

6. Cooling System

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Service Information

⚠ WARNING

- Wait until the engine is cool before slowly removing the radiator cap. Removing the cap while the engine is hot and the coolant is under pressure may cause serious scalding.
- Radiator coolant is toxic. Keep it away from eyes, mouth, skin and clothes.
 - If any coolant gets in your eyes, rinse them with water and consult a doctor immediately.
 - If any coolant is swallowed, induce vomiting, gargle and consult a physician immediately.
 - If any coolant gets on your skin or clothes, rinse thoroughly with plenty of water.
- KEEP OUT OF REACH OF CHILDREN.

- Add coolant at the reserve tank. Do not remove the radiator cap except to refill or drain the system.
- All cooling system service can be made with the engine in the frame.
- Avoid spilling coolant on painted surfaces.
- After servicing the system, check for leaks with a cooling system tester.
- Refer to section 25 of the Common Service Manual for fan motor switch and thermo sensor inspections.

Troubleshooting

Engine temperature too high

- Faulty radiator cap.
- Insufficient coolant.
- Passages blocked in radiator, hoses, oil cooler, or water jacket.
- Air in system.
- Faulty water pump.
- Thermostat stuck closed.
- Faulty cooling fan motor.
- Faulty cooling fan motor switch.

Engine temperature too low

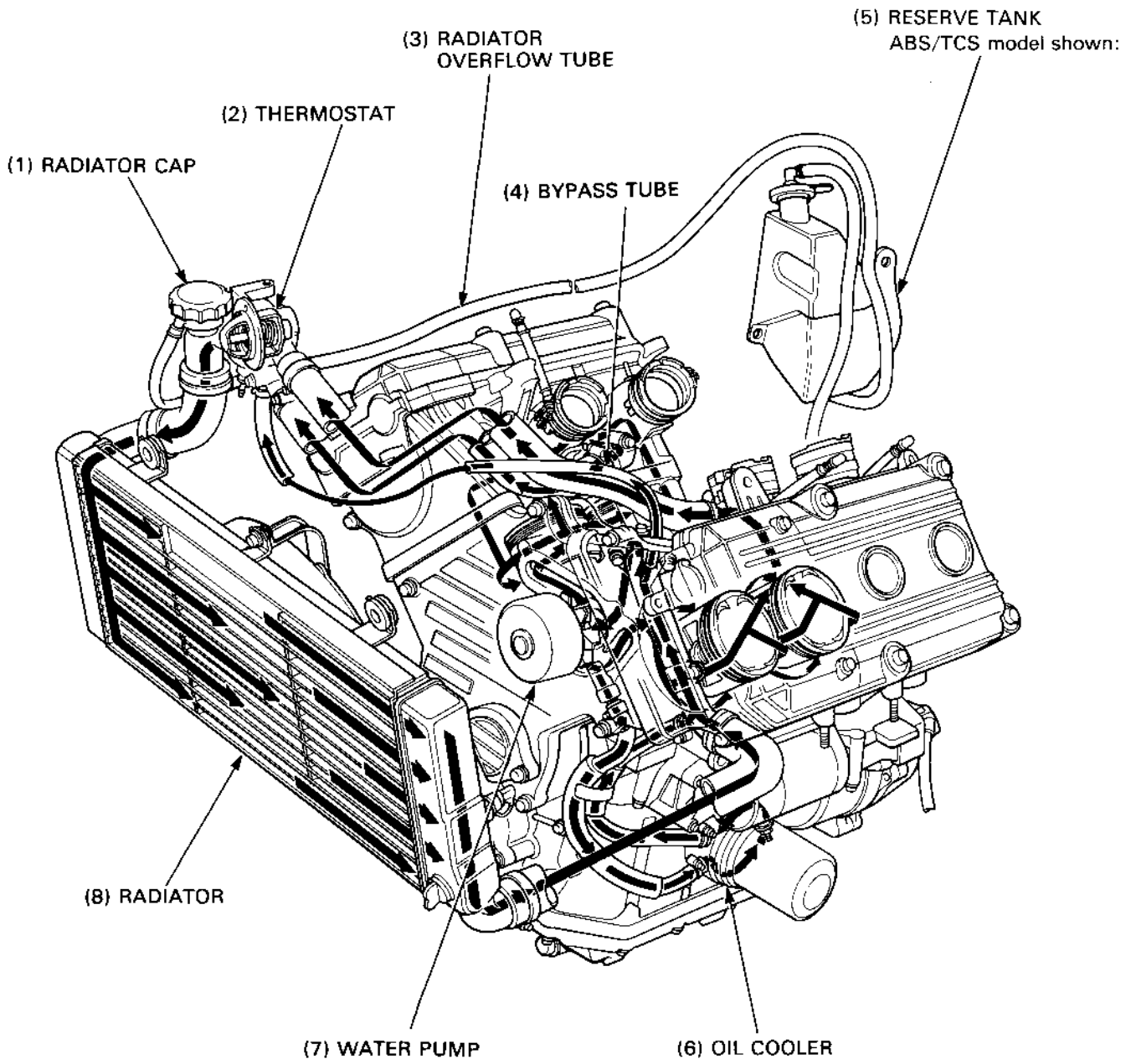
- Faulty temperature gauge or gauge sensor.
- Thermostat stuck open.
- Faulty cooling fan motor switch.
- Faulty cooling fan motor switch.

Coolant leaks

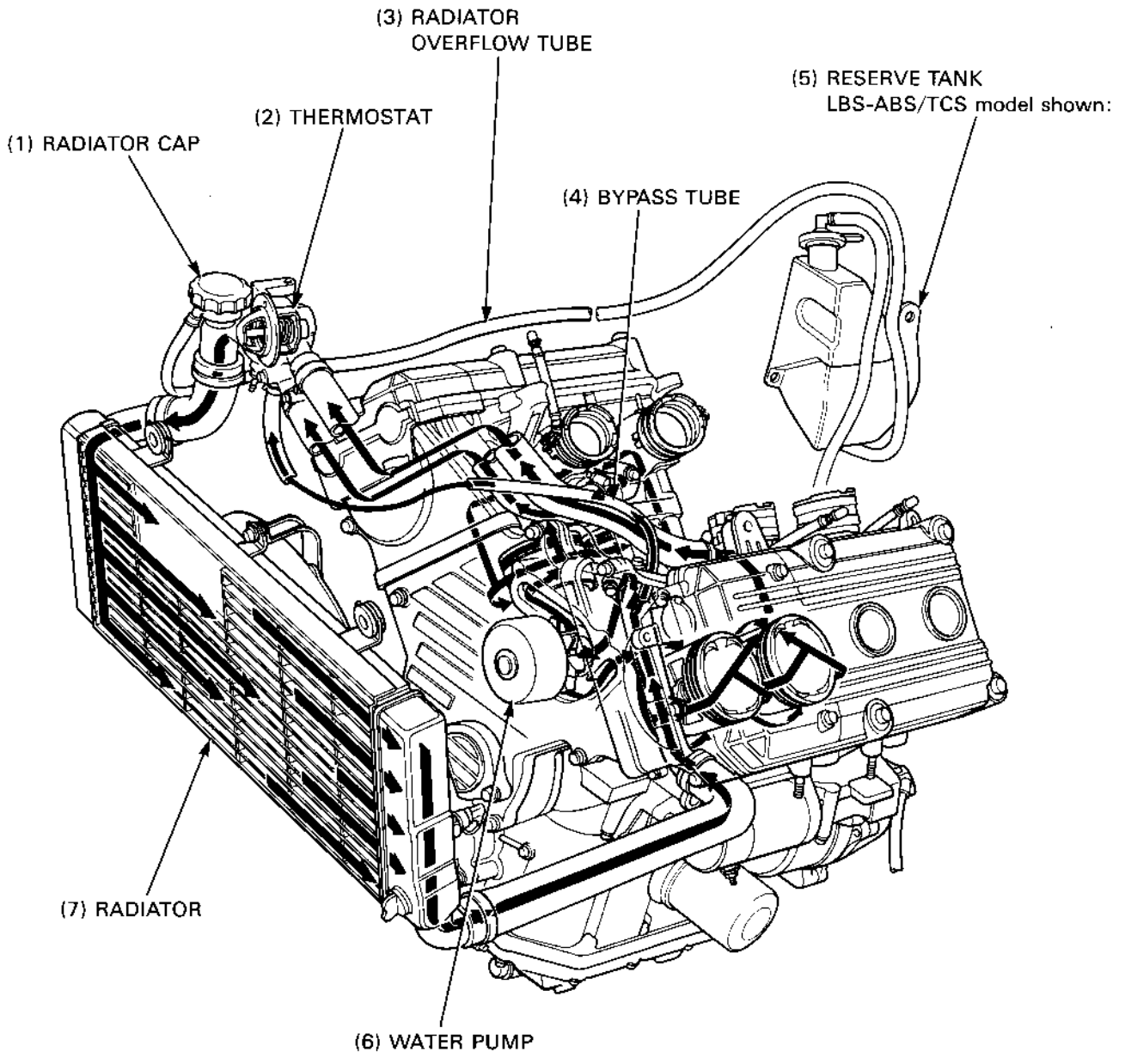
- Faulty pump mechanical seal.
- Deteriorated O-rings.
- Faulty radiator cap.
- Damaged or deteriorated cylinder head gasket.
- Loose hose connection or clamp.
- Damaged or deteriorated hoses.

System Flow Pattern

'91-'95



After '95



Coolant Draining

▲ WARNING

• Wait until the engine is cool before servicing the cooling system. Removing the radiator cap while the engine is hot and the coolant is under pressure may cause serious scalding.

NOTE

• For coolant replacement, refer to section 5 of the Common Service Manual.

Remove the left and right middle fairings (page 2-8).
Remove the radiator cap.

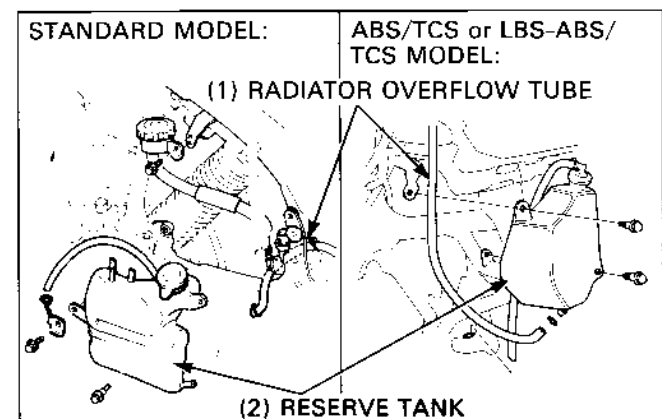
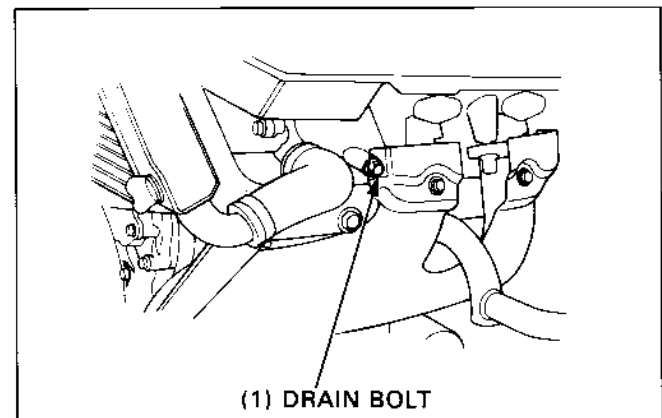
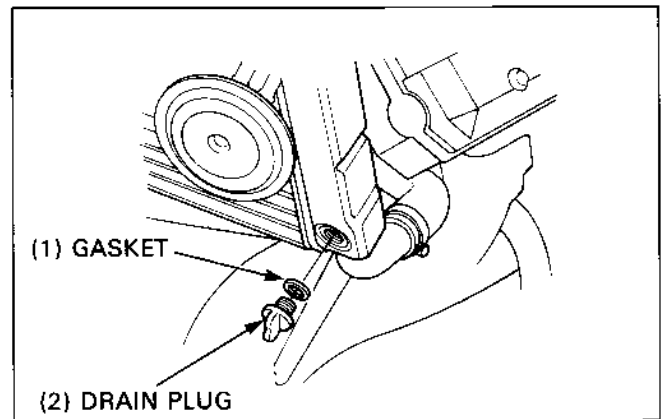
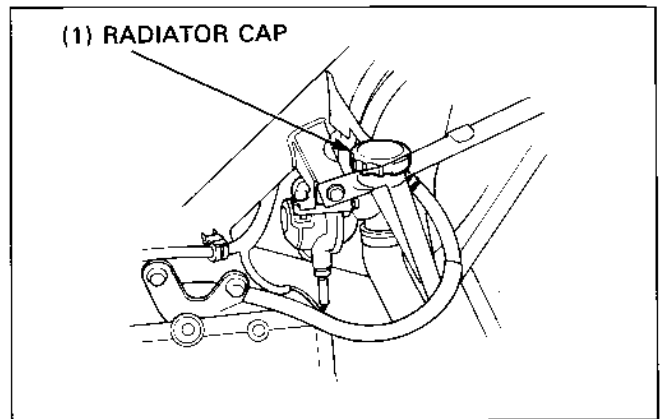
Remove the radiator drain plug and gasket, and drain the coolant from the radiator.

Remove the drain bolts and sealing washers from the left and right cylinders, and drain the coolant from the engine.

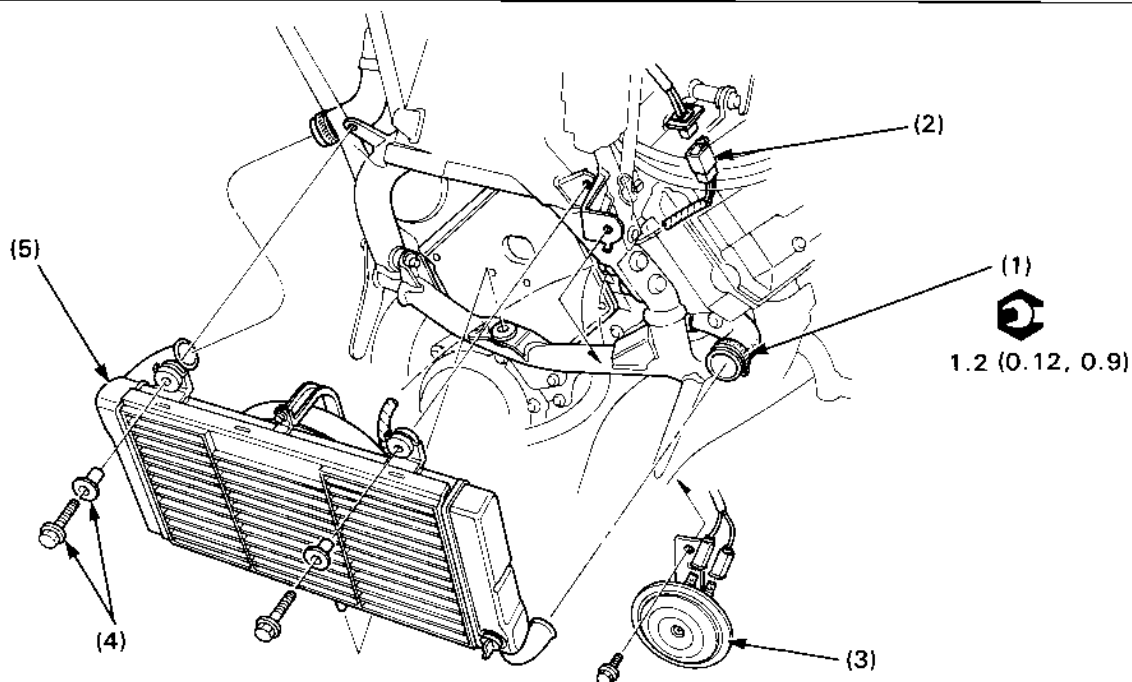
Remove the reserve tank mounting bolts (page 6-8).

Place a suitable container under the radiator overflow tube joint of the reserve tank, disconnect the overflow tube from the tank, and drain the coolant from the tank.

Install the drain plug with a gasket.
Install the drain bolts with new sealing washers.
Install the reserve tank (page 6-8).



Radiator Removal/Installation

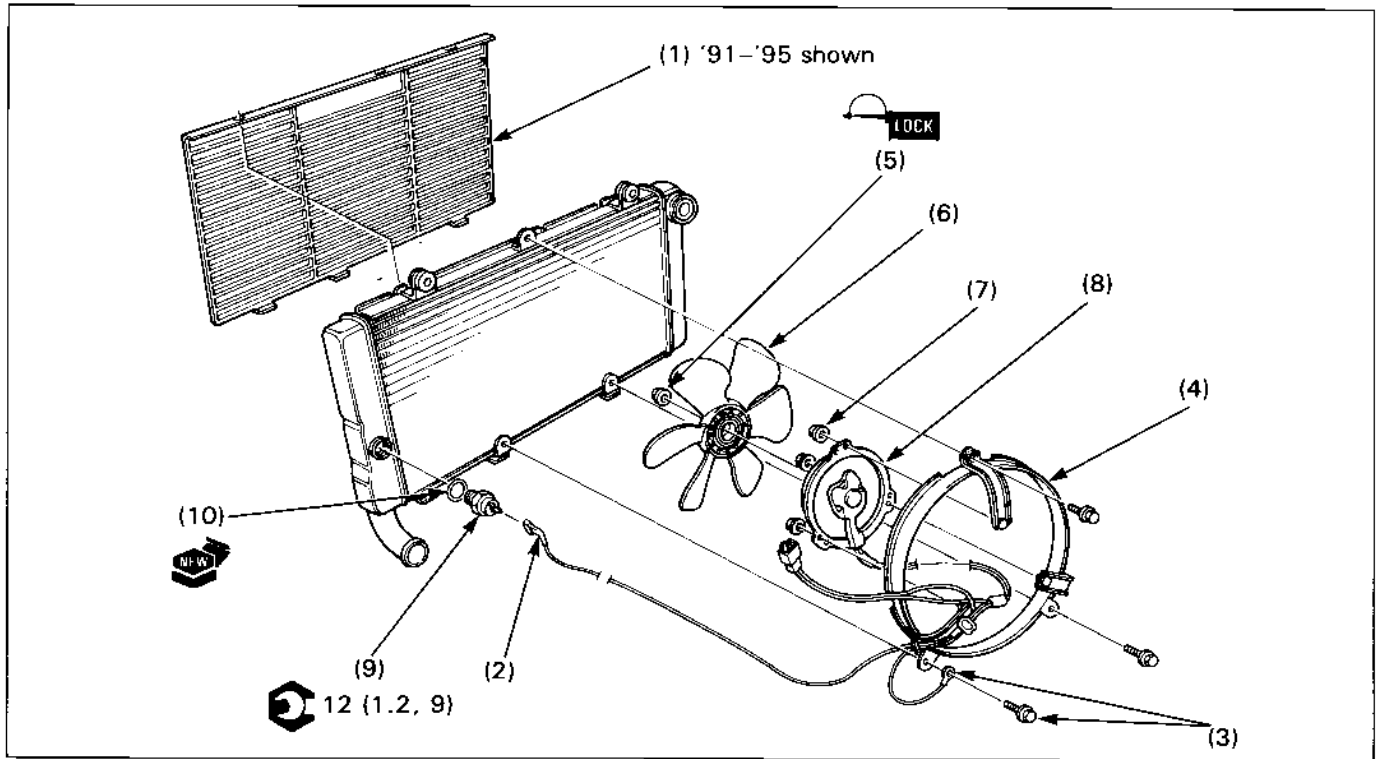


Requisite Service

- Upper fairing removal/installation (page 2-9)
- Coolant draining (page 6-4)
- Coolant refill (Section 5 of the Common Service Manual)

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Radiator hose	2	
(2) Fan motor switch connector	1	
(3) Horn	1	
(4) Radiator mounting bolt/collar	2/2	
(5) Radiator	1	At installation, align the pin of the radiator with the mounting grommet of the frame properly.

Radiator Disassembly/Assembly

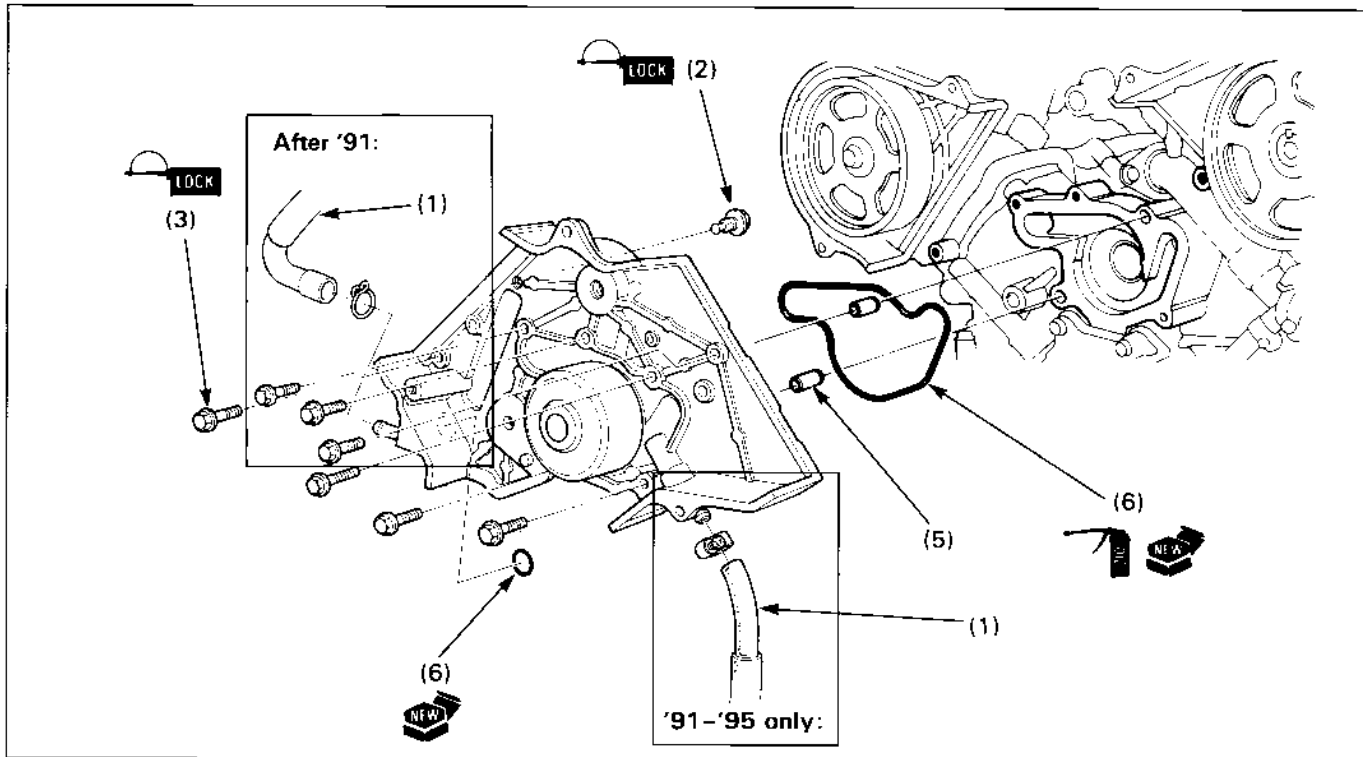


Requisite Service

- Radiator removal/installation (page 6-5)

Procedure	Q'ty	Remarks
Disassembly Order		Assembly is in the reverse order of disassembly.
(1) Radiator grille	1	
(2) Fan motor switch wire connector	1	
(3) Shroud mounting bolt/ground wire	3/1	
(4) Shroud	1	
(5) Fan mounting nut	1	
(6) Cooling fan	1	
(7) Fan motor mounting nut	3	
(8) Fan motor	1	
(9) Fan motor switch	1	
(10) O-ring	1	

Water Pump Removal/Installation



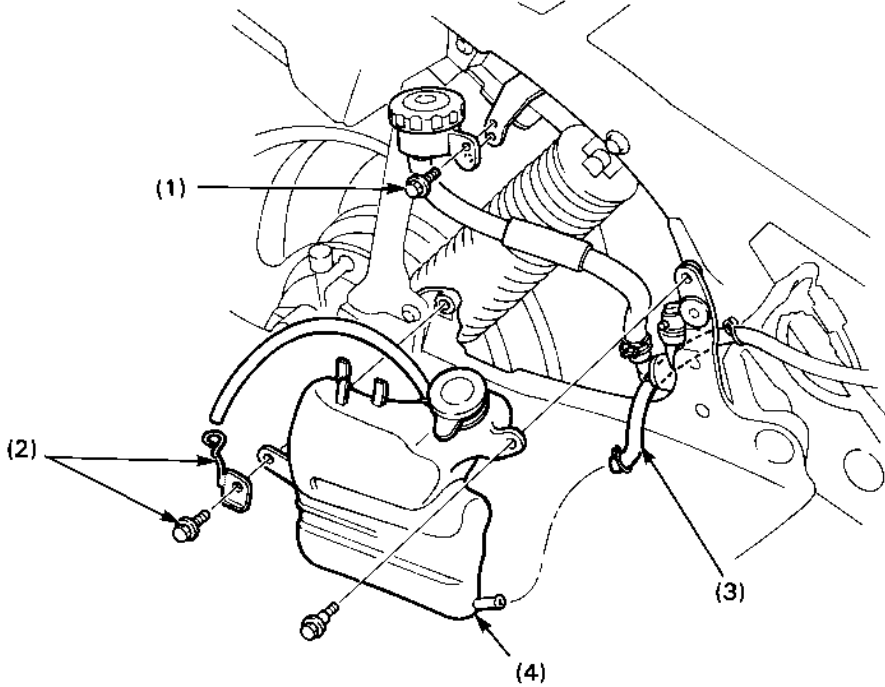
Requisite Service

- Timing belt idle pulley removal/installation (page 8-10)

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Oil cooler water hose/breather hose	1/1	
(2) Timing belt tensioner spring hook bolt	1	
(3) Bolt	7	
(4) Water pump	1	Be careful not to damage the reduction holder gasket.
(5) Dowel pin	2	
(6) O-ring	2	

Radiator Reserve Tank Removal/Installation

Standard Model

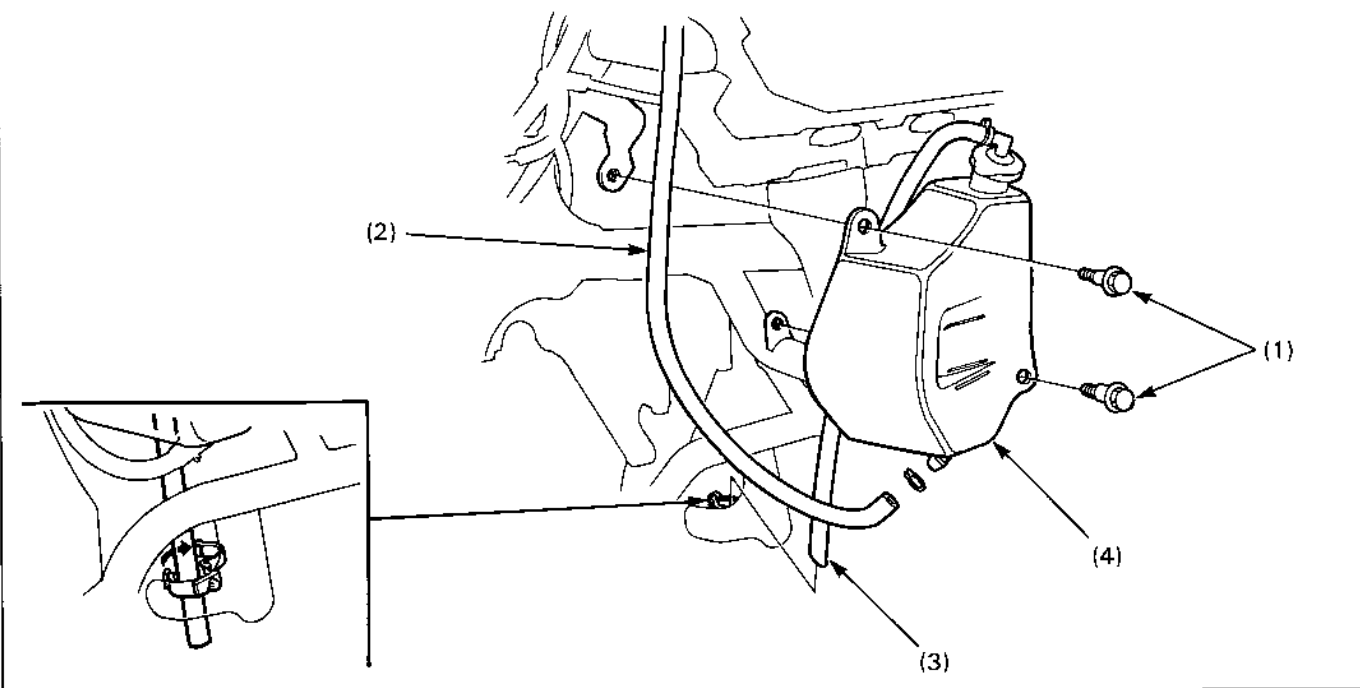


Requisite Service

- Right side cover removal/installation (page 2-2)

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Rear brake reservoir mounting bolt	1	
(2) Reserve tank mounting bolt/clamp	2/1	
(3) Radiator overflow tube	1	
(4) Reserve tank	1	

ABS/TCS or LBS-ABS/TCS Model

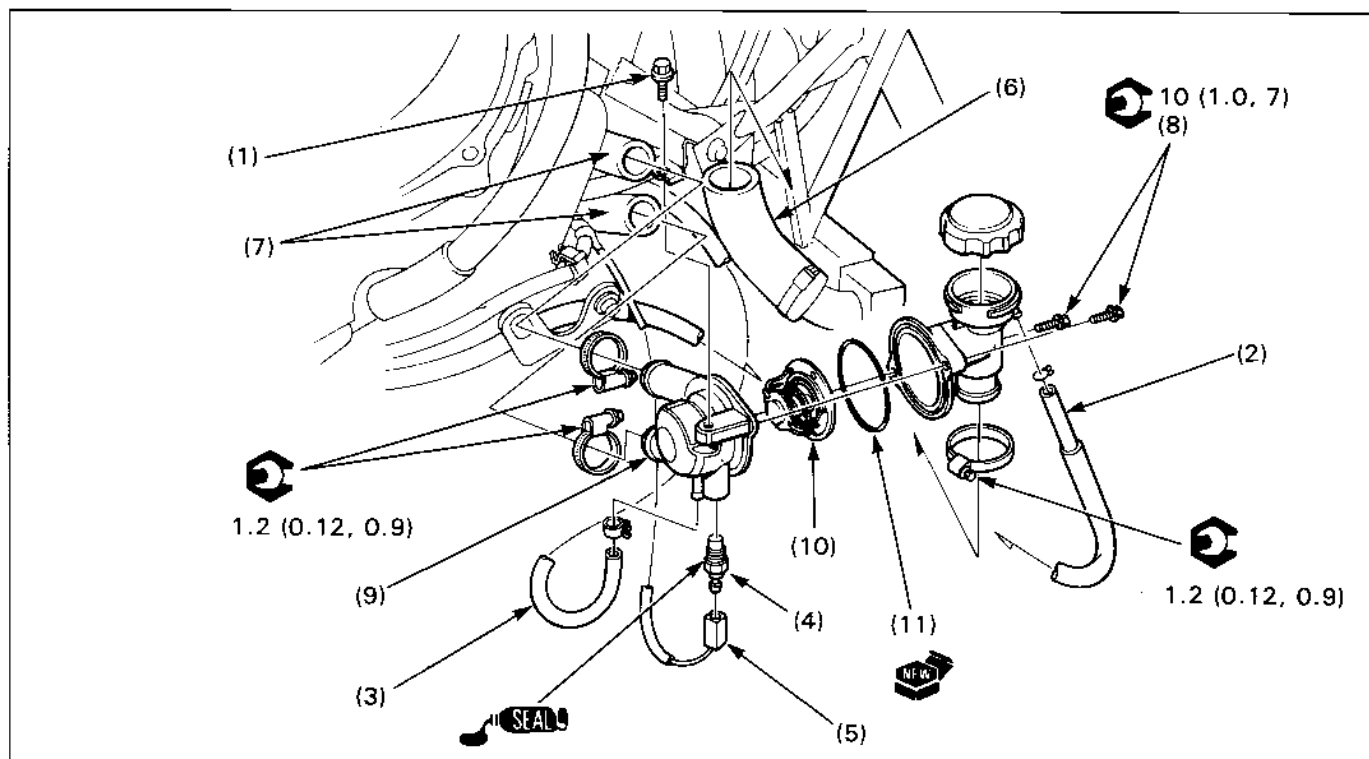


Requisite Service

- Right middle fairing removal/installation (page 2-8).

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Reserve tank mounting bolt	2	
(2) Radiator overflow tube	1	
(3) Breather tube	1	
(4) Reserve tank	1	

Thermostat Removal/Installation

















Requisite Service

- Upper fairing removal/installation (page 2-9)
- Coolant draining (page 6-4)
- Coolant refill (Section 5 of the Common Service Manual)

Procedure	Q'ty	Remarks
Removal Order		Installation is in the reverse order of removal.
(1) Mounting bolt	1	
(2) Radiator overflow tube	1	
(3) Bypass tube	1	
(4) Thermo sensor	1	Apply sealant to threads when installing.
(5) Thermo sensor wire connector	1	
(6) Radiator hose	1	
(7) Water hose	2	
(8) Thermostat case bolt	2	
(9) Thermostat case	1	
(10) Thermostat	1	
(11) O-ring	1	

Symbols

The symbols used throughout this manual show specific service procedures. If supplementary information is required pertaining to these symbols, it would be explained specifically in the text without the use of the symbols.

	<p>Replace the part(s) with new one(s) before assembly.</p>
	<p>Use special tool</p>
	<p>Use optional tool. Use the same procedure you use to order parts.</p>
 <p>10 (1.0, 7.2)</p>	<p>Torque specification. 10 N·m (1.0 kg-m, 7.2 ft-lb)</p>
	<p>Use recommended engine oil, unless otherwise specified.</p>
	<p>Use molybdenum oil solution (mixture of the engine oil and molybdenum grease in a ratio of 1 : 1).</p>
	<p>Use multi-purpose grease (Lithium based multi-purpose grease NLGI #2 or equivalent)</p>
	<p>Use molybdenum disulfide grease (containing more than 3% molybdenum disulfide, NLGI #2 or equivalent) Example: Molykote® BR-2 plus manufactured by Dow Corning, U.S.A. Multi-purpose M-2 manufactured by Mitsubishi Oil Japan</p>
	<p>Use molybdenum disulfide paste (containing more than 40% molybdenum disulfide, NLGI #2 or equivalent) Example: Molykote® G-n Paste manufactured by Dow Corning, U.S.A. Honda Moly 60 (U.S.A. only) Rocol ASP manufactured by Rocol Limited, U.K. Rocol Paste manufactured by Sumico Lubricant, Japan</p>
	<p>Use silicone grease</p>
	<p>Apply a locking agent. Use a middle strength locking agent unless otherwise specified.</p>
	<p>Apply sealant</p>
	<p>Use brake fluid, DOT 3 or DOT 4. Use the recommended brake fluid, unless otherwise specified.</p>
	<p>Use Fork or Suspension Fluid.</p>