

## 8. TROUBLESHOOTING GUIDE

### 1. ENGINE TROUBLESHOOTING

1) When engine is difficult to start.

Trouble	Service	Remark
Fuel is thick and doesn't flow.	<ul style="list-style-type: none"> <li>. Check the fuel tank and fuel filter.</li> <li>. Remove water, dirt and other impurities.</li> <li>. As all fuel will be filtered by the filter, if there should be water or other foreign matters on the filter, replace the filter.</li> </ul>	
Air or water mixed in fuel system.	<ul style="list-style-type: none"> <li>. If air is in the fuel filter or injection lines, the fuel pump will not work properly.</li> <li>. To obtain proper fuel injection pressure, unscrew the fuel cap nut and inspect the system.</li> <li>. Loosen air vent screw over fuel filter and fuel injection pump to eliminate all the air in the fuel system.</li> </ul>	
Thick carbon deposits on orifice of injection nozzle.	<ul style="list-style-type: none"> <li>. This is caused when water or dirt is mixed in the fuel. Clean the injection nozzle and check the fuel filler hole for damage.</li> <li>. Check to see if nozzle is working properly or not, if not, install a new nozzle.</li> </ul>	
Valve clearance is wrong.	<ul style="list-style-type: none"> <li>. Contact your local dealer.</li> </ul>	
Engine oil become thick in cold weather and engine cranks slow.	<ul style="list-style-type: none"> <li>. Change grade of oil according to the weather (temperature).</li> </ul>	
Start motor does not rotate when key switch is turned.	<ul style="list-style-type: none"> <li>. If the switch or start motor is faulty, have it repaired in a workshop.</li> <li>. If any terminal is loose or corroded, clean or fix it firm.</li> </ul>	

2) When power is insufficient.

Trouble	Service	Remark
Valve out of adjustment.	<ul style="list-style-type: none"> <li>. Contact your local dealer.</li> </ul>	
Air cleaner is dirty.	<ul style="list-style-type: none"> <li>. Clean or replace the element at every 100 of operation.</li> </ul>	
Fuel injection pressure is wrong.	<ul style="list-style-type: none"> <li>. Contact your local dealer.</li> </ul>	

3) When color of exhaust is specially bad.

Trouble	Service	Remark
Fuel is of extremely poor quality.	<ul style="list-style-type: none"> <li>. Select good quality fuel.</li> <li>Over -10°C (NO. 2 diesel) / Below -10°C (NO. 1 diesel)</li> </ul>	
Nozzle is faulty.	<ul style="list-style-type: none"> <li>. If necessary, replace with new nozzle.</li> </ul>	

## 2. MACHINE TROUBLESHOOTING

1) When the machine does not move while engine is running.

Trouble	Service	Remark
Parking brake is applied.	. Release the parking brake.	

2) Hydraulic system is faulty.

Trouble	Service	Remark
Oil is leaked from pipe or hose	. The pipe clamp is loose. Re-tighten it. . The pipe is cracked. Have it repaired in a workshop.it.	

3) Electric system is faulty.

Trouble	Service	Remark
Headlamps cannot be turned on or are dim.	. The fuse is blown. Check the wiring and replace the fuse. . The bulb is blown. Replace it. . The ground and terminal wirings are poorly contacted. Check and clean them. . The battery electrolyte level is low. Charge the battery.	
Horn does not sound.	. The horn switch is faulty. Replace it. . The wiring is faulty. Repair it. . The horn is damaged. Repair or replace it.	
Turn signal lamps do not blink.	. The horn switch is faulty. Replace it. . The blinking device is faulty. Repair or replace it. . The ground and terminal wirings are poorly contacted. Check and clean them.	
Battery cannot be charged.	. Check the battery and alternator.	
Work lamps do not come on	. The bulb is blown. Replace it. . The ground and terminal wirings are poorly contacted. Check and clean them.	