COOLING SYSTEM

OUTLINE

OUTLINE OF CONSTRUCTION

- The shape of the cooling fan has been changed in order to reduce fan noise.
- The water pump bearing has been changed from the ball bearing type to a shaft bearing.

SPECIFICATIONS

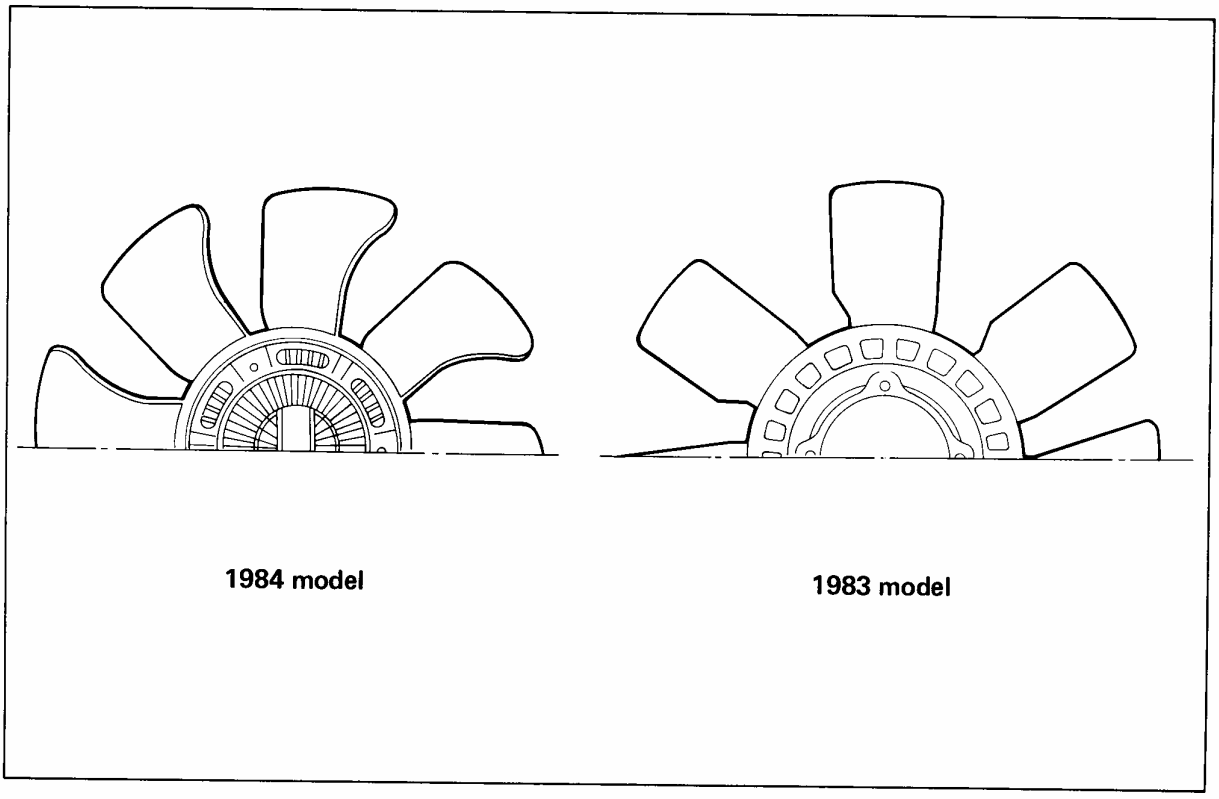
System		Water-cooled, forced circulation
Coolant quantity		9.5 liters (10.0 U.S. quarts, 8.4 Imp. quarts)
Thermostat	Type	Wax type
	Initial opening temperature	80.5 ~ 83.5°C (197 ~ 183°F)
	Full-open temperature	95°C (203°F)
	Full-open lift	8 mm (0.315 in) or more
Water pump	Type	Centrifugal
Radiator	Type	Corrugated-fin type
	Cap valve pressure	75 ~ 105 kPa (11 ~ 15 lb/in^2)
Cooling fan	Outer diameter x quantity	390 mm (15.4 in) x 8
Fan drive	Type	Thermo-modulated

COOLING FAN

In order to reduce noise caused by the cooling fan, the shape, diameter and number of blades have been changed.

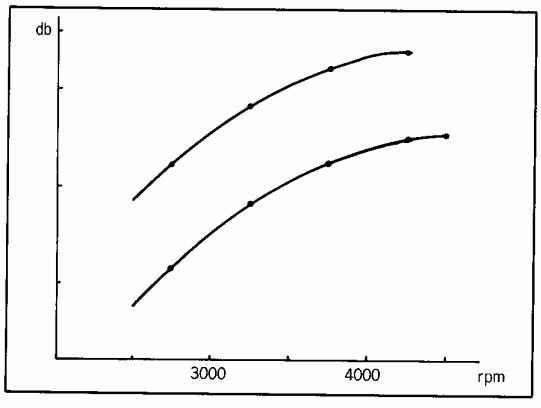
	1984 models	1983 models
Diameter	**390 mm (15.4 in)**	**410 mm (16.1 in)**
Blades	**8**	**7**

For 1984 models, the blade shape has been redesigned for smoother "stirring" of the air.



1984 model **1983 model**

As a result of these changes, fan noise has been greatly reduced.

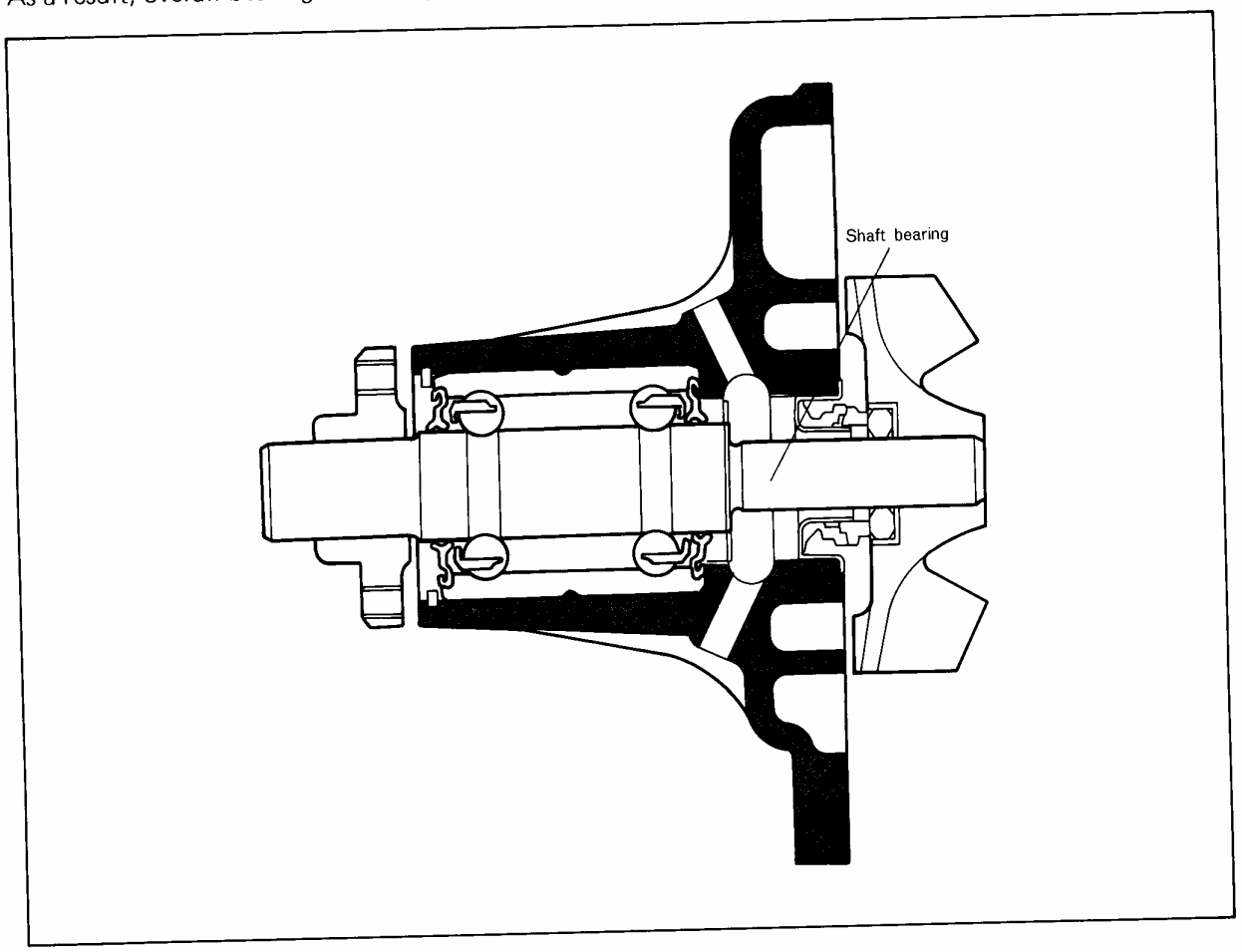


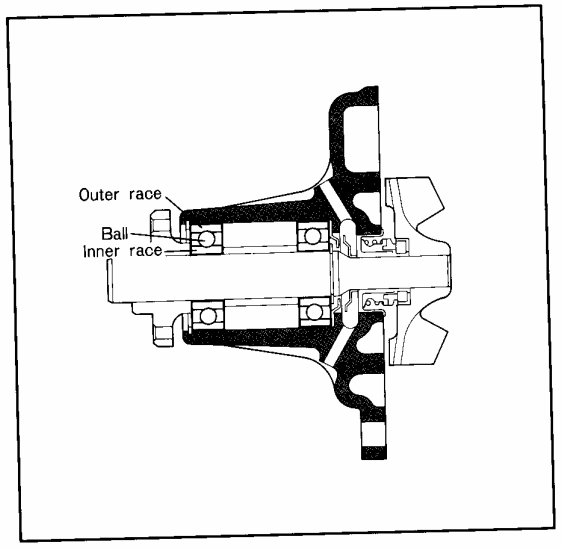
Fan noise has been reduced by the following amounts in the 1984 models as compared to the 1983 models:

4.5 dB at 3,000 rpm
5.0 dB at 4,000 rpm

WATER PUMP

The water pump bearing has been changed from the ball bearing type to the shaft bearing type. As a result, overall bearing durability has been improved.





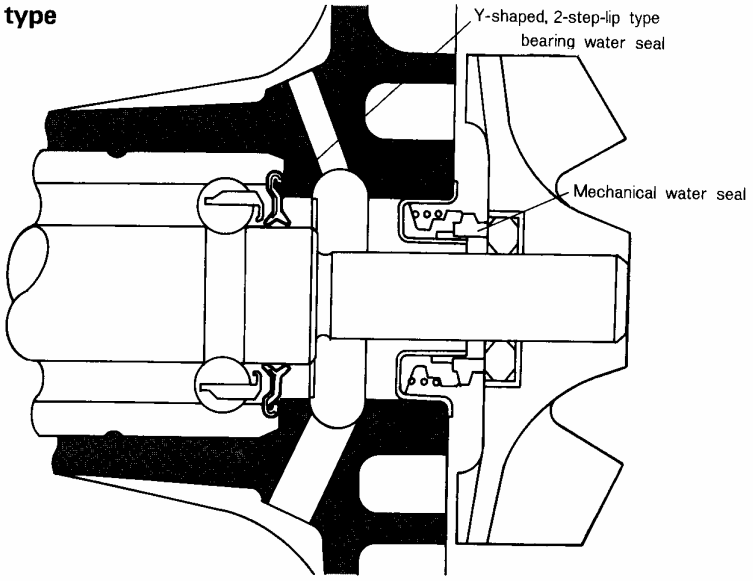
One advantage of the shaft bearing is that there is no mutual positional deviation of the ball and outer and inner race when the bearing is pressed into the water pump cover, with the result that there is less chance of bearing play.

Bearing water seal

In addition, the water seal of the bearing has been changed to the Y-shaped, 2-step-lip type so that it is more difficult for water to penetrate in to the bearing.

Normally, lubrication of the mechanical water seal is performed by the coolant during rotation. Coolant leaked from the water seal is discharged externally through the water drain hole, but water droplets which were not discharged and steam penetrated through to the bearing through its water seal, with the resulting problems of rust and bearing play. In order to solve this problem therefore, the Y-shaped, 2-step-lip type of bearing water seal has been adopted, thus improving the seal's performance and improving the durability of the bearing.

Shaft bearing type



Ball bearing type