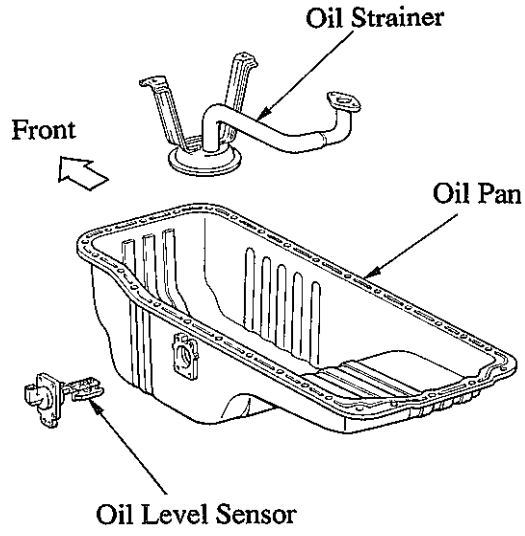
■ LUBRICATION SYSTEM

1. Oil Pan

The following changes have been made, in the same way as the 3B and 14B engines:

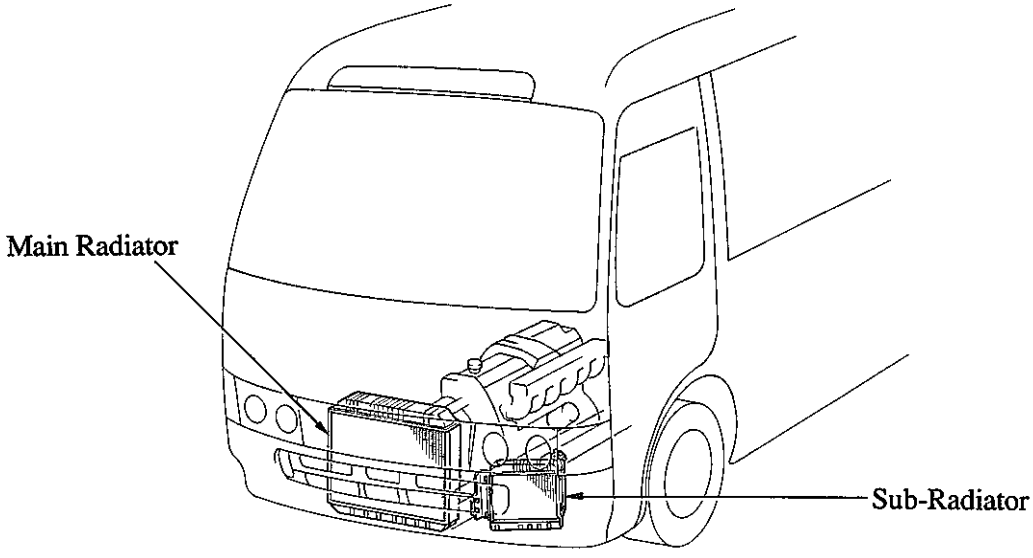
- The oil sump has been relocated from the rear to the front.
- The oil strainer configuration has been changed.
- The oil level sensor is now adopted, located on the left side of the oil pan.



■ COOLING SYSTEM

1. General

To conform with this change, the cooling system of the 1HZ engine models has undergone some changes, including a modification of the main radiator, and on models other than those for Australia and Hong Kong, a sub-radiator has been adopted.
Modifications such as the radiator filler neck which has been separated from the main radiator, or the fan shroud of RHD models changed to resin, are the same as the changes found on the 3B and 14B engines.
For details on these changes, refer to page 39 of the section on 3B and 14B engines.

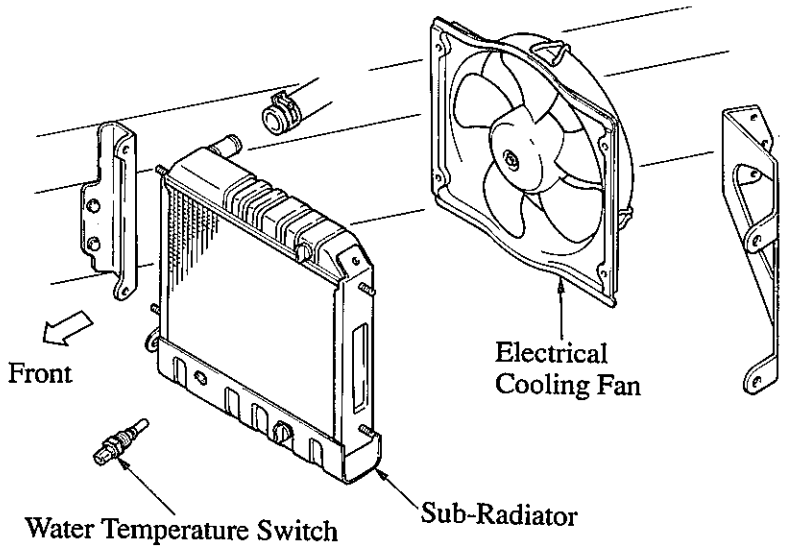


2. Sub-Radiator (Except Australia and Hong Kong Models)

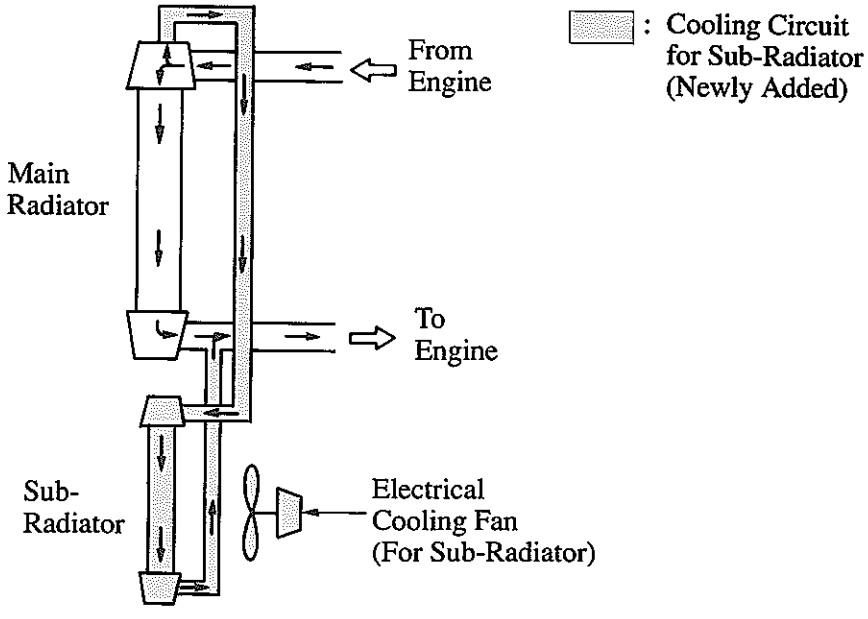
Construction

The sub-radiator has been adopted to improve the engine's cooling efficiency. It consists of the double-row type sub-radiator which dissipates engine coolant heat, the electric cooling fan, which forces air through the sub-radiator, and the water temperature switch which controls the operation of the cooling fan according to the coolant temperature.
As illustrated below, the cooling circuit of the sub-radiator is parallel to the main radiator, so that coolant reaches the main radiator at the same time as the sub-radiator.

▶Sub-Radiator◀



▶Cooling Circuit◀



EG

Cooling Fan

The cooling fan drives air through the sub-radiator to lower the engine coolant temperature. The cooling fan control circuit consists of a water temperature switch, radiator fan relay, and electric cooling fan. As illustrated below, this circuit allows the cooling fan to be activated by the operation of the water temperature switch.

The radiator fan relay, which is normally closed, allows the switched circuit to open when current is fed to the coil side. The water temperature switch opens (or turns off) the switch circuit when the coolant temperature rises above 98°C (208.4°F), and closes (or turns on) the circuit when the temperature reaches 91°C (195.8°F) or below.

