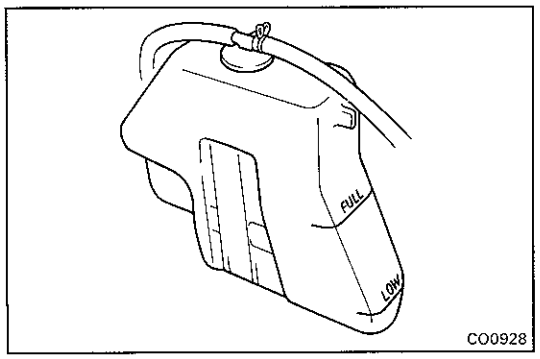
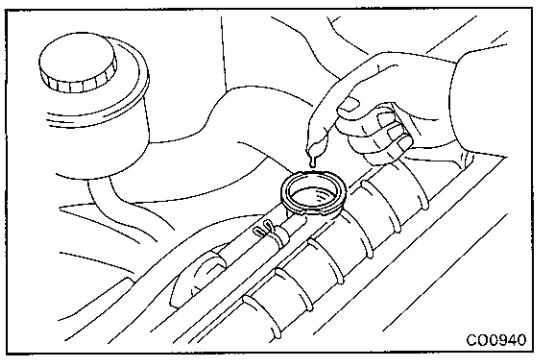
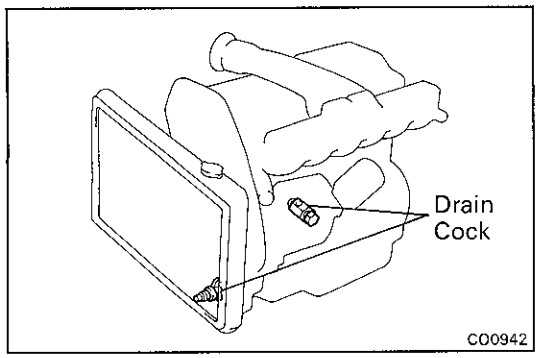
TROUBLESHOOTING

Problem	Possible cause	Remedy	Page
Engine overheats	Fan belt loose or missing	Adjust or replace belts	CH-5
	Dirt, leaves or insects on radiator or condenser	Clean radiator or condenser	CO-12
	Hoses, water pump, thermostat housing, radiator, heater, core plugs or head gasket leakage	Repair as necessary	
	Thermostat faulty	Check thermostat	CO-10
	Injection timing retarded	Adjust timing	EM-24
	Fluid coupling faulty	Replace fluid coupling	CO-7
	Radiator hose plugged or rotted	Replace hose	
	Water pump faulty	Replace water pump	CO-7
	Radiator plugged or cap faulty	Check radiator	CO-12
	Cylinder head or block cracked or plugged	Repair as necessary	

HINT: Removal of the thermostat would have an adverse effect, causing a lowering of cooling efficiency. Do not remove the thermostat, even if the engine tends to overheat.







CHECK AND REPLACEMENT OF ENGINE COOLANT

1. CHECK ENGINE COOLANT LEVEL AT RESERVOIR TANK

The coolant level should be between the "LOW" and "FULL" lines.

If low, check for leaks and add coolant up to the "FULL" line.

2. CHECK ENGINE COOLANT QUALITY

There should not be any excessive deposits of rust or scales around the radiator cap or radiator filler hole, and the coolant should be free from oil.

If excessively dirty, replace the coolant.

3. REPLACE ENGINE COOLANT

(a) Remove the radiator 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.

(b) Drain the coolant from the radiator and engine drain cocks.

(c) Close the drain cocks.

Torque (Engine drain cock):
250 kg-cm (18 ft-lb, 25 N-m)

(d) Fill the system with coolant.
Use a good brand of ethylene-glycol or TOYOTA radiator conditioner or equivalent anticorrosive, mixed according to the manufacturer's directions.

Ethylene-glycol type: This type has an antifreeze and anticorrosive effect.
TOYOTA radiator conditioner: This has only an anticorrosive effect.

NOTICE:

- **Do not use alcohol type coolant.**
- **The coolant should be mixed with demineralized water or distilled water.**

Capacity (w/o Heater):

PZJ70, 73, 75
9.6 liters (10.1 US qts, 8.4 Imp. qts)

HZJ70, 73, 75
M/T 9.9 liters (10.5 US qts, 8.7 Imp. qts)
A/T 9.7 liters (10.3 US qts, 8.5 Imp. qts)

HZJ80 and HDJ80
M/T 10.4 liters (11.0 US qts, 9.2 Imp. qts)
A/T 10.2 liters (10.8 US qts, 9.0 Imp. qts)

HZB30 and HDB30
10.2 liters (10.8 US qts, 9.0 Imp. qts)

Capacity (w/ Heater):

PZJ70, 73, 75
10.3 liters (10.9 US qts, 9.1 Imp. qts)

HZJ70, 73, 75
M/T 10.6 liters (11.2 US qts, 9.3 Imp. qts)
A/T 10.4 liters (11.0 US qts, 9.2 Imp. qts)

HZJ80 and HDJ80
M/T 11.1 liters (11.6 US qts, 9.8 Imp. qts)
A/T 10.9 liters (11.5 US qts, 9.6 Imp. qts)

HZB30 and HDB30
14.6 liters (15.4 US qts, 12.8 Imp. qts)

Capacity (w/ Front and rear heaters):

PZJ70, 73 75
11.3 liters (11.9 US qts, 9.9 Imp. qts)

HZJ70, 73, 75
11.6 liters (12.2 US qts, 10.2 Imp. qts)

HZJ80 and HDJ80
M/T (Europe)
12.0 liters (12.7 US qts, 10.6 Imp. qts)
A/T (Europe)
11.8 liters (12.5 US qts, 10.4 Imp. qts)
M/T (Others)
11.9 liters (12.6 US qts, 10.5 Imp. qts)
A/T (Others)
11.7 liters (12.4 US qts, 10.3 Imp. qts)

(e) Reinstall the radiator cap.

(f) Warm up the engine and check for leaks.

(g) Recheck the coolant level and refill as necessary.