

Please rate this document after reviewing at the bottom of this page.

## TROUBLESHOOTING

Trouble Symptom		Probable Cause		Remedy
Coolant leakage	<ul style="list-style-type: none"> <li>From the bleed hole of the water pump</li> </ul>	Visually check	<ul style="list-style-type: none"> <li>Check leaks after about 10 minutes of warming up.</li> </ul>	<ul style="list-style-type: none"> <li>If coolant still leaks, replace the water pump.</li> </ul>
	<ul style="list-style-type: none"> <li>From gaskets or bolts</li> </ul>		<ul style="list-style-type: none"> <li>Check the tightening of the water pump mounting bolts.</li> </ul>	<ul style="list-style-type: none"> <li>If leakage stops, reuse the water pump. (Do not replace the pump with a new one.)</li> <li>Retighten the mounting bolts.</li> </ul>
	<ul style="list-style-type: none"> <li>From outer surface of water pump</li> </ul>		<ul style="list-style-type: none"> <li>Check damage of gaskets or inflow of dust.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the gasket and clean dust off.</li> </ul>
	<ul style="list-style-type: none"> <li>From outer surface of water pump</li> </ul>		<ul style="list-style-type: none"> <li>Check the material for any cracks of the water pump.</li> </ul>	<ul style="list-style-type: none"> <li>Material defect. If any cracks are found, replace the water pump.</li> </ul>
Noise	<ul style="list-style-type: none"> <li>From bearings</li> <li>From mechanical seals</li> <li>Impeller interference</li> </ul>	Inspection with a stethoscope	<ul style="list-style-type: none"> <li>After starting the engine, check noise with a stethoscope.</li> </ul>	<ul style="list-style-type: none"> <li>If there is no noise, reuse the water pump (do not replace it).</li> </ul>
		Inspection after removing the drive belt.	<ul style="list-style-type: none"> <li>After removing the water pump and the drive belt, check noise again.</li> </ul>	<ul style="list-style-type: none"> <li>If there is any noise from the water pump, remove the drive belt and recheck.</li> </ul>
		Inspection after removing the water pump	<ul style="list-style-type: none"> <li>After removing the water pump and the drive belt, check noise again.</li> </ul>	<ul style="list-style-type: none"> <li>If there is noise, reuse the water pump. Check other drive line parts.</li> </ul>
		Inspection after removing the water pump	<ul style="list-style-type: none"> <li>After removing the water pump and the drive belt, check noise again.</li> </ul>	<ul style="list-style-type: none"> <li>If there is no noise, replace the water pump with a new one.</li> </ul>
Overheating	<ul style="list-style-type: none"> <li>Damaged impeller</li> <li>Loose impeller</li> </ul>	Loose impeller	<ul style="list-style-type: none"> <li>Corroded impeller wing</li> </ul>	<ul style="list-style-type: none"> <li>Check engine coolant.</li> <li>Poor coolant quality / Maintenance check</li> </ul>
			<ul style="list-style-type: none"> <li>Impeller separated from the shaft</li> </ul>	<ul style="list-style-type: none"> <li>Replace the water pump.</li> </ul>

\* Thanks for your cooperation for the more quality. Please surely rate this document before closing.