

## **Diesel Oil Generator Set 7 Use Taboos in Winter**

### **Notice 1:**

Avoid early draining off or do not draining off cooling water. Keep idle running before stall, when the cooling water temperature drop below 60°C, water is not hot, then turn on water and stall. If the cooling water is drained off early, the equipment in high temperature state will produce sudden contraction and crack when it invaded by cooling water. The remnant water should be drained off completely to avoid the frozen water expand to lead the equipment expanding split.

### **Notice 2:**

Avoid select fuel oil casually. The diesel oil flow ability will be slowed, viscosity will be enlarged in winter low temperature, besides, it hard to spray, this will lead to nozzle bad, deterioration of combustion, all this will lead to descend of diesel engine's dynamic property & economic performance. So the users should choose light diesel fuel with low pour point and good ignition quality. The demand of the diesel engine's condensation point is that it should blow 7-10°C compared with local lowest temperature.

### **Notice 3:**

- Avoid combustion-supporting start with open fire, the air cleaner can not took down, use cotton yarn dipped in diesel, then put the cotton yarn (which is used as pyrophoric substance) in intake-tube to help combustion-supporting start. In the process of starting, outside dusted air will be inhaled to the air cylinder without filtering, this situation will lead abnormal wear of plunger & air cylinder, besides, it will also make the diesel engine work rudely, this will damage the engine.

### **Notice 4:**

Avoid using open fire to bake oil bottom case. If do like that the engine oil will deteriorate even charring, lubricating property will down or totally lose, all this will intensify abrasion of the machine. Choose low condensation point engine oil.

### **Notice 5:**

Avoid wrong start method. In winter, some drivers in order to start the diesel engine quickly, they usually take the without-water start (start first, and then add cooling water). This kind of start method will severely damage the equipment, so this start method is prohibited. The right preheat way is: firstly, put the heat retaining quilt on the water tank, then open the drain valve, pour continuously 60-70°C clean water in the water-tank, close the drain valve when you feel water flew from the drain valve is hot, pour into the water tank 90-100°C cleaning soft water, and then shake the crankshaft, make the parts get lubricating, then start.

### **Notice 6:**

Avoid low-temp overload work. After the start of diesel engine, some drivers hurrys to do the overload work. The diesel engine which

started shortly, as the body's low temperature, the big viscosity of engine oil, engine oil can not easily fill the friction surface and cause heavy wear. Besides, plunger spring, valve spring and fuel injector spring will easily get break since the cold shortness. So after the start of diesel engine, the equipment should be kept idling at mid - low speed, do not do the overload work until the cooling water reach 60°C

**Notice 7:**

**Avoid ignore the** insulation of the equipment. The low temperature in winter may cause the over cooling. So insulation is the point to use. In the north , in winter, the user should prepare the muff and heat preservation curtain for the diesel engine.

Besides, thermostat play a very important role during the heating-up of the diesel's working. So the user should examine the thermostat whether in good condition.