

## 7. TROUBLESHOOTING GUIDE

### 1. ENGINE

This guide is not intended to cover every conditions, however many of the more common possibilities are listed.

Trouble	Service	Remark
Engine oil pressure lamp fails to go off immediately after the engine is started.	<ul style="list-style-type: none"> <li>• Add the oil to the specified level</li> <li>• Replace the oil filter</li> <li>• Check oil leakage from the tube or the joint</li> </ul>	
Steam is emitted from the top part of the radiator(The pressure valve). Overheat warning lamp is turned ON.	<ul style="list-style-type: none"> <li>• Supply the cooling water and check leakage</li> <li>• Adjust fan belt tension</li> <li>• Wash out inside of cooling system</li> <li>• Clean or repair the radiator fin</li> <li>• Check the thermostat</li> <li>• Check the engine cooling water temperature gauge</li> <li>• Tighten the radiator cap firmly or replace the gasket of it</li> </ul>	
Engine does not start when the starting motor is turned over.	<ul style="list-style-type: none"> <li>• Repair where air is inhaled into fuel system</li> <li>• Check the injection pump or the nozzle</li> </ul>	
Exhaust gas is white or blue.	<ul style="list-style-type: none"> <li>• Check the valve clearance</li> </ul>	
Exhaust gas occasionally turns black.	<ul style="list-style-type: none"> <li>• Adjust to specified oil quantity</li> <li>• Replace with specified fuel</li> <li>• Clean or replace the air cleaner element</li> <li>• Check the nozzle</li> </ul>	
Combustion noise occasionally changes to breathing sound	<ul style="list-style-type: none"> <li>• Check engine compression pressure</li> </ul>	
Unusual combustion noise or mechanical noise	<ul style="list-style-type: none"> <li>• Check the nozzle</li> <li>• Check the injection pump</li> <li>• Check with specified fuel</li> <li>• Check overheating</li> <li>• Check the muffler</li> <li>• Adjust valve clearance</li> </ul>	

## 2. ELECTRICAL SYSTEM

Trouble	Service	Remark
Starting motor does not turn when starting switch is turned on.	<ul style="list-style-type: none"> <li>• Inspect and repair the wiring</li> <li>• Charge the battery</li> <li>• Check starting switch</li> <li>• Check battery relay switch</li> <li>• Place the foot pedal and travel/swing control lever in the neutral</li> </ul>	
Starting motor turns the engine sluggishly.	<ul style="list-style-type: none"> <li>• Charge the battery</li> <li>• Check the starting motor</li> </ul>	
Starting motor disengages before the engine starts up.	<ul style="list-style-type: none"> <li>• Check and repair the wiring</li> <li>• Charge the battery</li> </ul>	
Engine oil pressure lamp does not light up when engine is stationary(When the starting switch is ON position).	<ul style="list-style-type: none"> <li>• Check the lamp</li> <li>• Check the oil pressure switch</li> </ul>	
Charge lamp does not light up when the engine is stationary (When the starting switch is in ON position).	<ul style="list-style-type: none"> <li>• Check the lamp</li> <li>• Check and repair the wiring</li> </ul>	

### 3. HYDRAULIC SYSTEM

Trouble	Service	Remark
Bucket lacks lifting power. Bucket lifting speed is slow.	<ul style="list-style-type: none"><li>• Check the hydraulic oil level and add if necessary</li><li>• Replace filter on rear</li></ul>	
Bubbles in oil.	<ul style="list-style-type: none"><li>• Replace with specified oil</li><li>• Add oil if needed</li></ul>	
Oil pressure is too low.	<ul style="list-style-type: none"><li>• Bleed air from oil line</li><li>• Add oil and bleed air</li></ul>	
Cylinder vibrates when operating.	<ul style="list-style-type: none"><li>• Add oil</li></ul>	