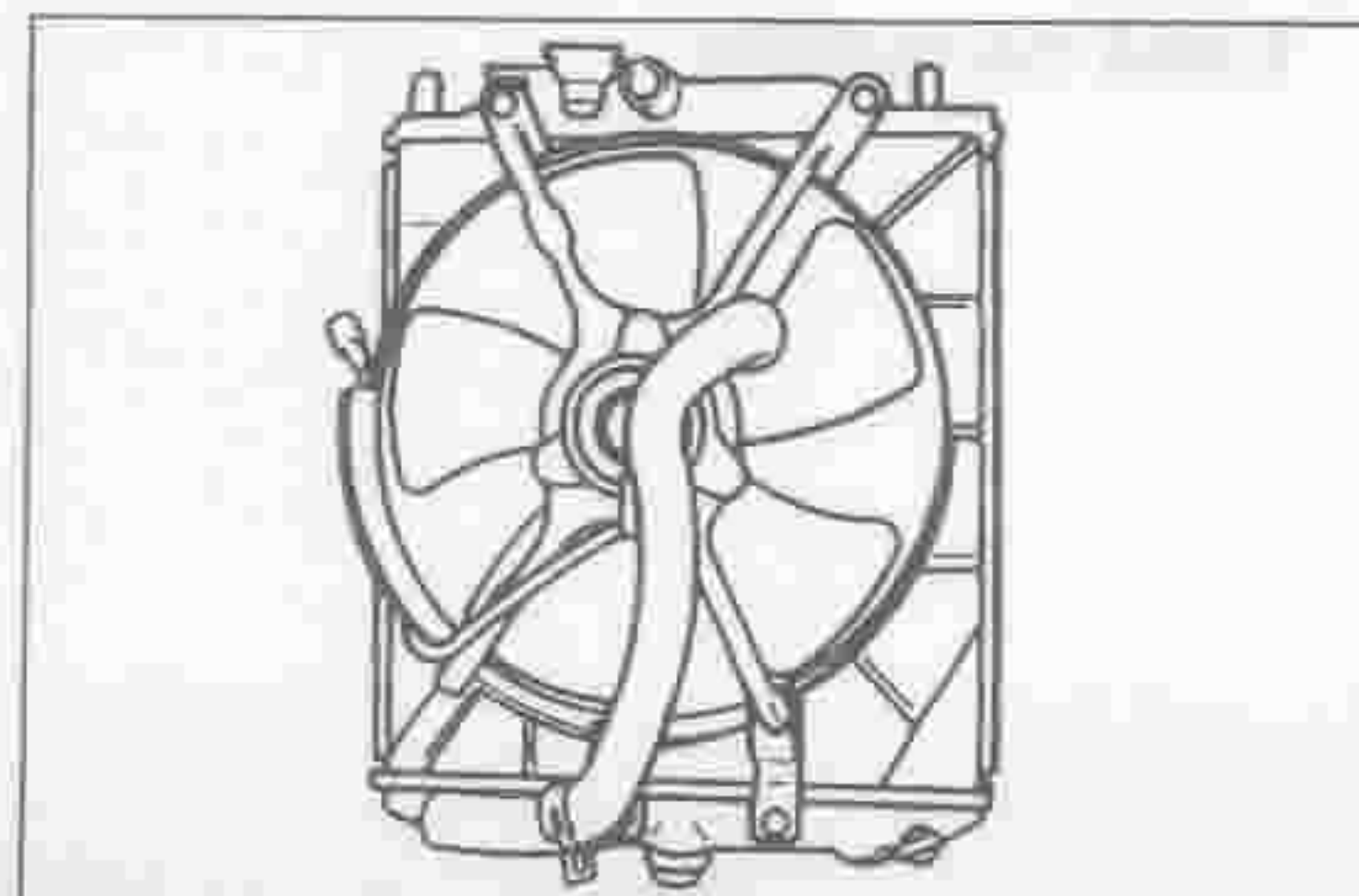
LC000055-00050

7. Remove the radiator by removing the attaching bolt or radiator bracket.



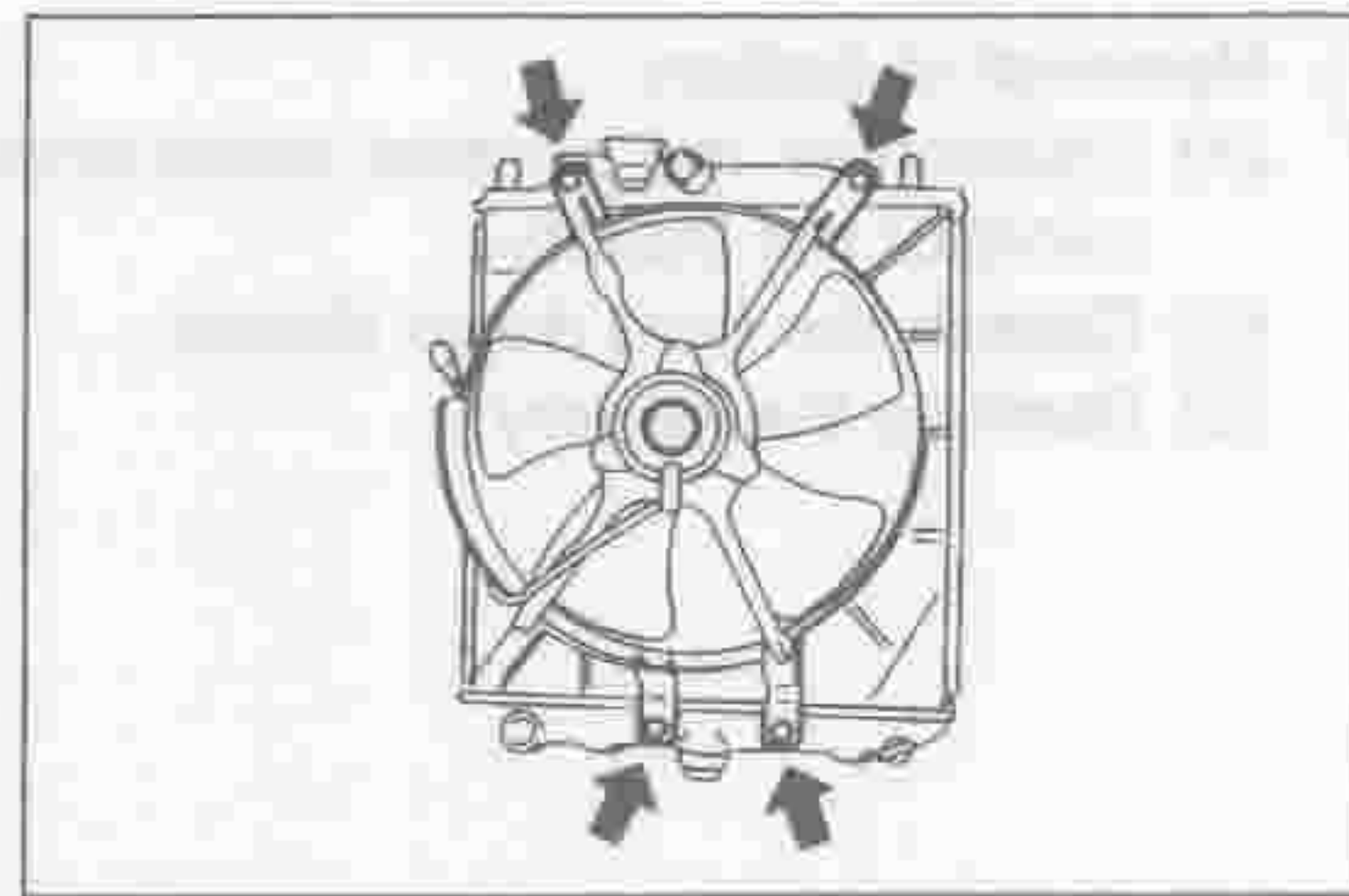
LC000056-00051

8. Remove the radiator lower hose from the radiator.



LC000057-00052

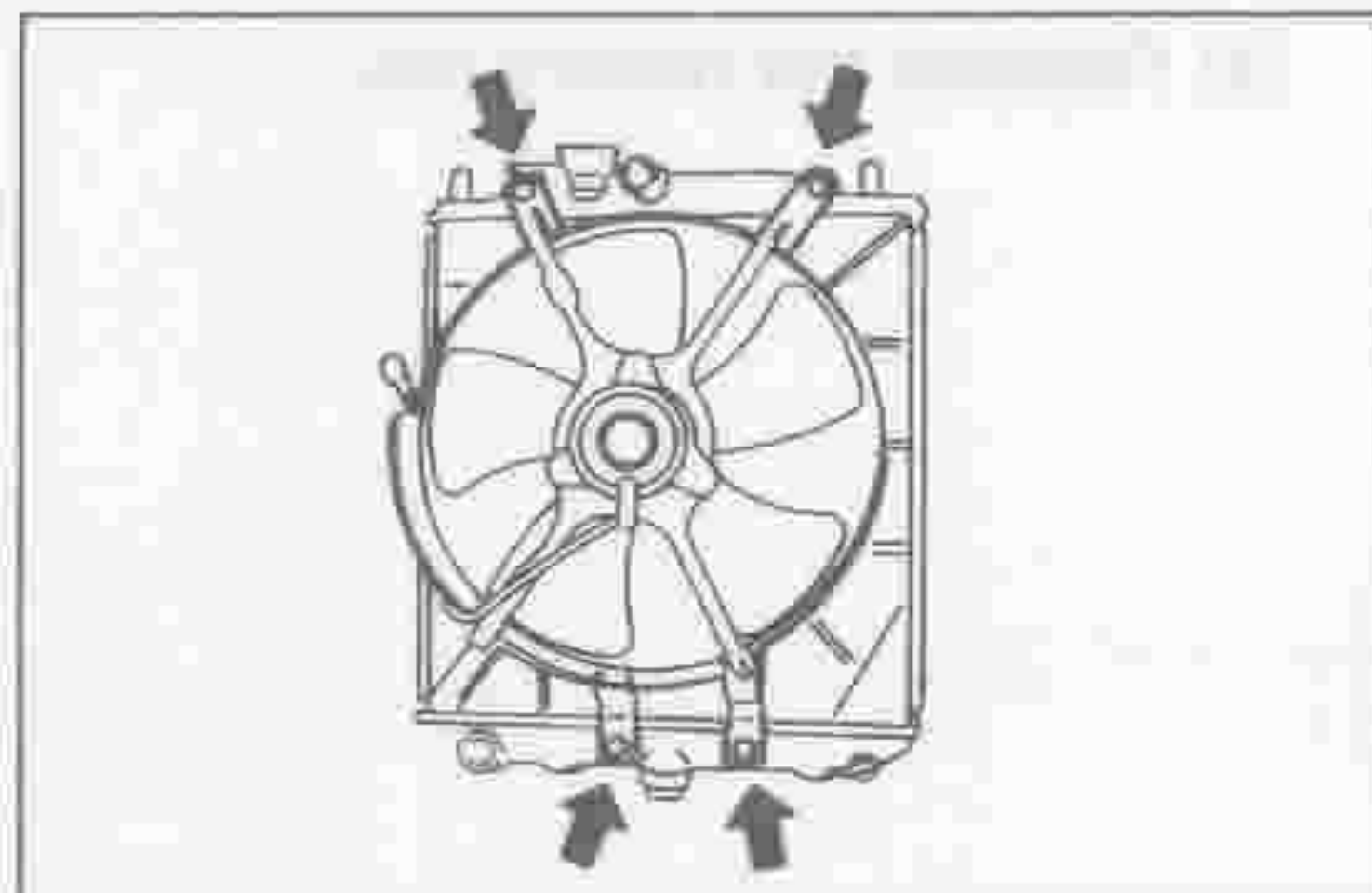
9. Remove the fan shroud with the fan motor from the radiator.



LC000058-00053

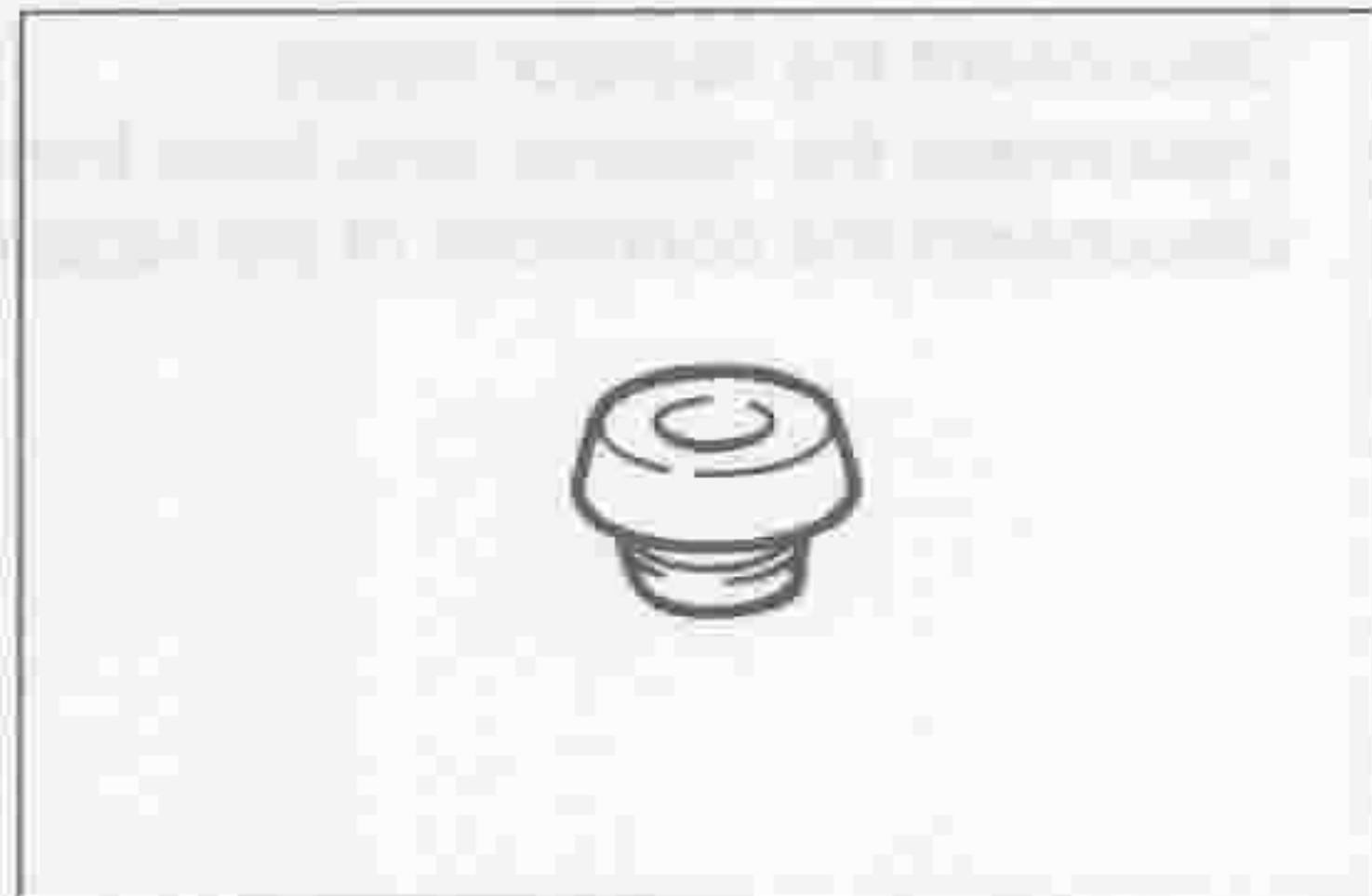
INSTALLATION OF RADIATOR

1. Install the fan shroud with the fan motor on the radiator.



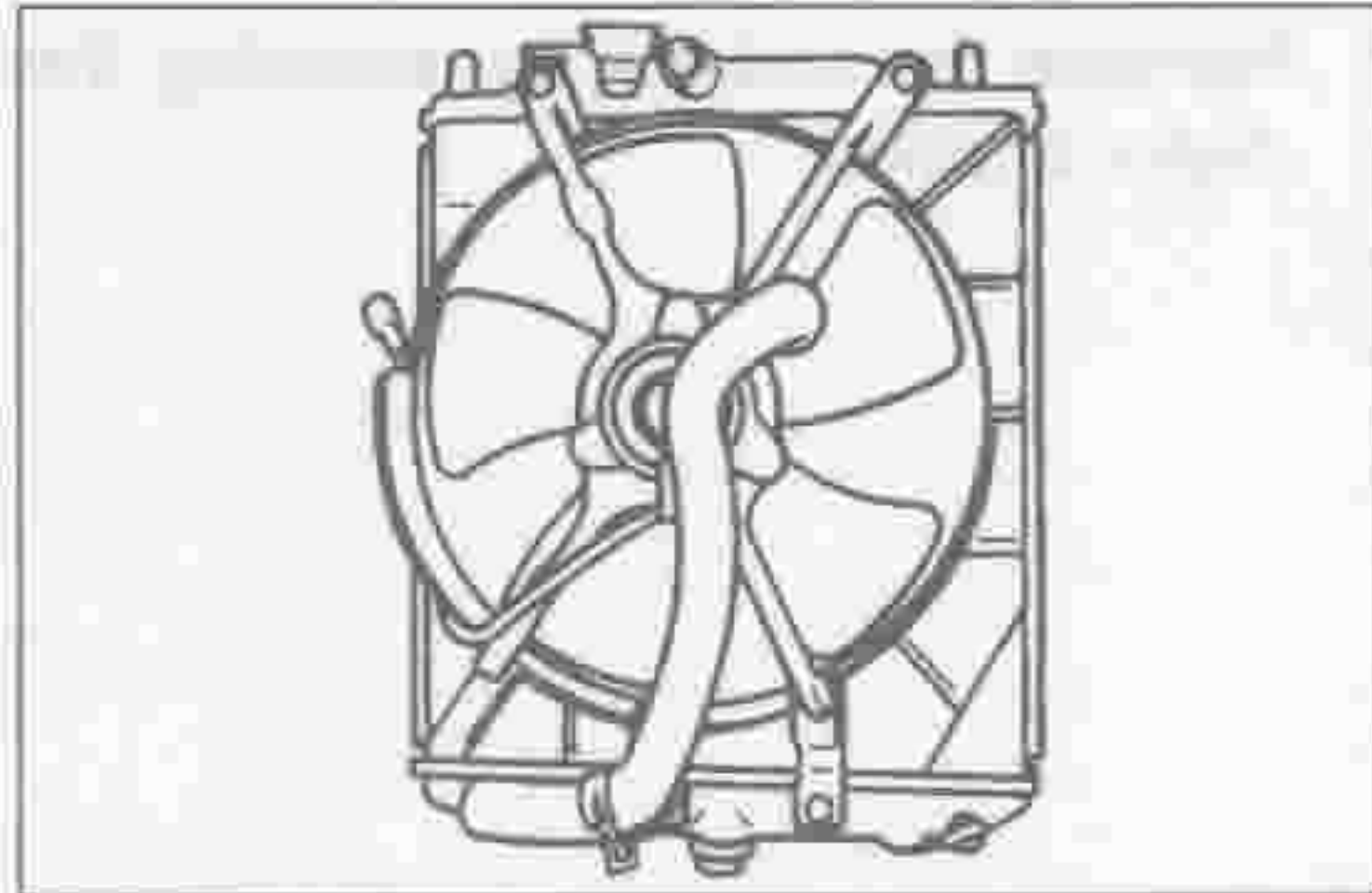
LC000059-00054

2. Ensure that the radiator lower mounting exhibits no damage. Replace the radiator lower mounting if it exhibits any damage.



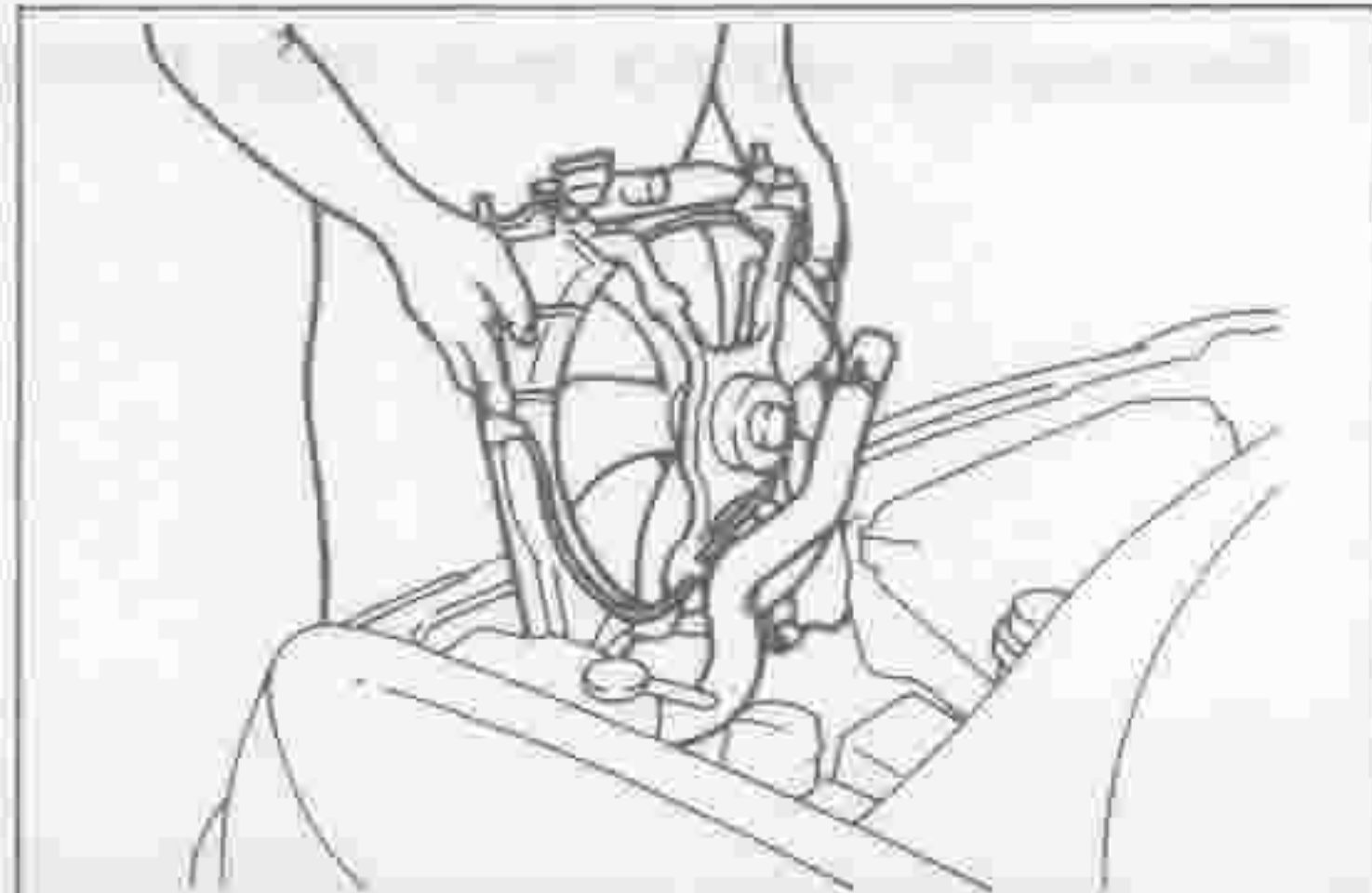
LC000060-00055

3. Install the radiator lower mounting to the radiator.
4. Connect the radiator lower hose to the radiator. Install the radiator lower hose to the hose clamp.



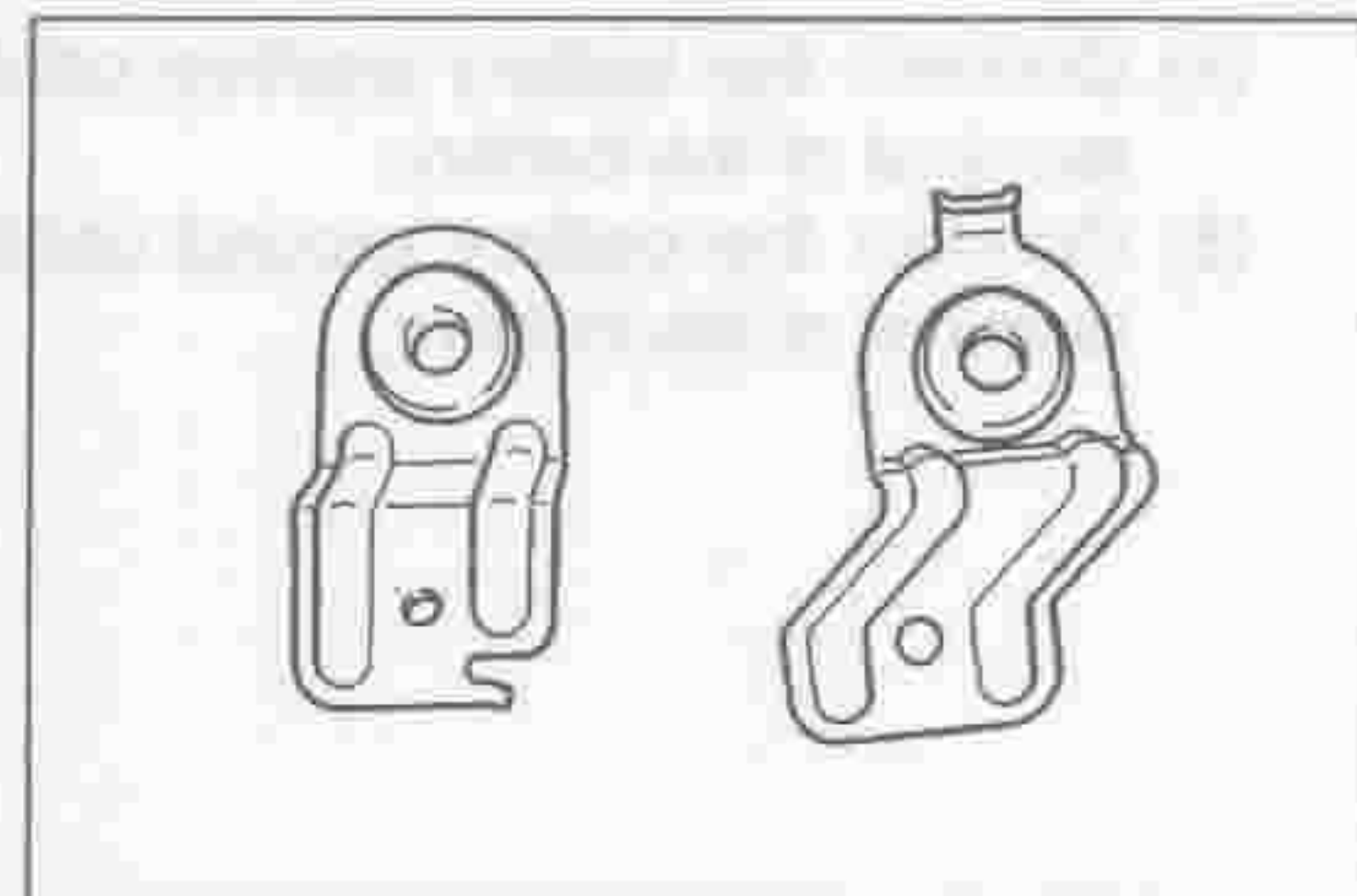
LC000061-00056

5. Install the radiator.



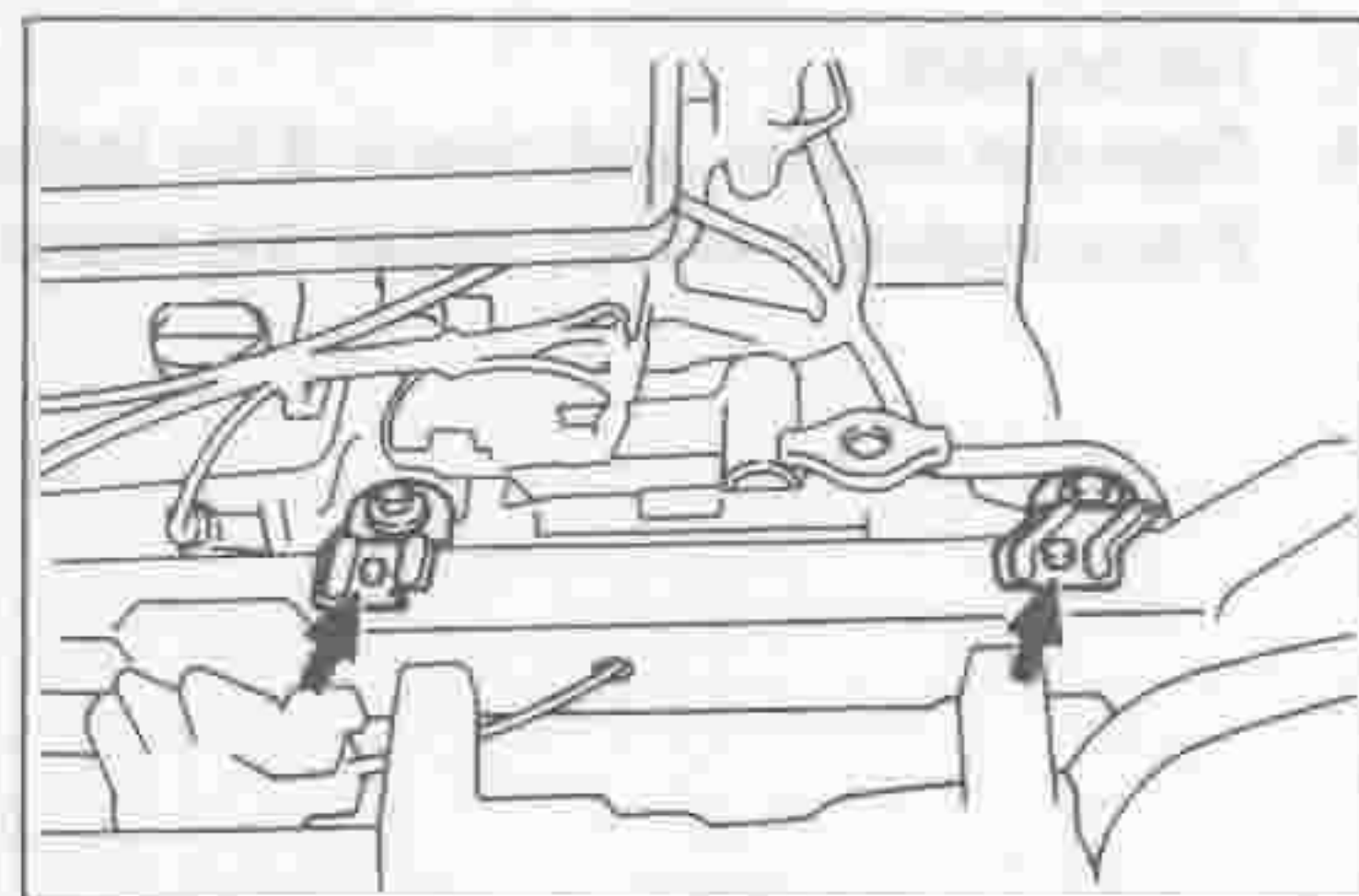
LC000062-00057

6. Check the rubber grommet of the radiator bracket for damage or cracks.
Replace the rubber grommet if it exhibits any damage or cracks.



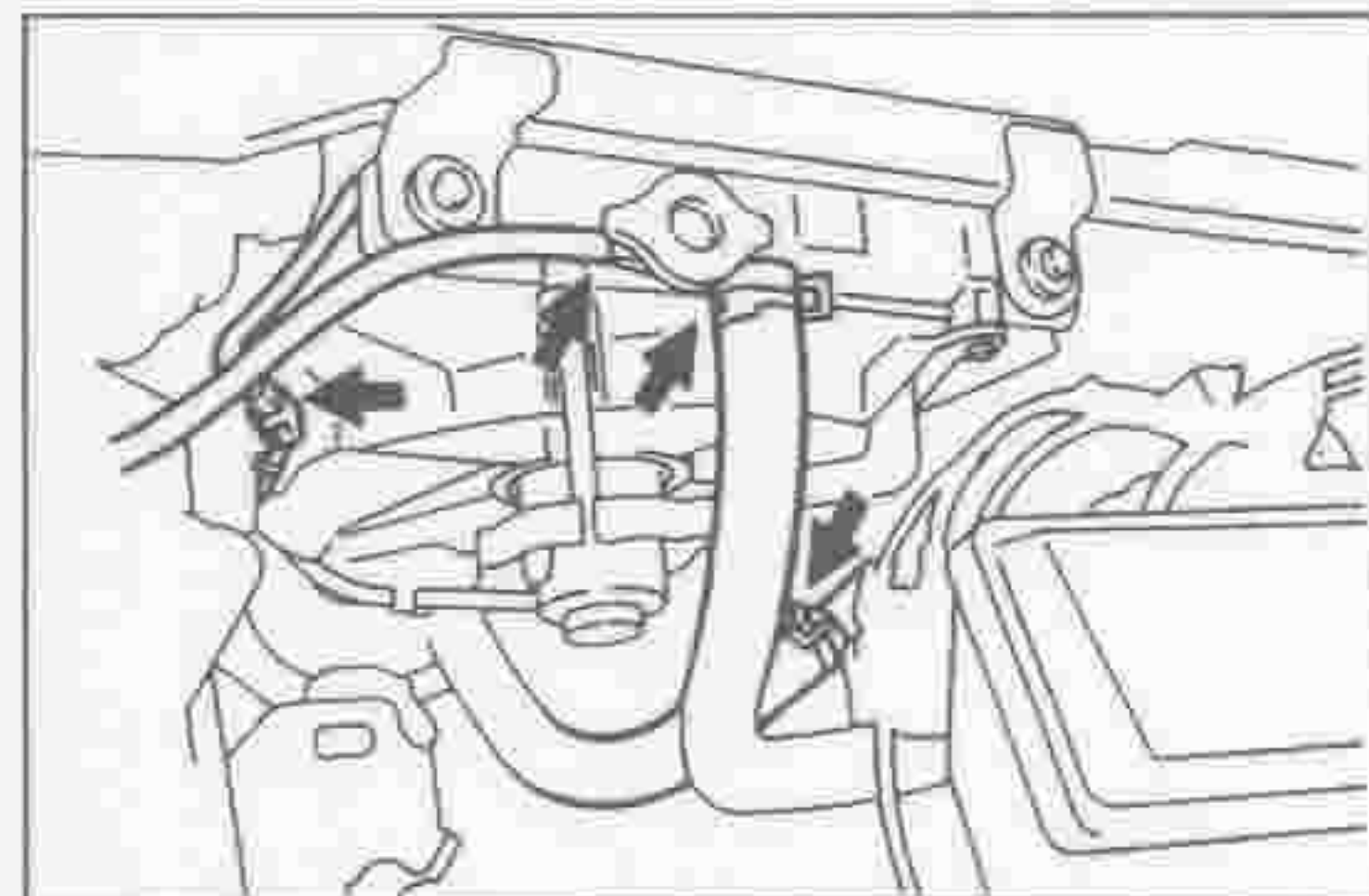
LC000063-00058

7. Secure the radiator by installing the radiator bracket.



LC000064-00059

8. Connect the connector of the radiator cooling fan motor.
9. Connect the reserve tank hose to the radiator.
10. Connect the radiator hoses and attach new hose bands.

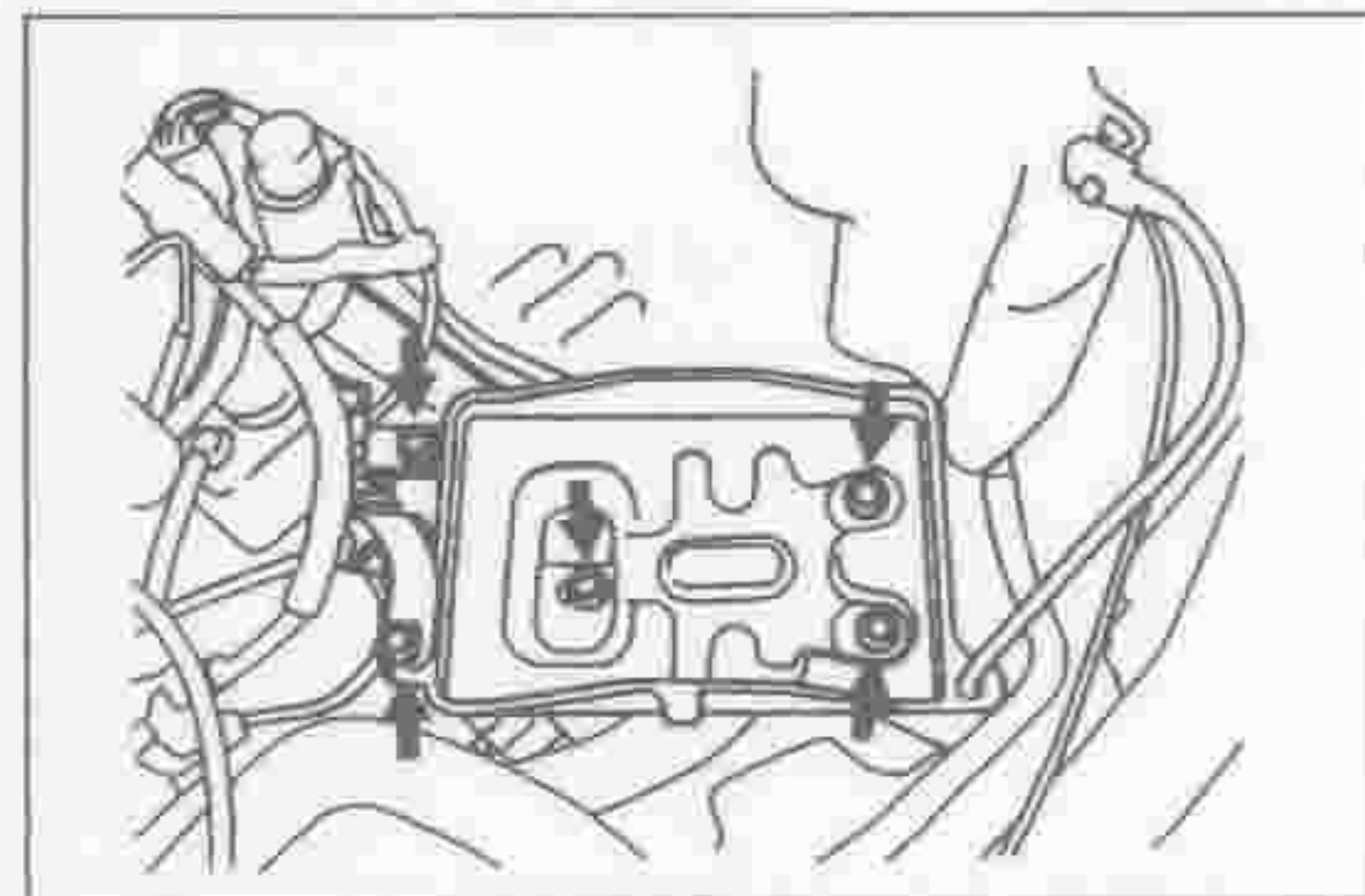


LC000065-00060

11. Installation of battery

(1) Installation of battery tray

- ① Install the battery tray.
- ② Attach the speedometer cable clamp.
- ③ Attach the wire cable clamp.
- ④ Attach the ground cable to the clamp.



LC000066-00061

(2) Install the battery

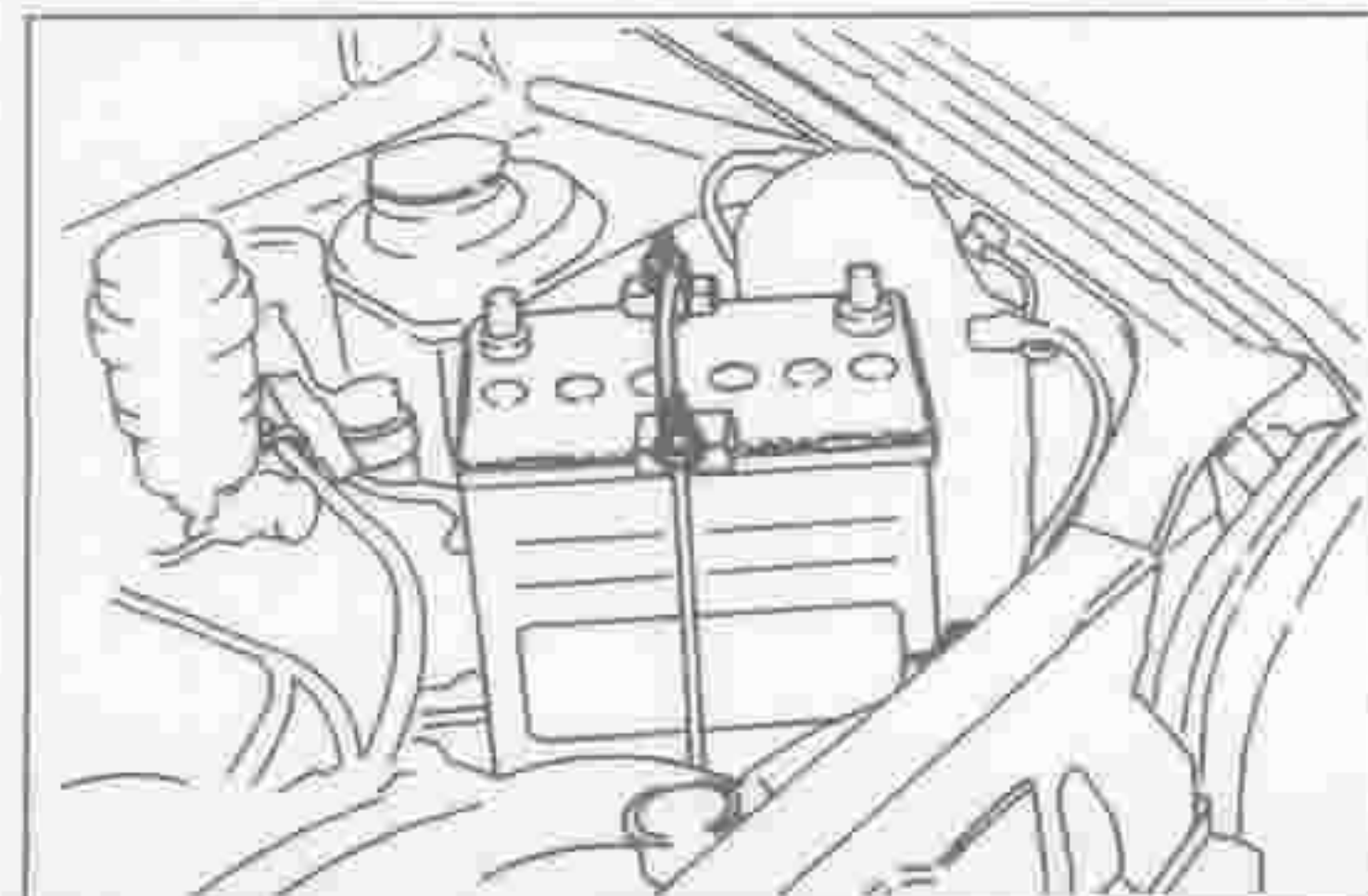
CAUTION:

- Make sure that the battery is installed in the correct polarity.

(3) Install the battery hold-down clamp.

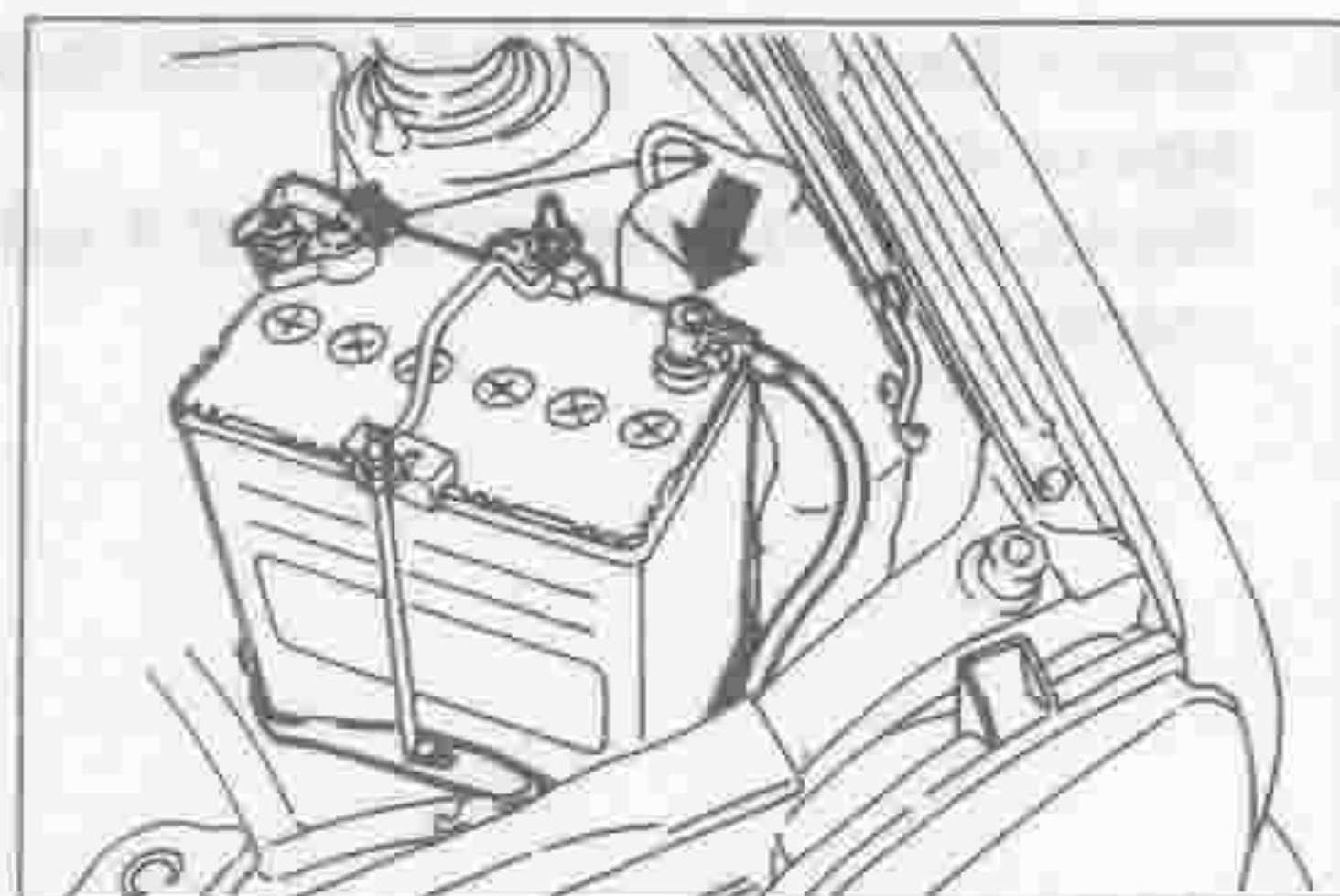
CAUTION:

- Be very careful not to tighten the hold-down clamp excessively.



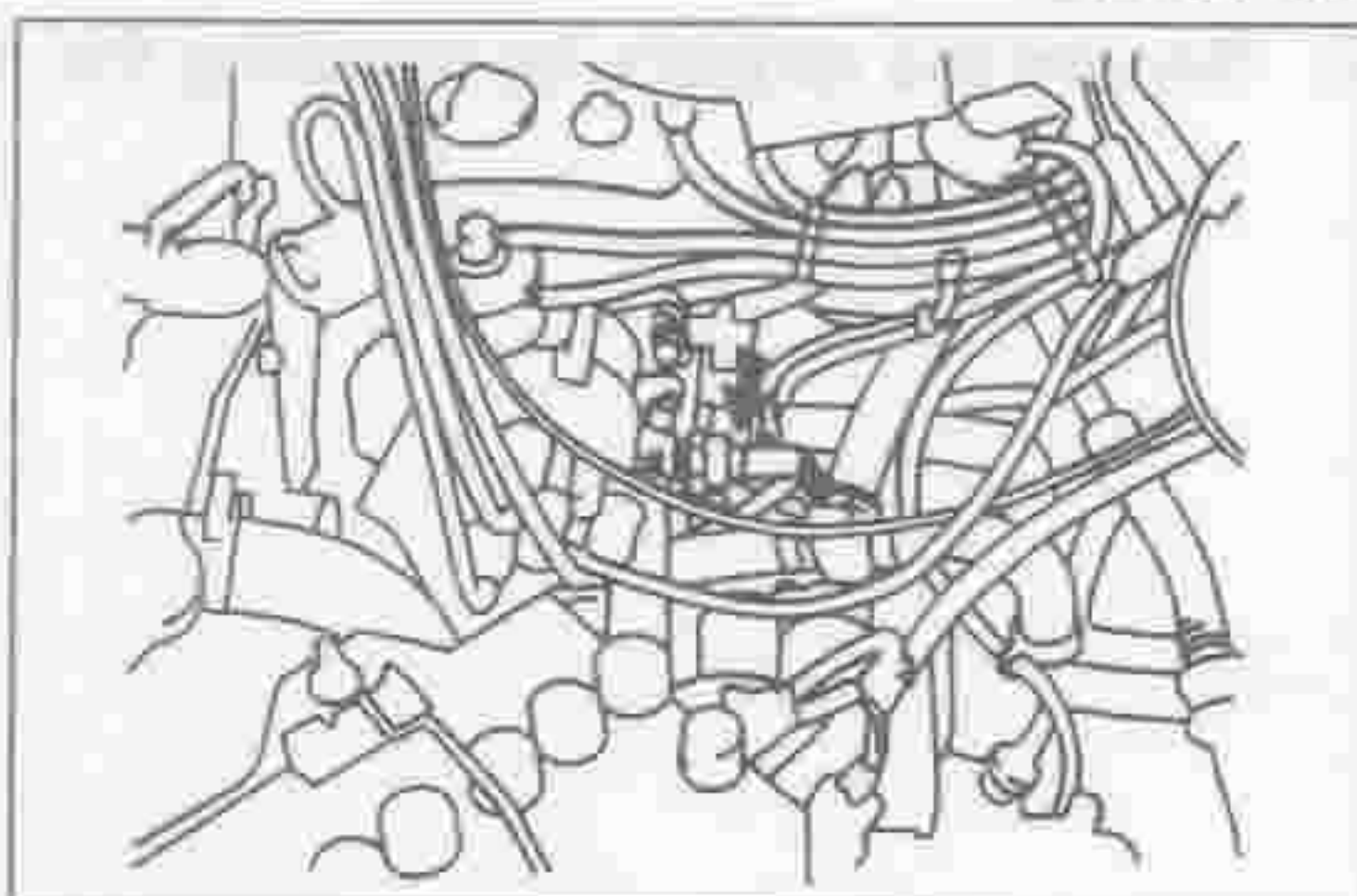
LC000067-00062

- (4) Connect the battery positive cable to the positive (+) terminal of the battery.
- (5) Connect the battery ground cable to the negative (-) terminal of the battery.



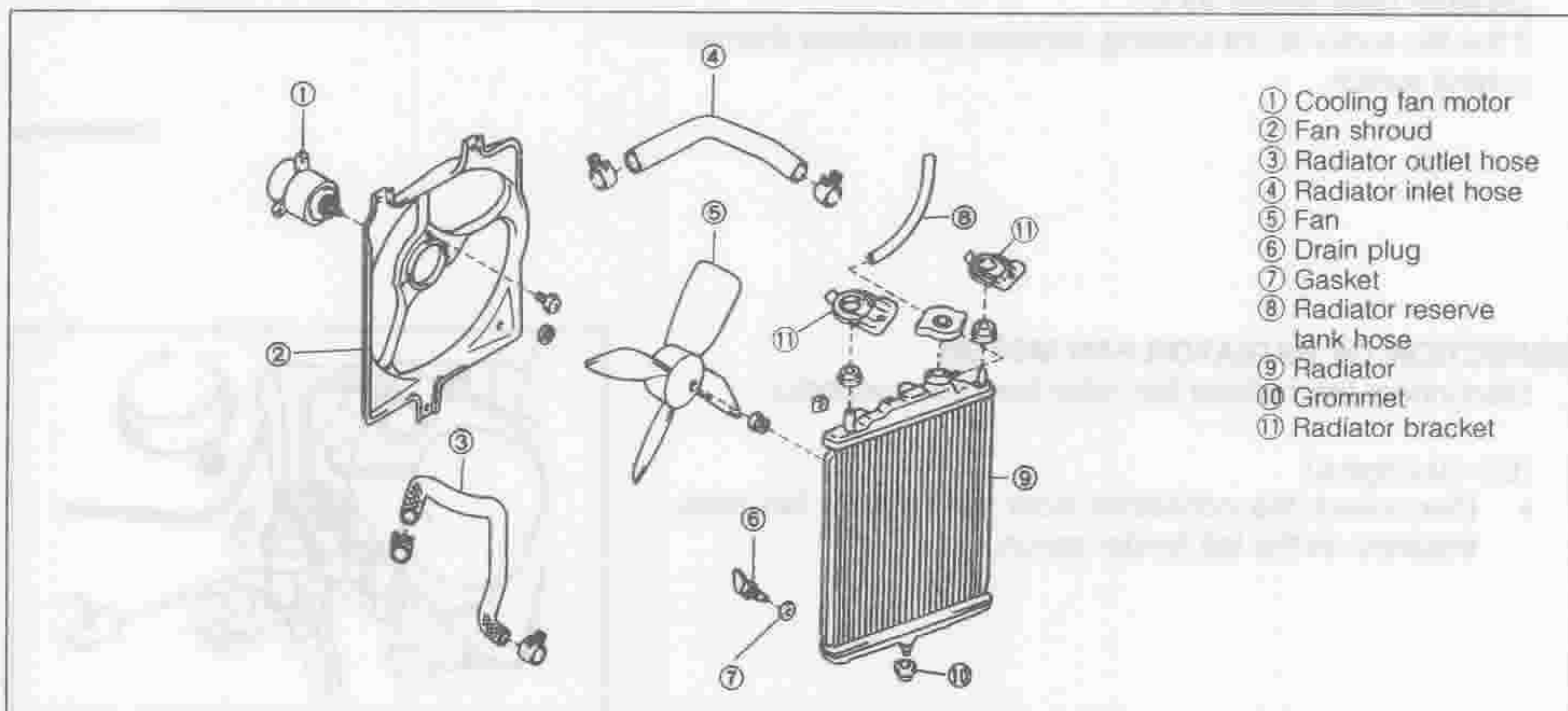
LCO00068-00063

12. Fill coolant.
13. Start the engine and check it for leakage.
If any leakage exists, repair the leaky point.



LCO00069-00064

ELECTRIC COOLING FAN COMPONENTS

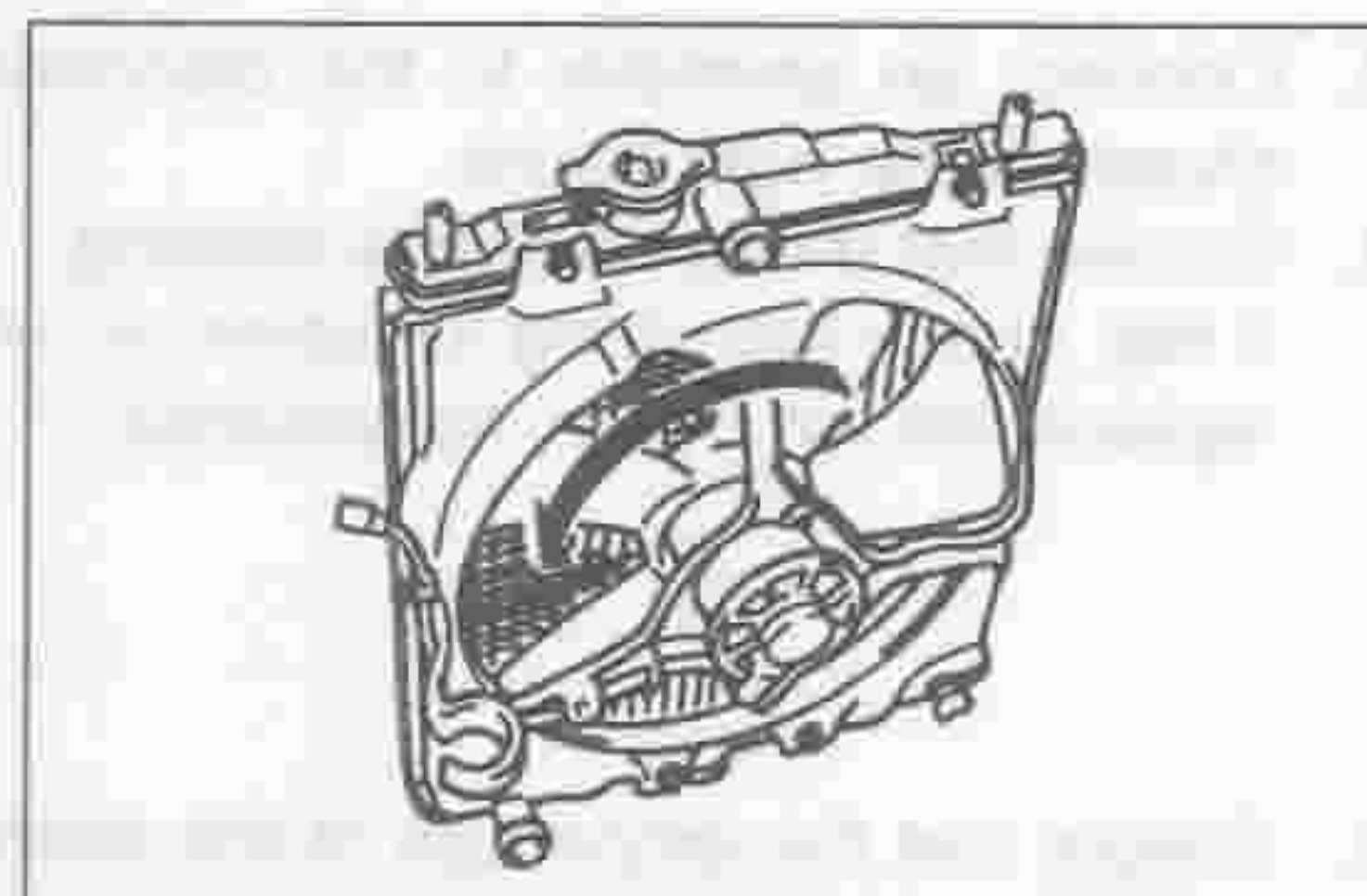


LCO00070-00065

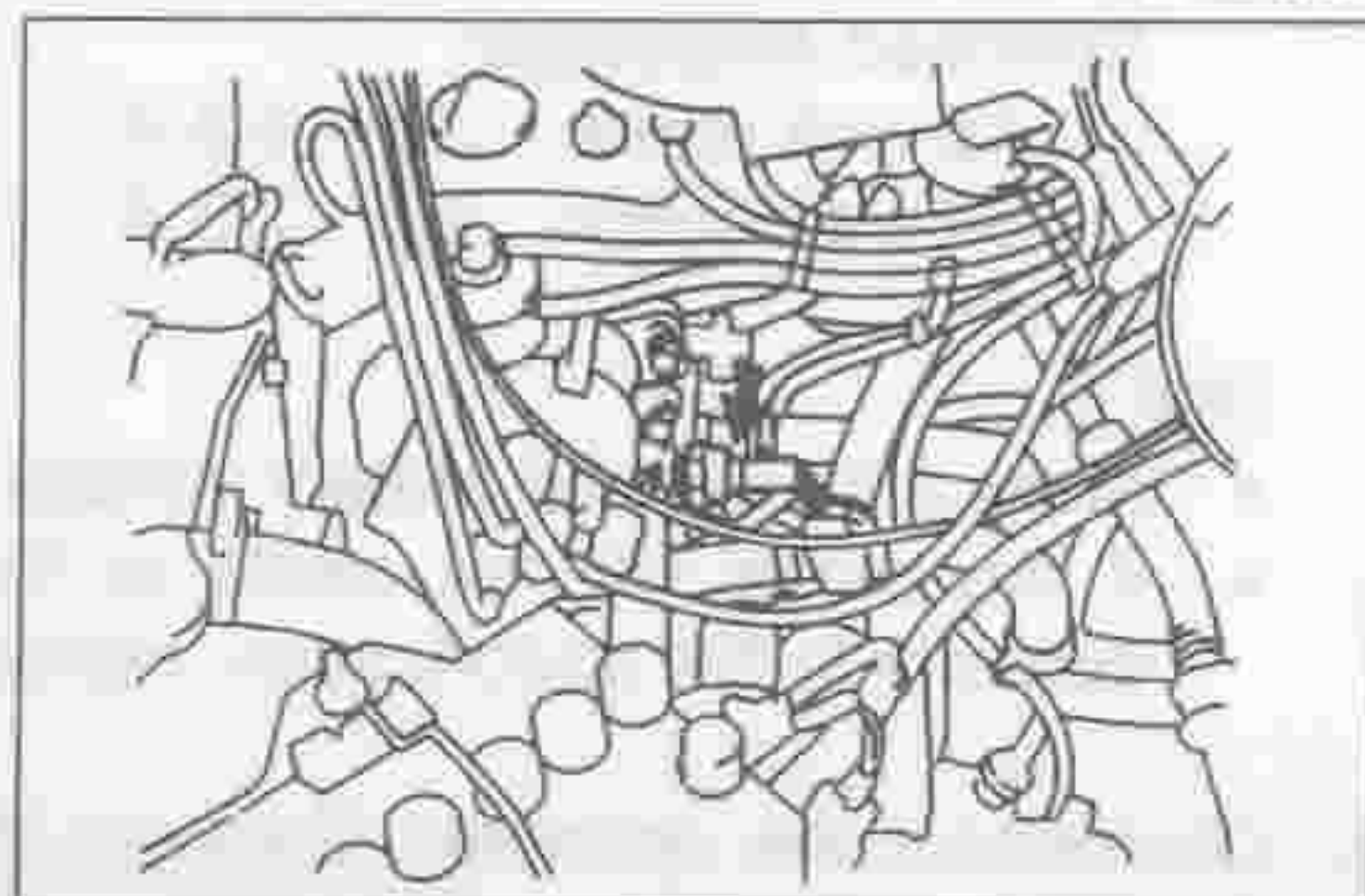
IN-VEHICLE INSPECTION

1. Turn ON the Ignition switch.
Ensure that the fan motor is not rotating when the coolant temperature is below 85°C.
If the fan motor is rotating, check the radiator thermo-control switch, fan motor relay and wiring for short circuit.
2. Ensure that the fan is rotating after the radiator thermo-control switch connector is disconnected and when the disconnected connector is connected to the engine ground.
If the fan motor is not rotating, check the fan motor, fan motor relay and wiring for open circuit.
3. Turn OFF the ignition switch.
4. Connect the disconnected connector to the radiator thermo control switch.

LCO00071-00000



LCO00072-00066



LCO00073-00067

5. Start the engine.
6. Ensure that the fan motor is rotating when the coolant temperature rises above 93°C.
If the fan motor is not rotating, replace the radiator thermo-control switch.

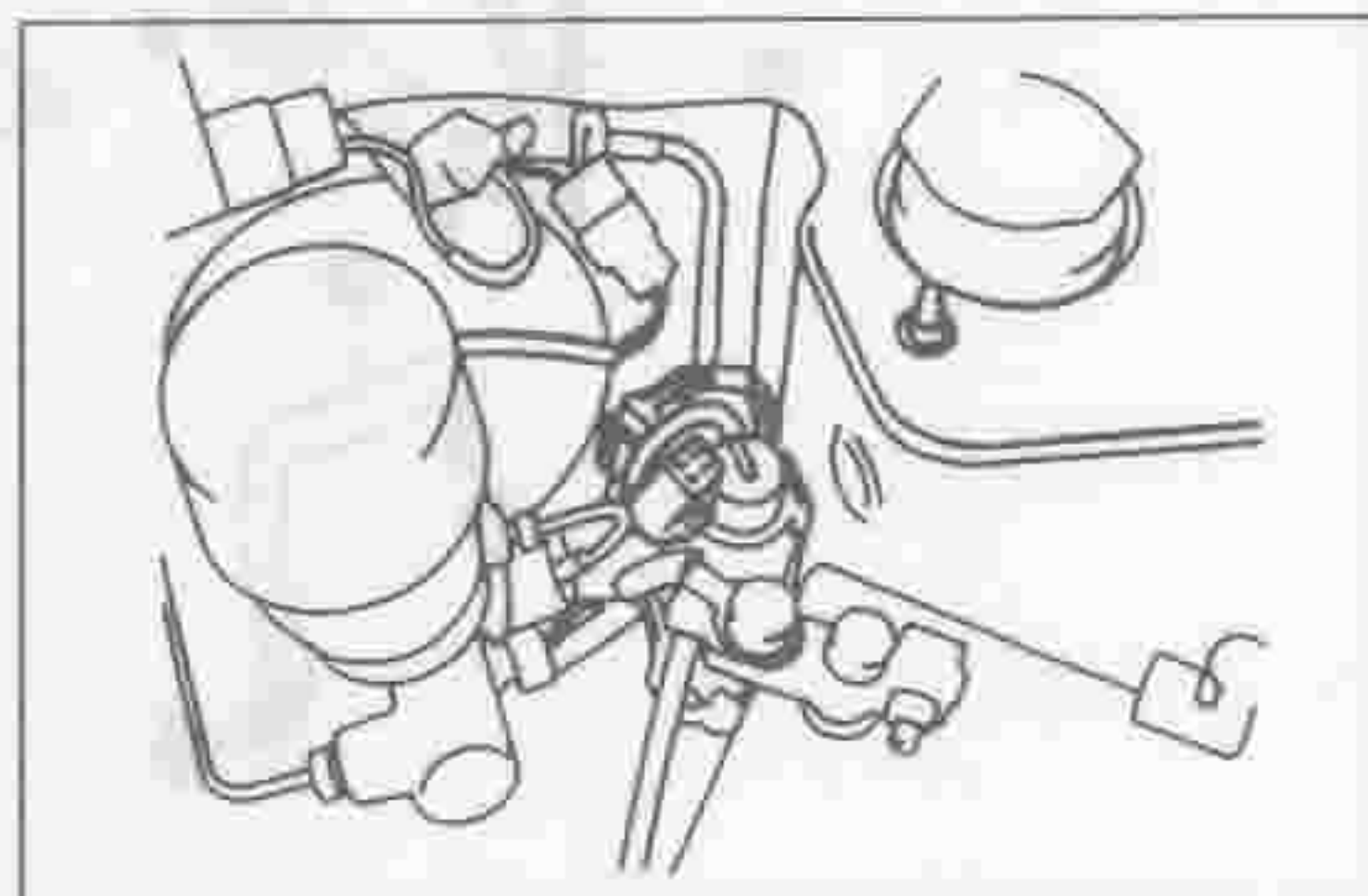
LC000074-00000

INSPECTION OF RADIATOR FAN MOTOR

1. Disconnect the radiator fan relay from the connector.

(ED-10 Engine)

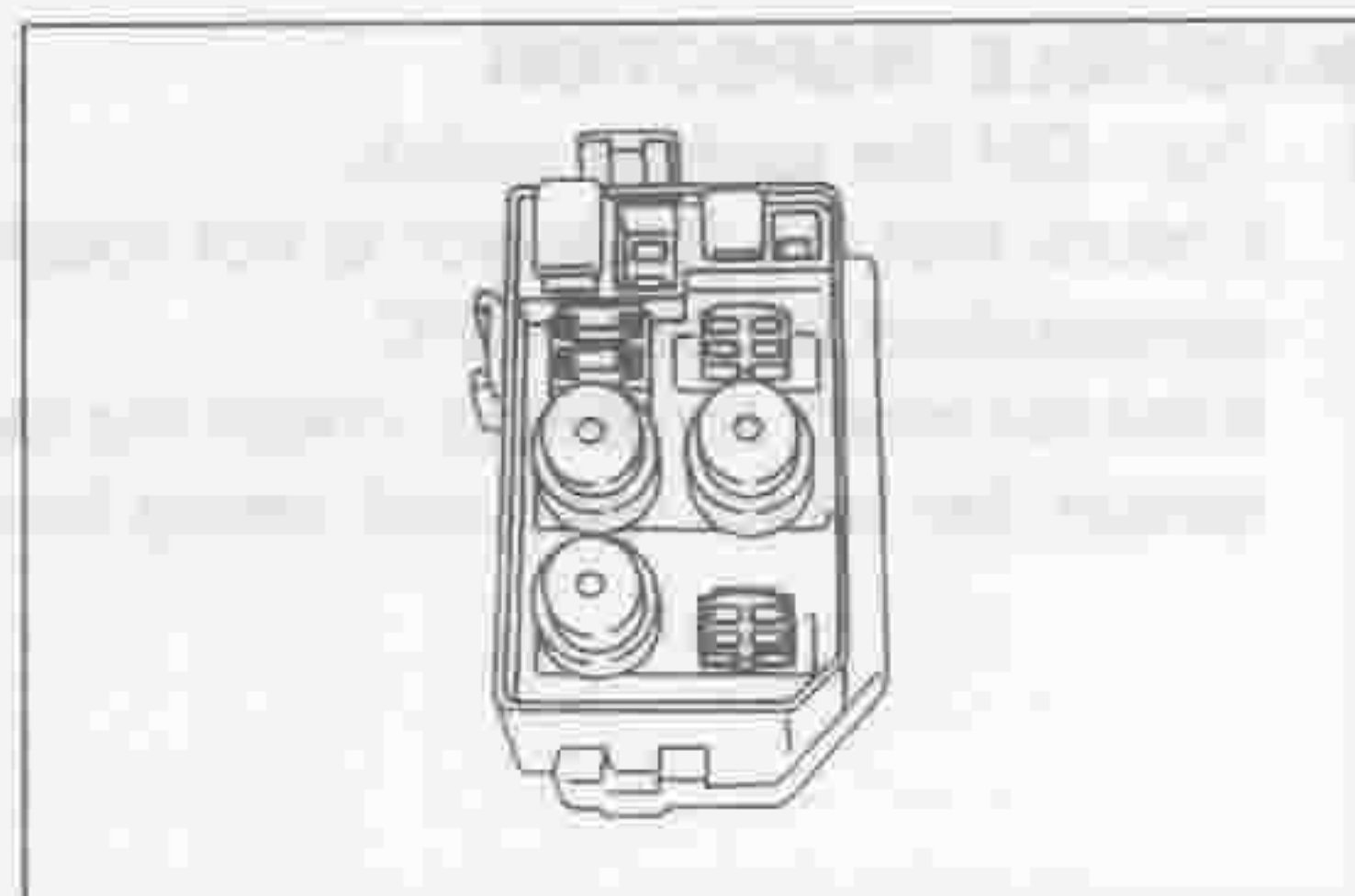
- Disconnect the connector from the radiator fan relay installed on the left fender apron.



LC000075-00068

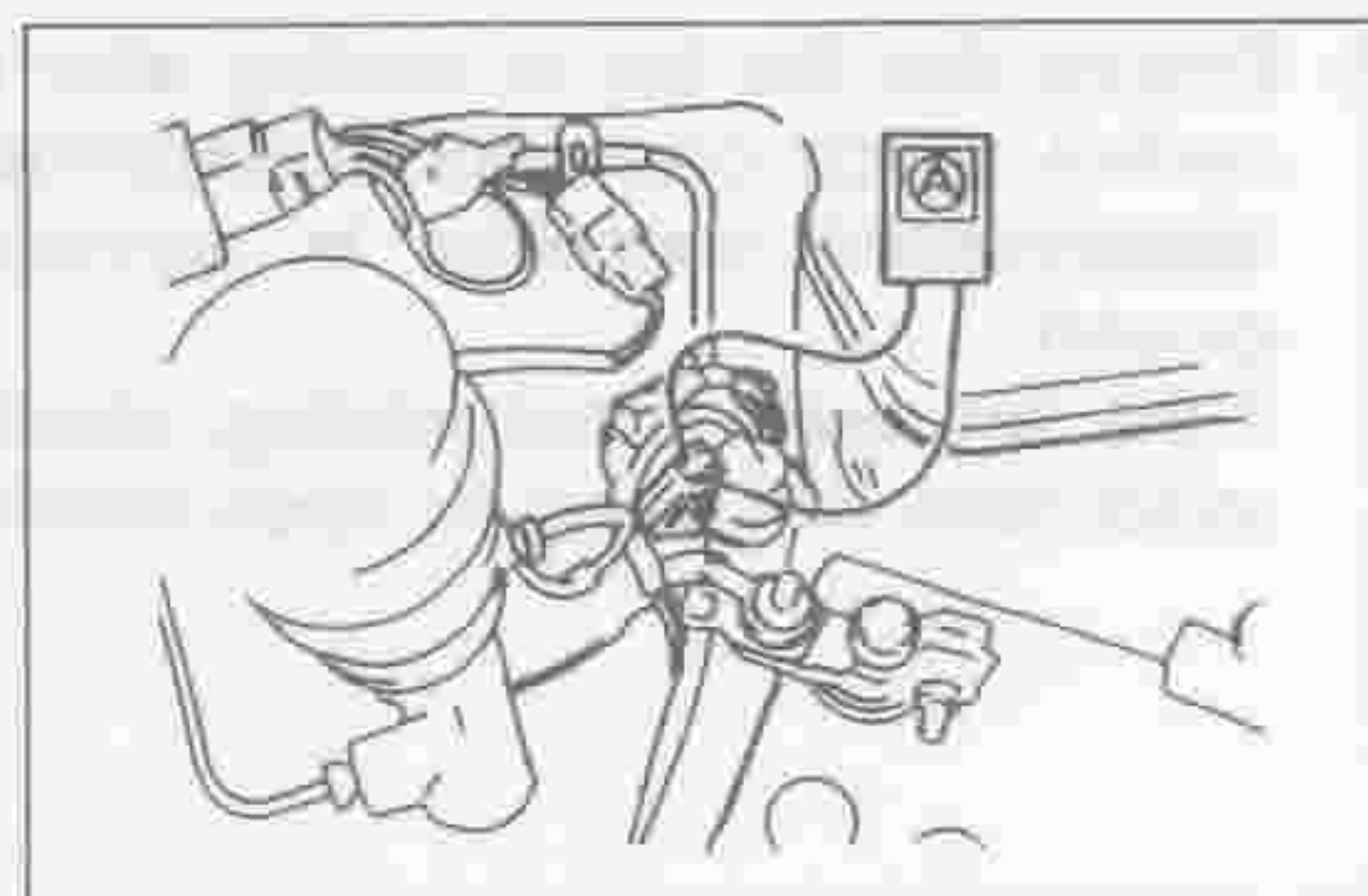
(EF-EL & ED-20 Engine)

- Remove the lid of the relay box and pull out the radiator fan relay from the relay box.



LC000000-00069

2. Connect an ammeter to the disconnected connector, as shown in the right figure.
3. Ensure that the fan motor is rotating.
If not, check the wiring for open circuit and so forth. Then, replace the fan motor, as required.



LC000076-00070

4. Ensure that the amperage of the ammeter conforms to the specified value when the fan motor is rotating.

Specified Amperage:

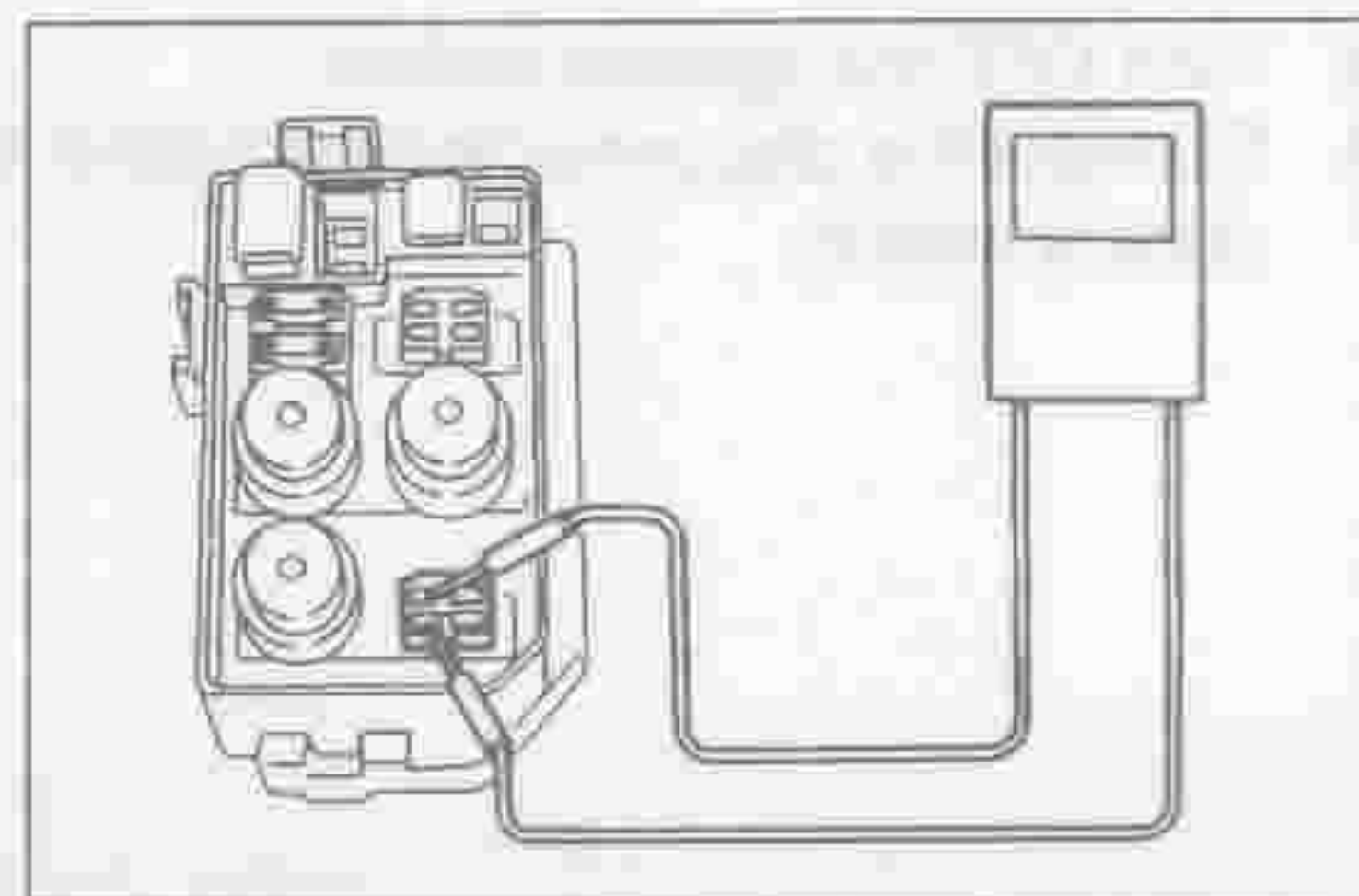
45-watt motor: 3.1 - 4.3 A

80-watt motor: 5.5 - 7.6 A

NOTE:

- Make sure that the battery voltage is 13V or more.
- If the motor will not rotate or the amperage fails to conform to the specification, replace the fan motor.

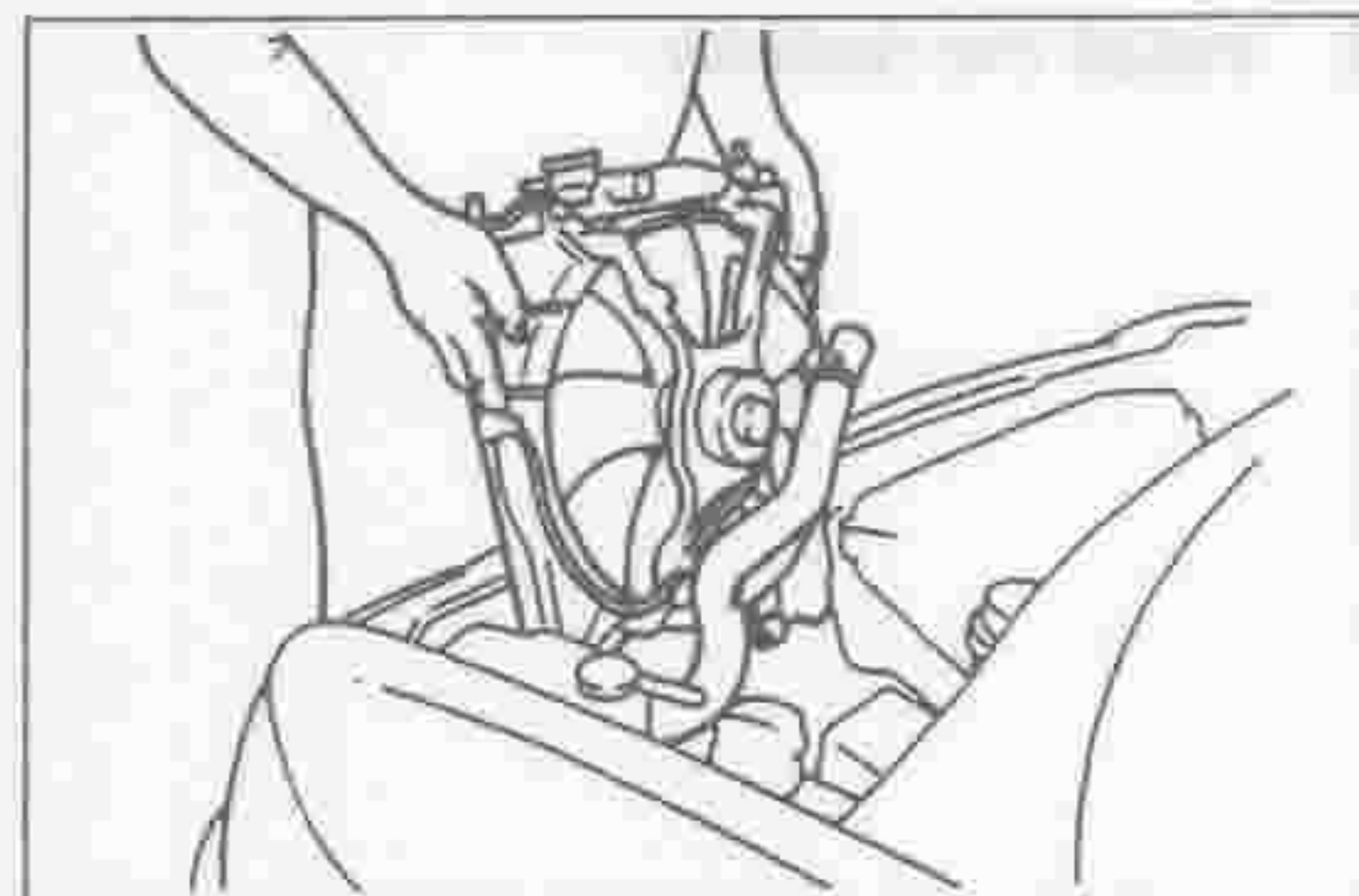
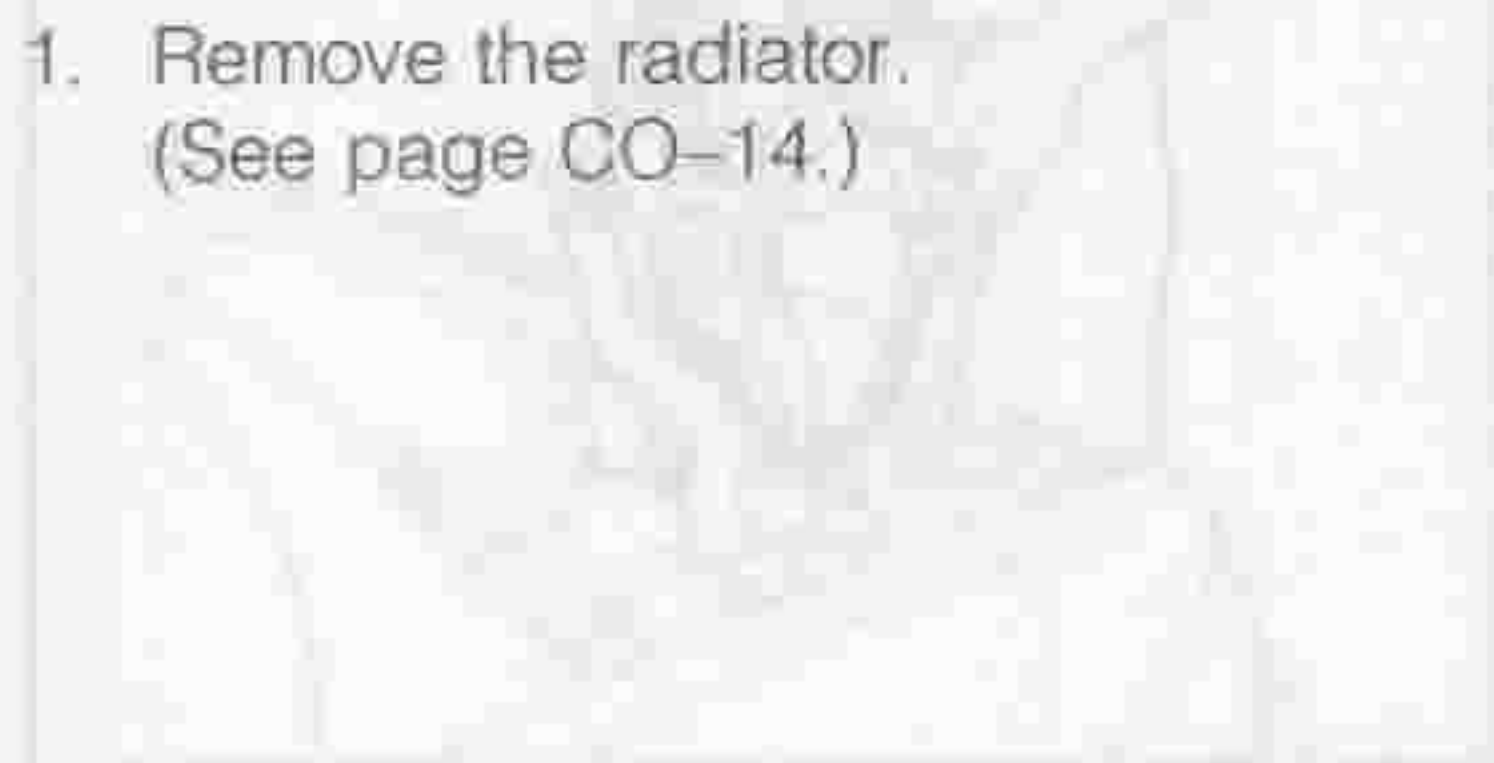
5. Disconnect the ammeter. Connect the disconnected fan motor relay connector to the relay.



LC000077-00071

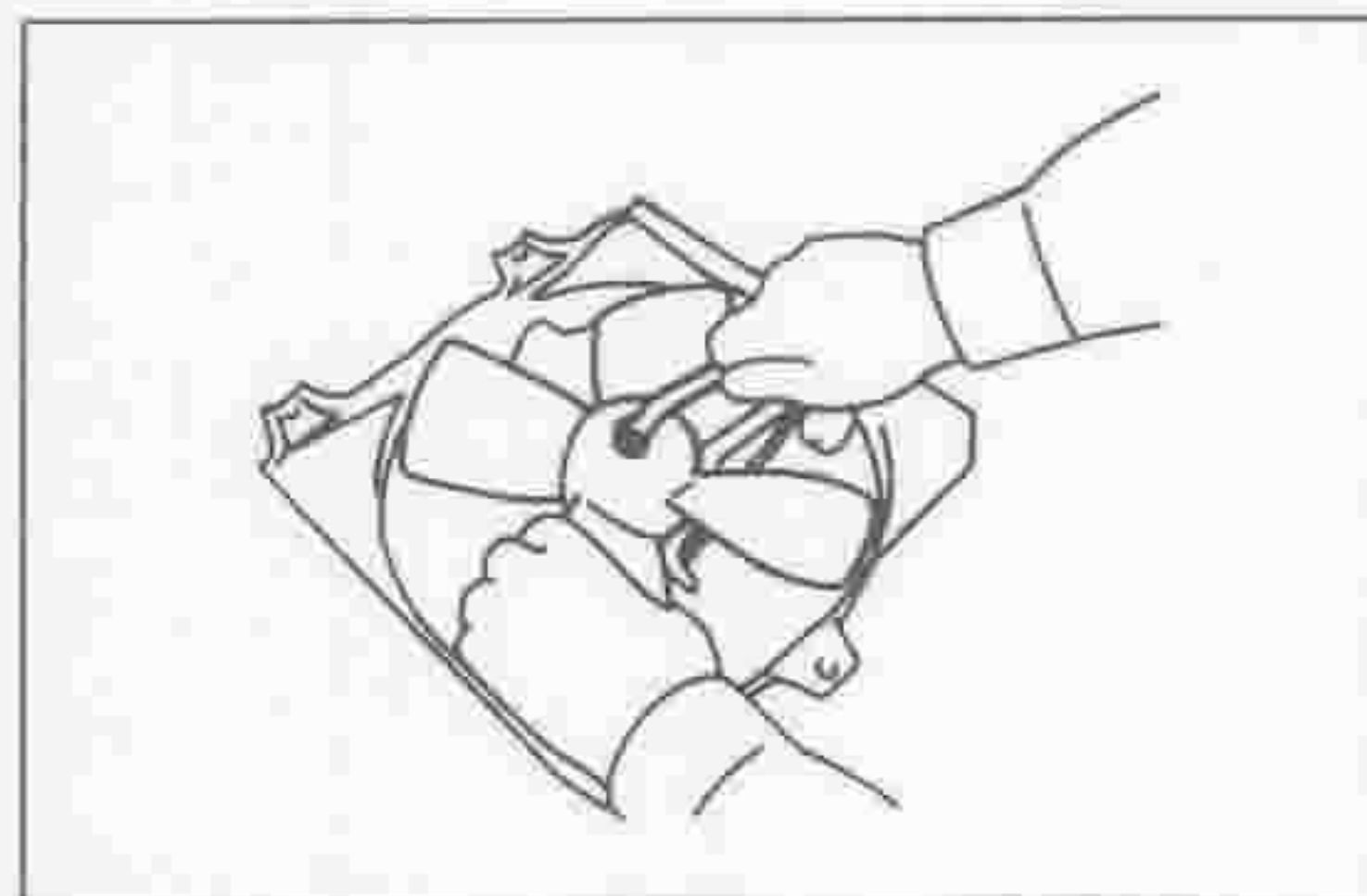
REPLACEMENT OF RADIATOR FAN MOTOR**Removal of radiator fan motor**

1. Remove the radiator.
(See page CO-14.)



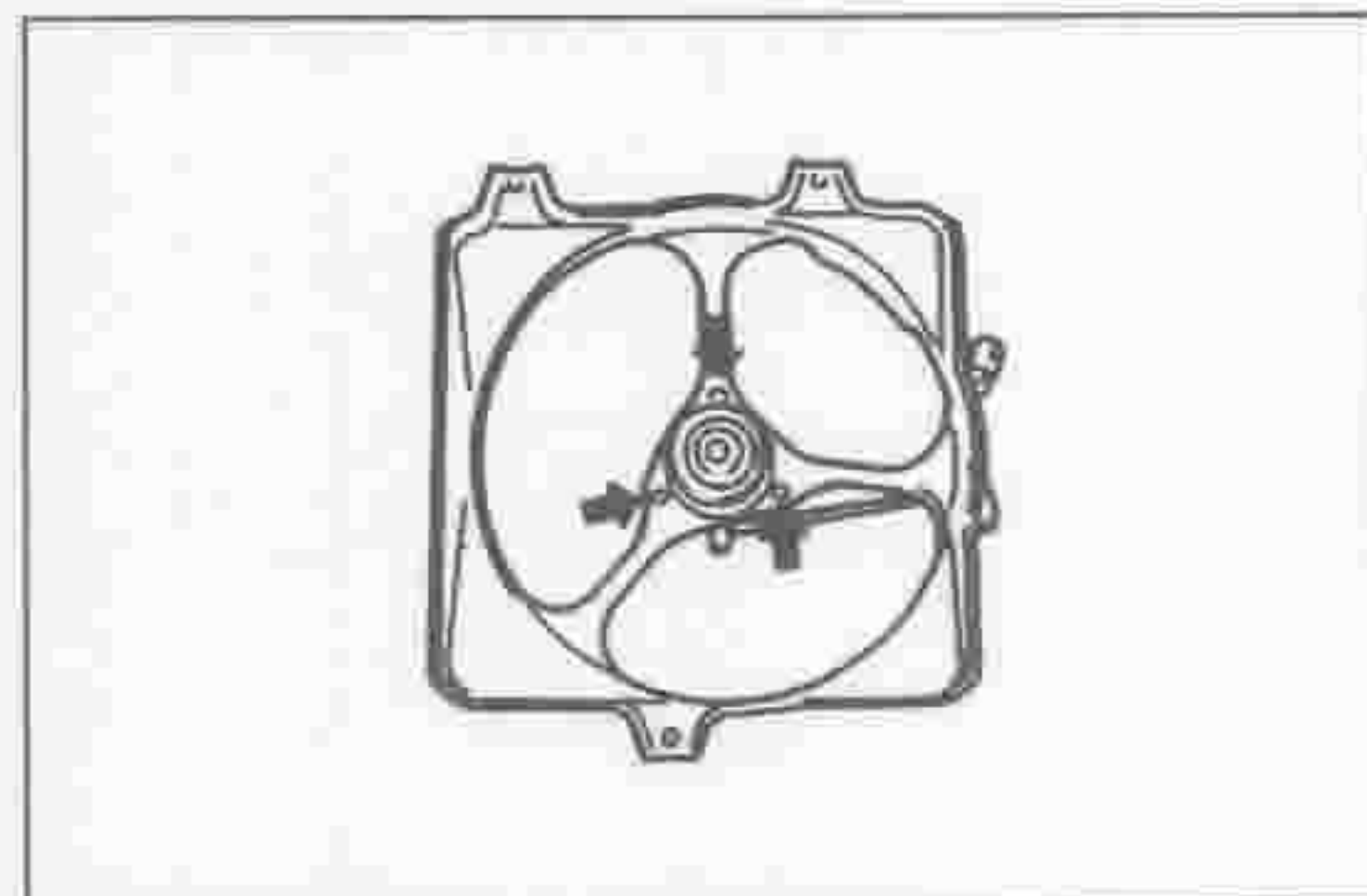
LCO00078-00072

2. Remove the fan from the fan motor.



LCO00079-00073

3. Remove the fan motor from the fan shroud.



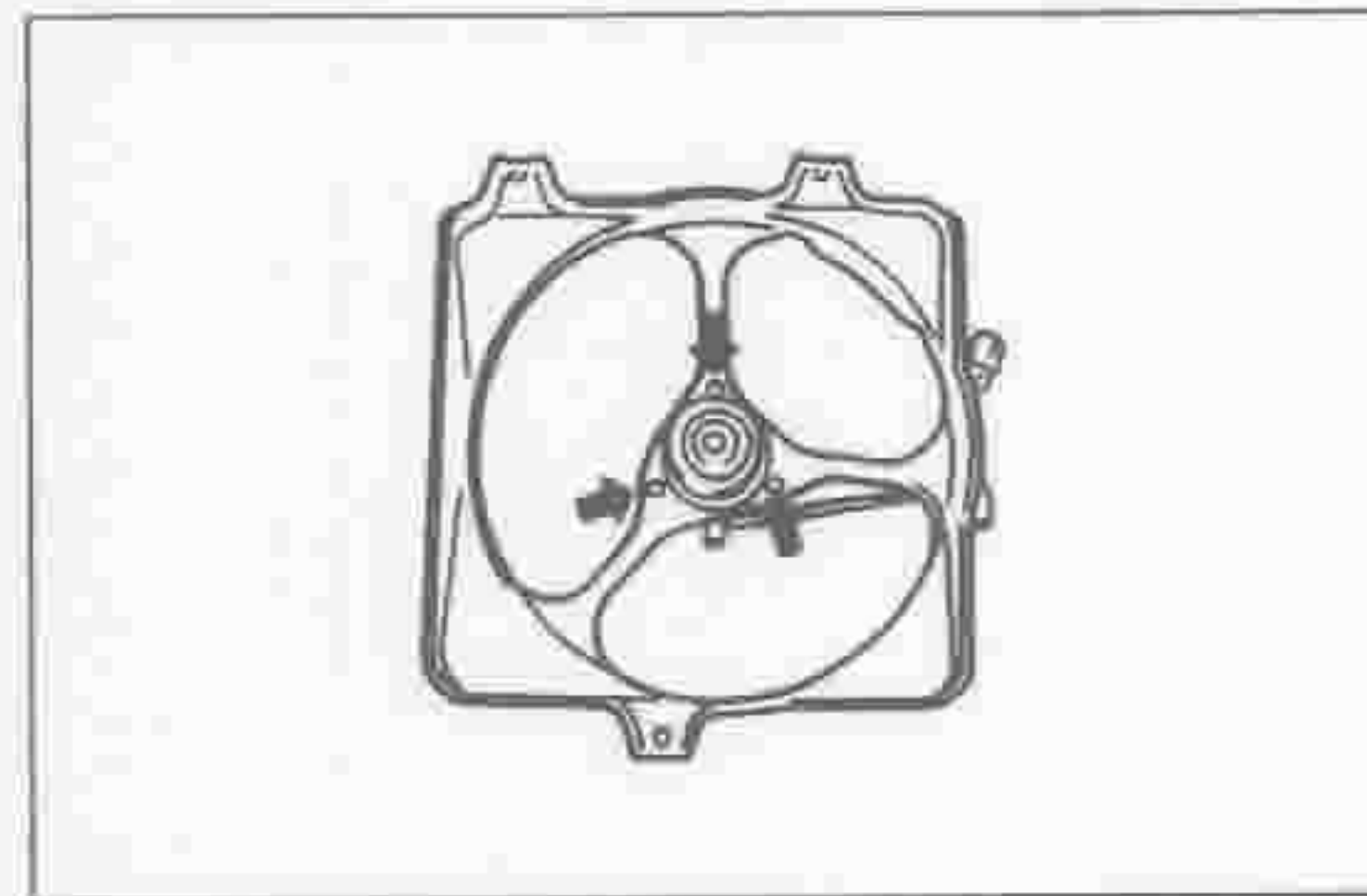
LCO00080-00074

Installation of radiator fan motor

1. Install the radiator fan motor to the fan shroud.

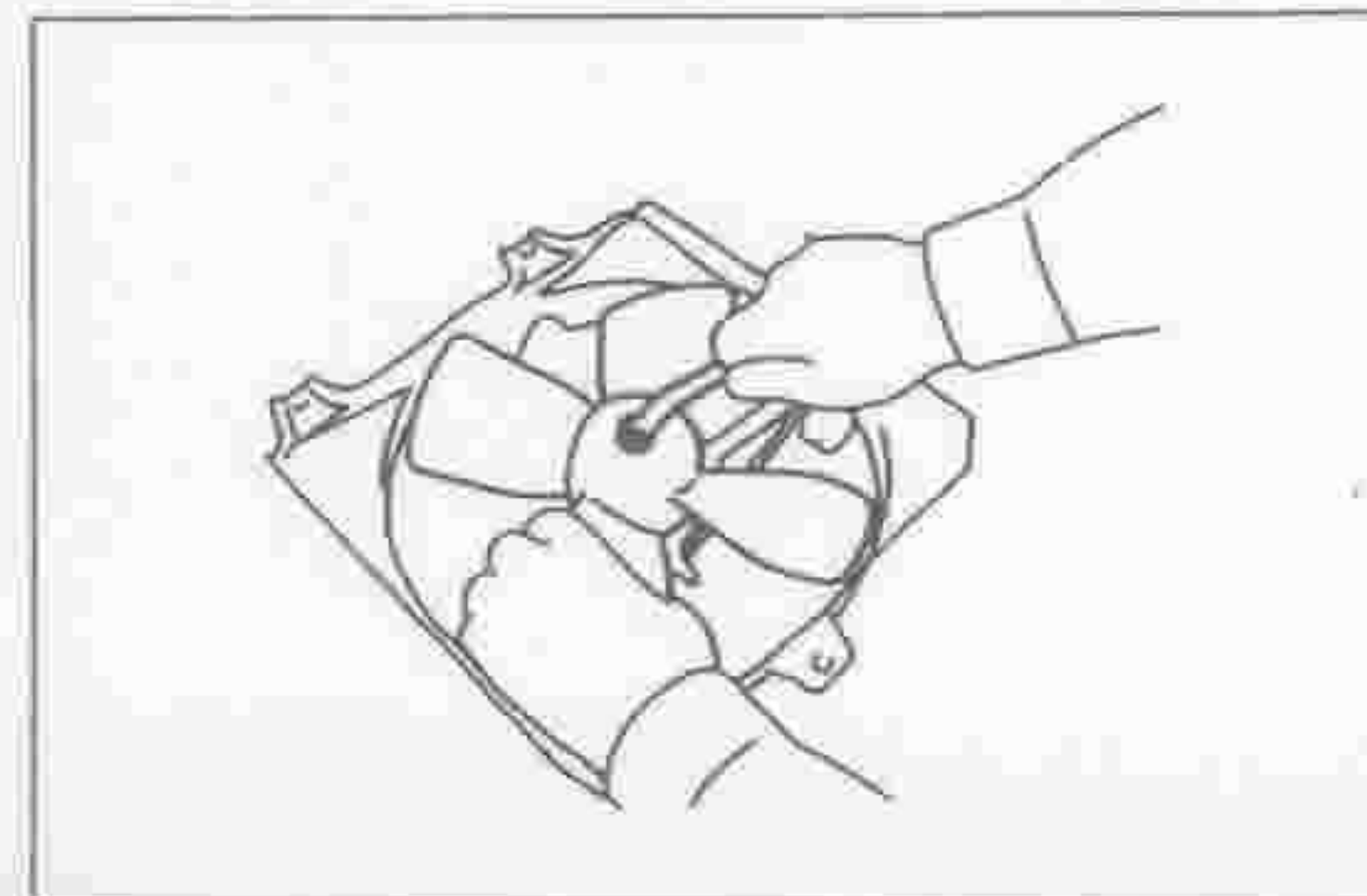
NOTE:

- Install the radiator fan motor in such a way that the drain hose comes at the lower side of the vehicle.



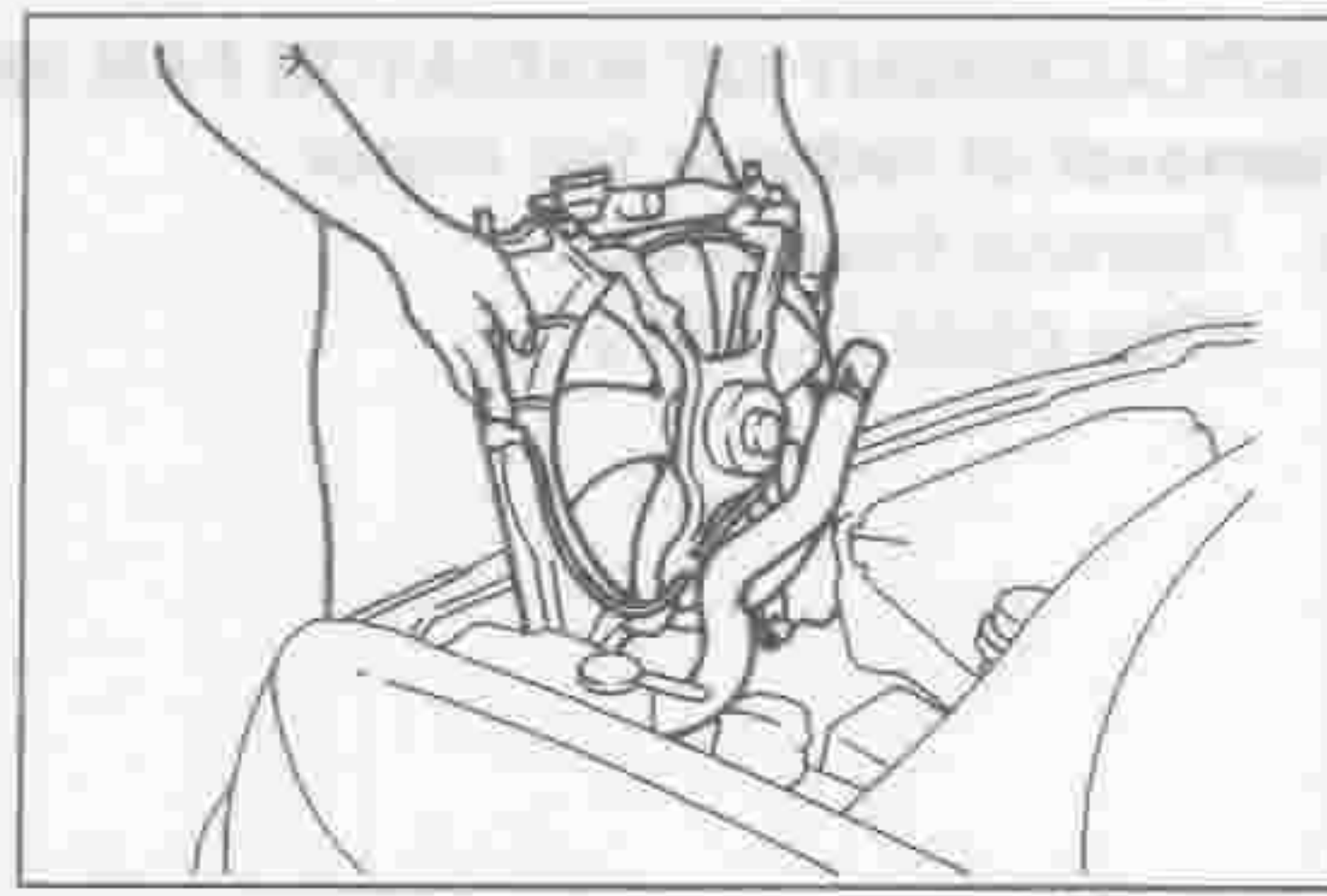
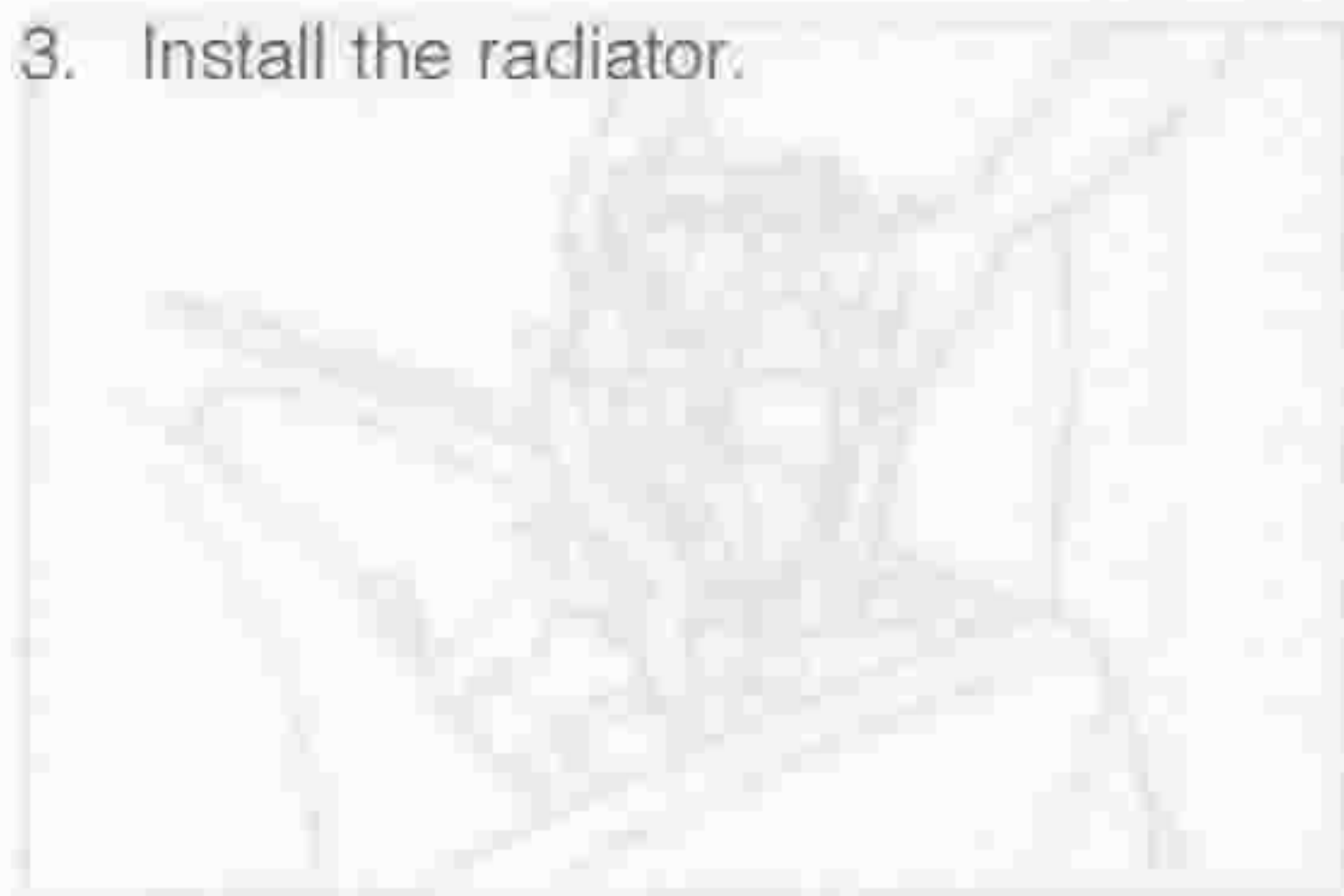
LCO00081-00075

2. Install the fan to the fan motor.



LCO00082-00076

3. Install the radiator.



LC000083-00077

LC000083-00077

LC000083-00077

LC000083-00077

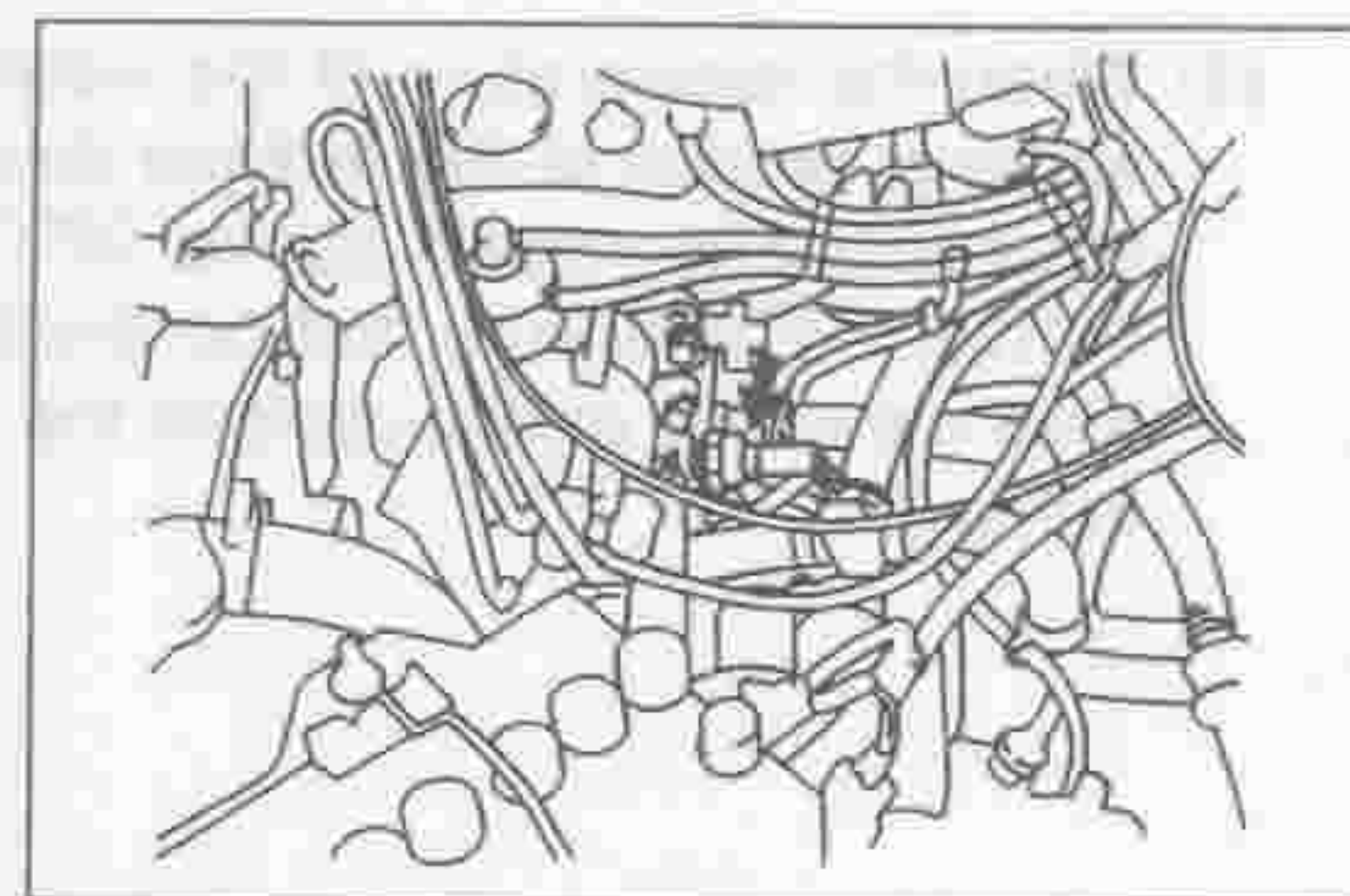
LC000083-00077

LC000083-00077

RADIATOR THERMO CONTROL SWITCH

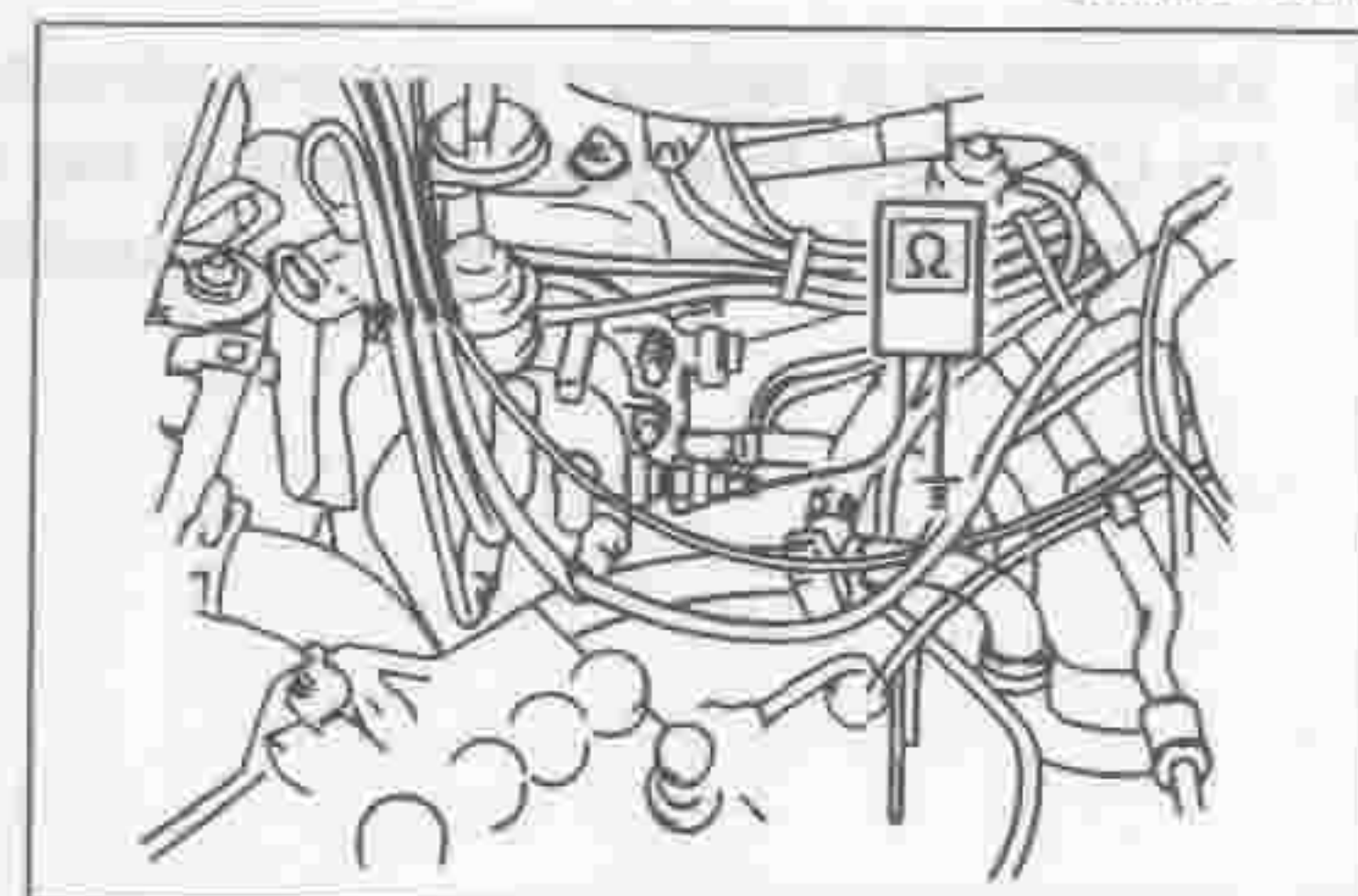
INSPECTION OF RADIATOR THERMO CONTROL SWITCH

1. Disconnect the thermo-control switch connector.



LCO00084-00078

2. Connect an ohmmeter, as shown in the right figure.



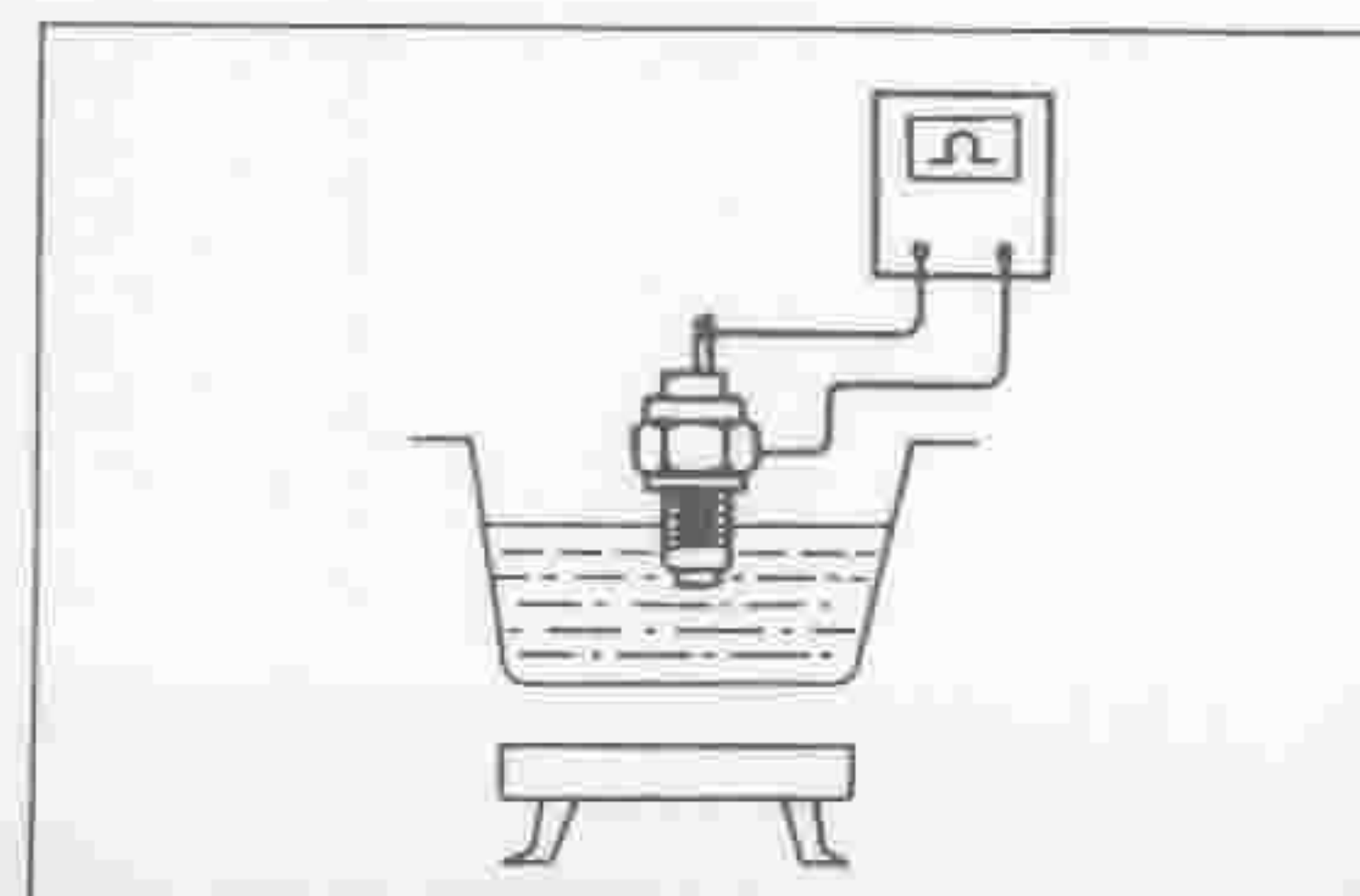
LCO00085-00079

3. Ensure that no continuity exists when the coolant is below 83°C.
If continuity exists, replace the radiator thermo-control switch.
4. Start the engine. Ensure that continuity exists when the coolant temperature rises above 92°C (EF-EL, ED-10) or 98°C (ED-20).
If no continuity exists, replace the radiator thermo-control switch.

UNIT INSPECTION OF RADIATOR THERMO-CONTROL SWITCH

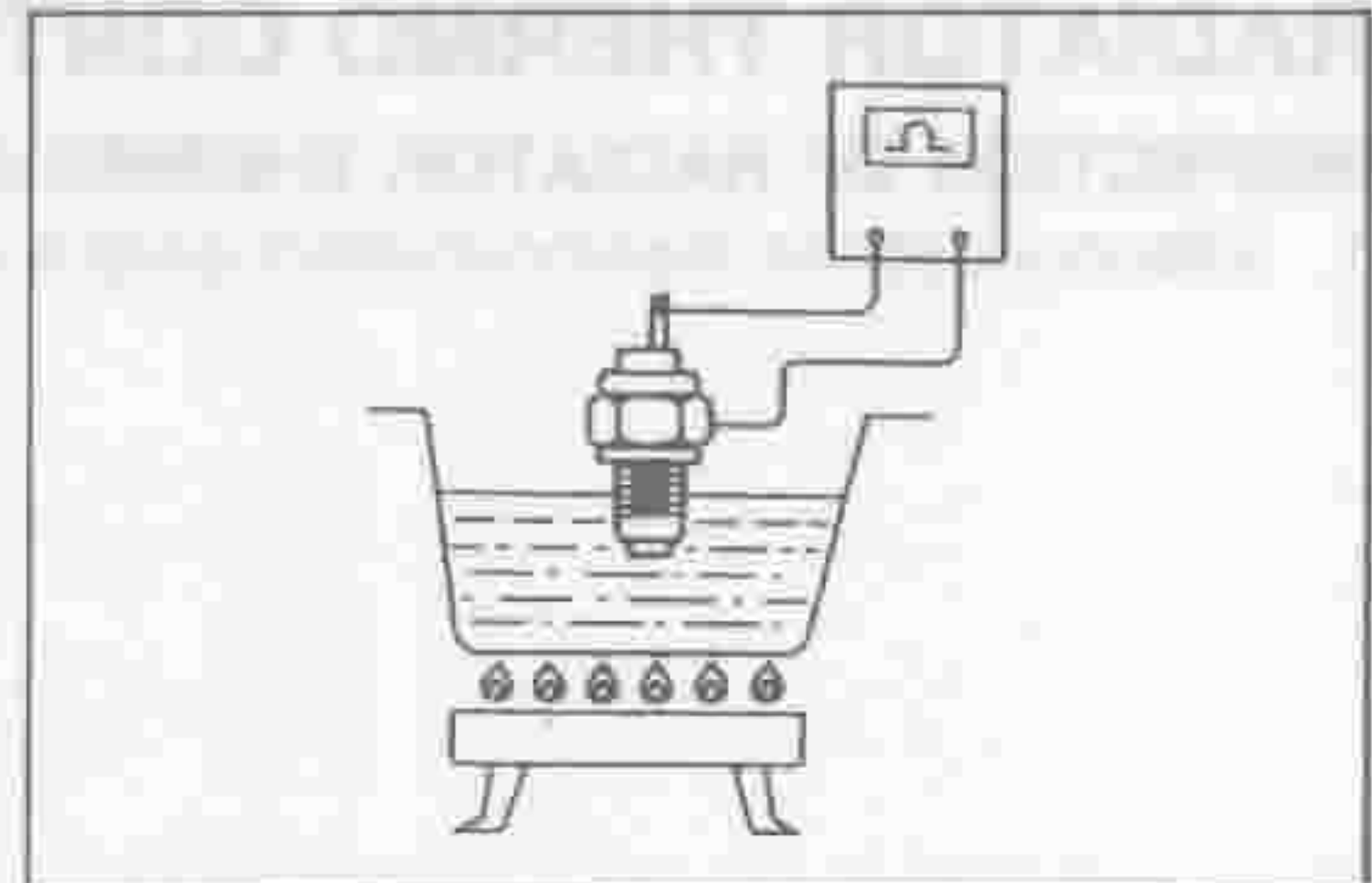
1. Removal of radiator thermo-control switch
 - (1) Disconnect the ground cable from the negative (-) terminal of the battery.
 - (2) Drain the coolant.
 - (3) Disconnect the connector from radiator thermo control switch.
 - (4) Remove the radiator thermo-control switch.
2. Unit inspection of radiator thermo-control switch
 - (1) Connect an ohmmeter to the radiator thermo-control switch.
 - (2) Submerge the heat sensing section of the radiator thermo-control switch into water whose temperature is below 83°C. Ensure that no continuity exists.
If continuity exists, replace the radiator thermo-control switch.

LCO00087-00000



LCO00088-00080

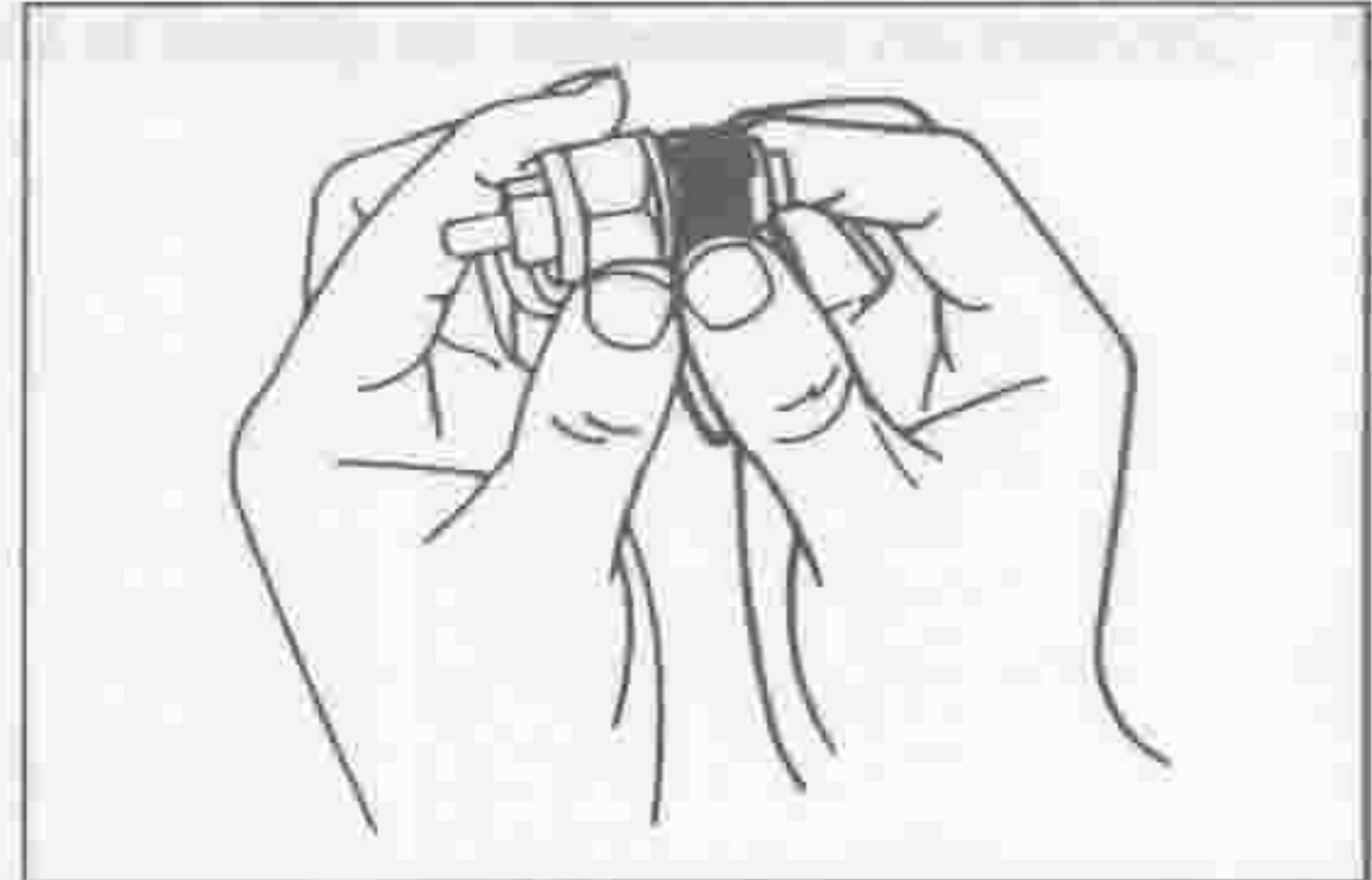
- (3) When the temperature of the water into which the heat sensing section of the radiator thermo-control switch is submerged is raised above 92°C (EF-EL, ED-10) or 98°C (EF-20), ensure that continuity exists. If no continuity exists, replace the radiator thermo control switch.



LCO000089-00081

3. Installation of radiator thermo-control switch

- (1) Clean the threaded portion of the radiator thermo control switch. Wind seal tape around the threaded portion.



LCO000090-00082

- (2) Install the radiator thermo control switch to the water inlet.

Tightening Torque: $29.4 \pm 4.9 \text{ N}\cdot\text{m}$
 $(3.00 \pm 0.50 \text{ kgf}\cdot\text{m})$

- (3) Fill coolant.
 (4) Connect the ground cable to the negative terminal of the battery.
 (5) Start the engine and check for water leakage.

NOTE:

- Repair the leaky point if leakage exists.

LCO000091-00000



RADIATOR FAN MOTOR RELAY

INSPECTION OF RADIATOR FAN MOTOR RELAY

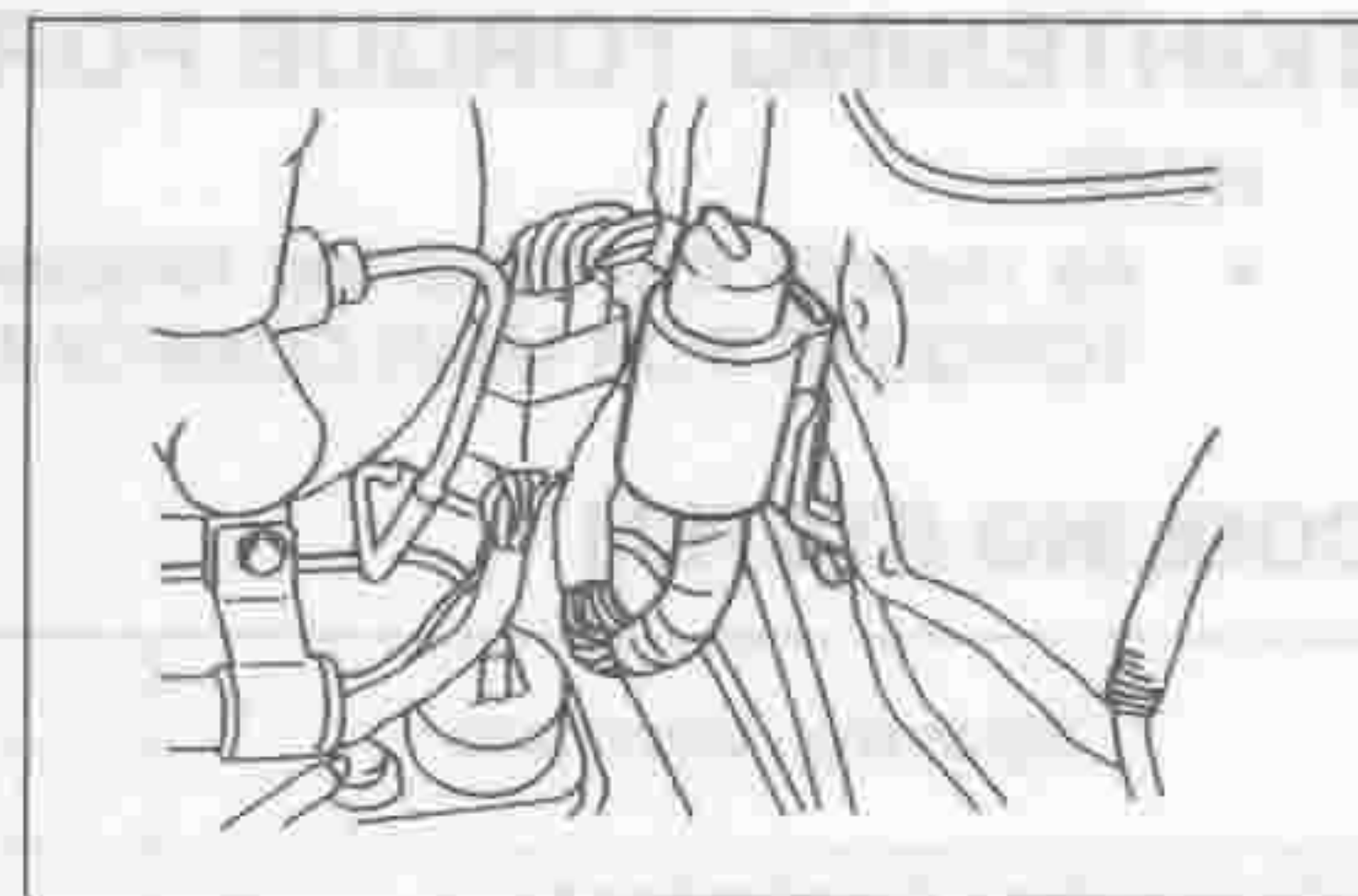
1. Removal of radiator fan motor relay

(ED-10 Engine)

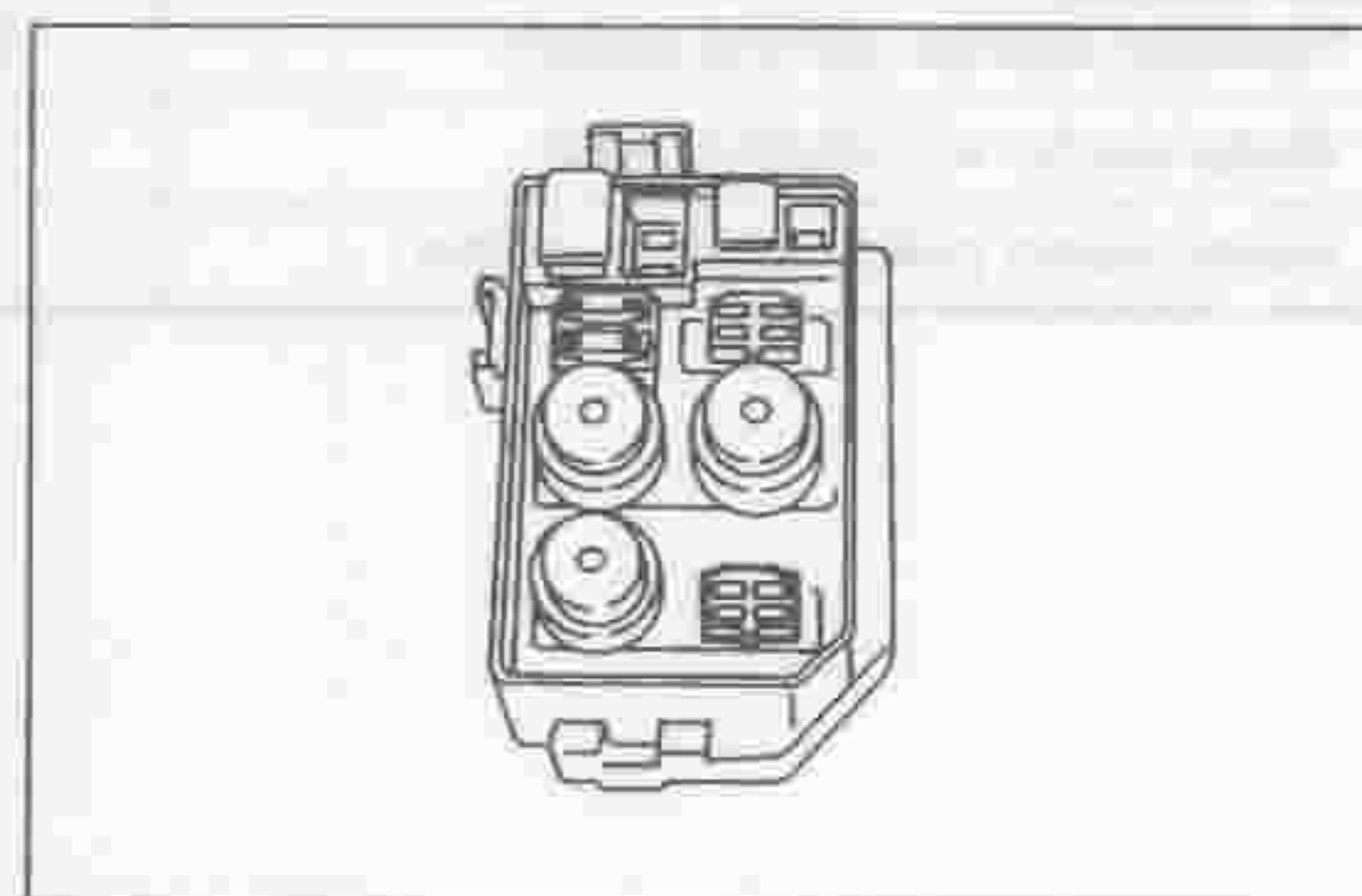
- Remove the radiator fan motor relay installed on the left fender apron section inside the engine compartment. Then, pull out the connector.

(EF-EL & ED-20 Engine)

- Remove the lid of the relay box inside the engine compartment and pull out the radiator fan motor relay.



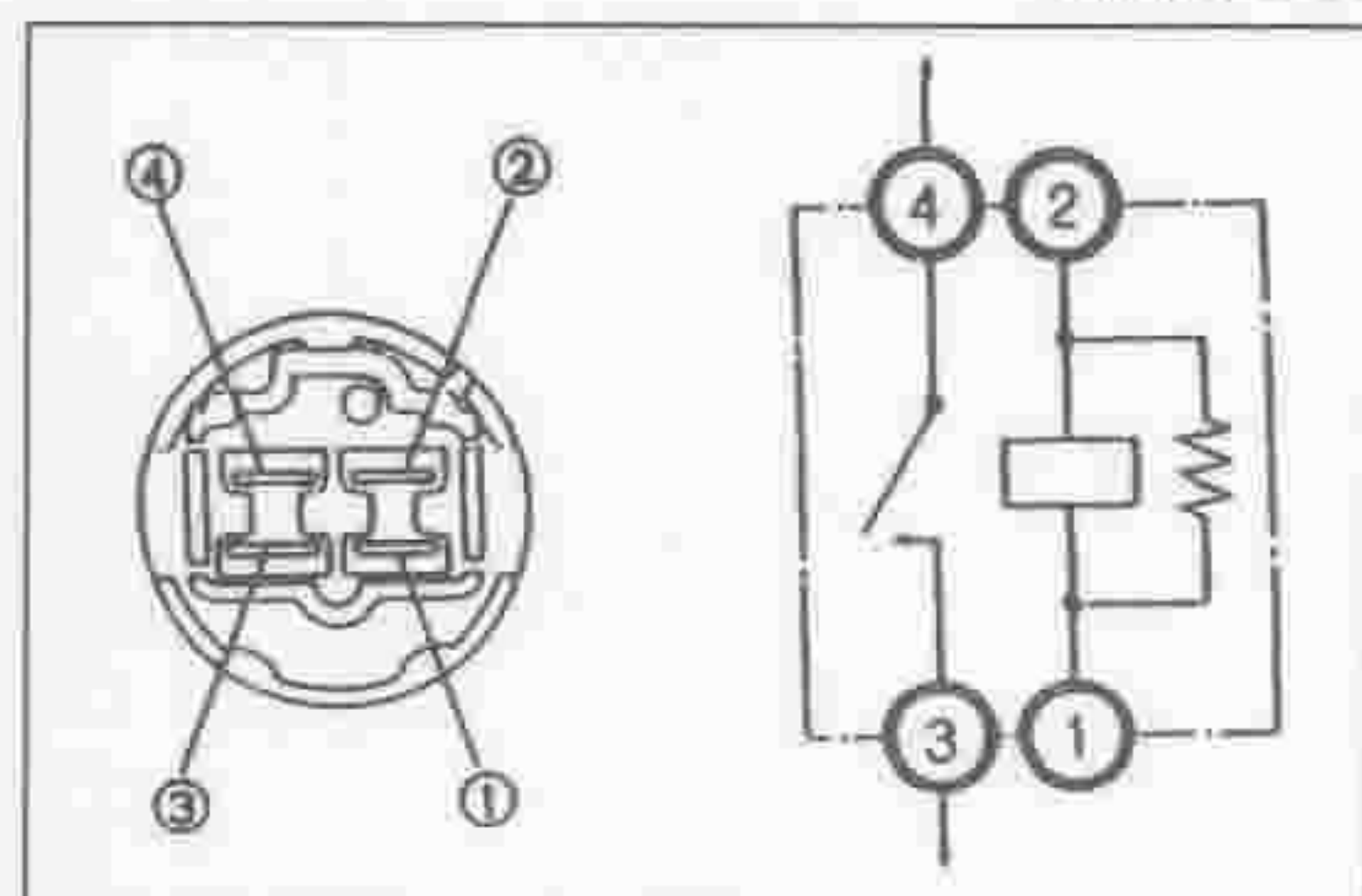
LCO00092-00083



LCO00000-00084

2. Inspection of relay continuity

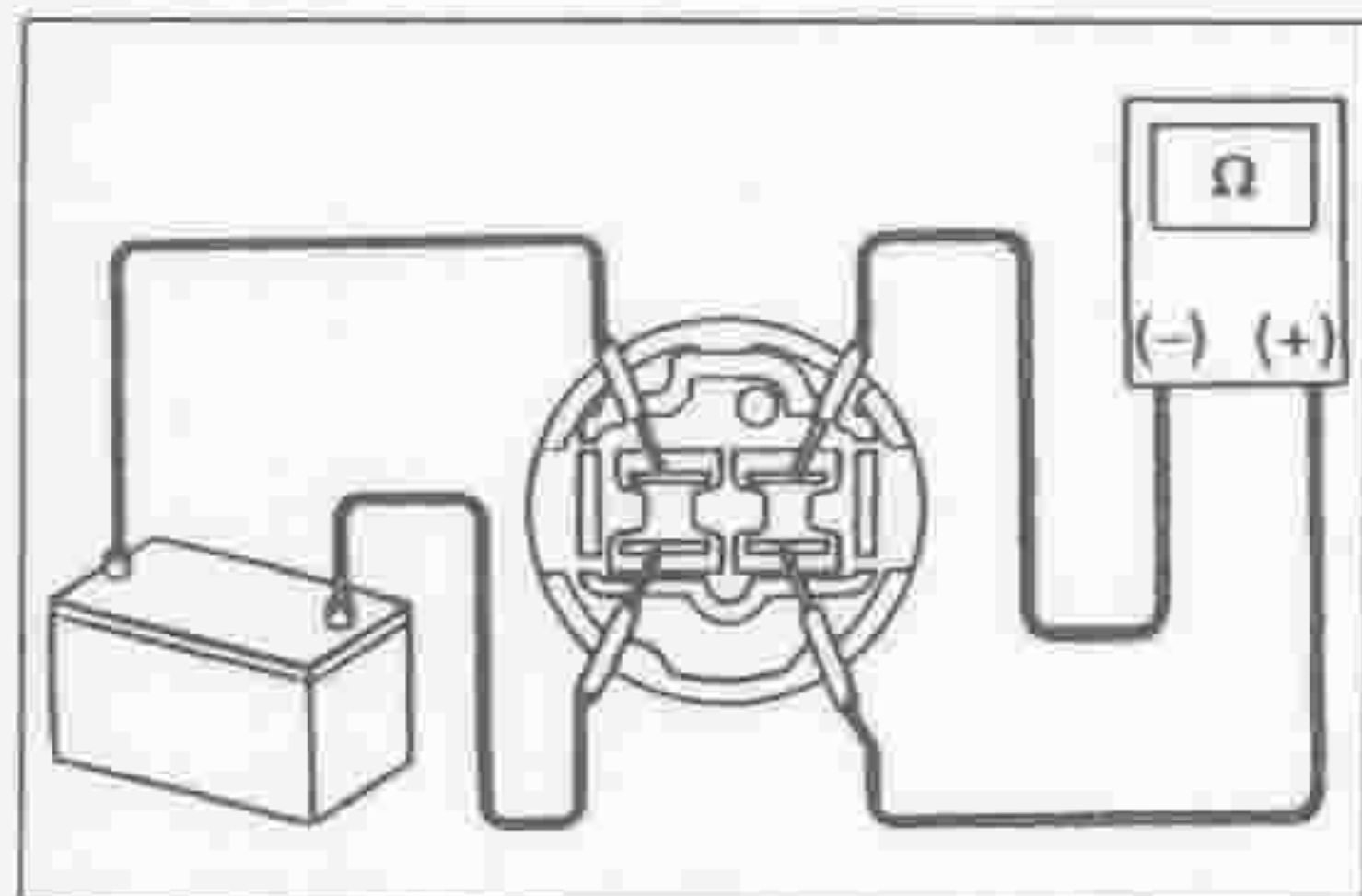
- Ensure that the resistance between the terminals ③ and ④ is not more than 100Ω , using an ohmmeter.
 - Ensure that no continuity exists between the terminals ① and ③ as well as between the terminals ① and ④.
 - Ensure that no continuity exists between the terminals ② and ③ as well as between the terminals ② and ④.
- If the relay continuity test results do not conform to specifications, replace the relay.



LCO00093-00085

3. Inspection of relay operation

- Apply the battery voltage across the terminals ③ and ④.
 - Ensure that continuity exists between the terminals ① and ②, using an ohmmeter.
- If the test results do not conform to specifications, replace the relay.



LCO00094-00086

- Connect the fan motor relay connector to the fan motor relay.
- Install the radiator fan motor relay to the fender apron.

LCO00095-00000

TIGHTENING TORQUE FOR MAIN COMPONENTS

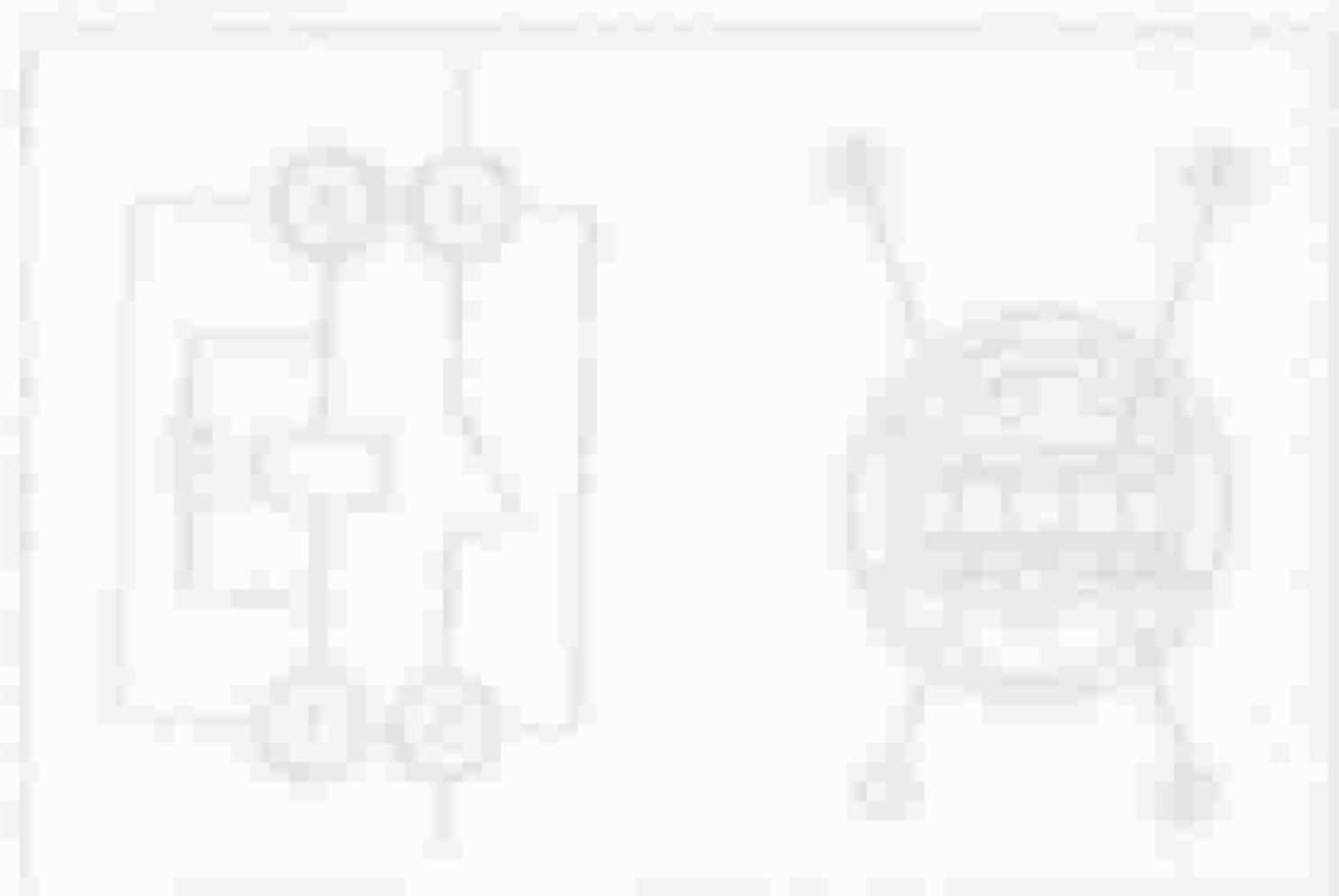
NOTE:

- As regards the tightening torques for the general bolts, refer to the section under "TIGHTENING TORQUES FOR MAIN COMPONENTS" in the EM section.

COOLING SYSTEM

Tightening components	Tightening torque			Remarks
	N·m	kgf-m	ft-lb	
Water outlet × Cylinder head	19.1 ± 3.8	1.95 ± 0.39	14.1 ± 2.8	
Radiator thermo control switch	29.4 ± 4.9	3.00 ± 0.50	21.7 ± 3.6	
Water pump × Cylinder block	19.1 ± 3.8	1.95 ± 0.39	14.1 ± 2.8	
Water pump pulley × Water pump	5.4 ± 1.1	0.55 ± 0.11	3.98 ± 0.79	

LCD00096-00000



SERVICE SPECIFICATIONS

Coolant capacity [Including 350 cm ³ (350 cc) for reserve tank]	EF-EL (MT) (AT) ED-10 (MT) ED-20 (MT) (AT)	3.05 dm ³ 3.25 dm ³ 3.15 dm ³ 3.15 dm ³ 3.05 dm ³
Thermostat	Valve opening temperature	82 ± 1.5°C 88 ± 1.5°C (ED-20 Engine only)
	Valve full opening temperature	95°C 100°C (ED-20 Engine only)
	Valve lift	Not less than 8 mm
Thermo-control switch	ON OFF	89°C or above 95°C or above (ED-20) 84°C or below 90°C or below (ED-20)
Radiator cap	Relief valve opening pressure	73 - 103 kPa (0.75 - 1.05 kgf/cm ²)
Radiator fan motor	Amperage 45 watt motor 80 watt motor	2.5 - 4.5 A 5.2 - 8.2 A

LC000097-00000

[Reference]**Equipment to be used**

- Coolant concentration meter
- Circuit tester
- Radiator cap tester*
- Torque wrench, etc.

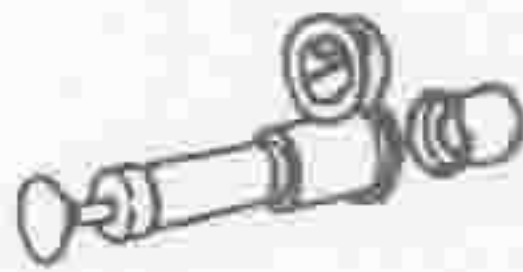
*** Radiator cap tester**

The radiator comes in two kinds: Toyo-made radiator and Denso-made radiator.

In the case of the Toyo-made radiator, it is possible to employ a conventional radiator cap tester. However, the Denso-made NSR radiator requires an adaptor for testing NSR/NWR radiators.

LC000098-00000

Recommended radiator cap tester

Shape	Part number and part name	Purpose
	Radiator cap tester RCT-2A Handled by Banzai Limited RCT-2 Handled by Iyasaka Limited	For water leakage check use
	Radiator cap tester adaptor set RCT-2A-20S Handled by Banzai Limited RCT-2AS Handled by Iyasaka Limited	For water leakage check use (Toyo-made radiator)
	Radiator cap tester adaptor set A RCT-2A-30S Handled by Banzai Limited RCT-2-AST Handled by Iyasaka Limited	For water leakage check use (Denso-made radiator)

LC000099-00087