**DIESEL FUEL PROBLEMS**

**WHAT ARE WINTER DIESEL PROBLEMS?**

All diesel fuel contains wax. It is considered an important diesel component because of its high cetane value. Normally the wax is a liquid in the fuel, however, when diesel fuel gets cold enough the wax starts to crystallise (i.e. solidify). If the temperature is sufficiently low, enough crystals will form to block the fuel filter, fuel line or nozzle.

**HOW TO IDENTIFY WAXING PROBLEMS**

* If wax has formed in a diesel fuel then it will block fuel lines and filters, it is visible as a white/yellow deposit or cloud in the fuel.
* The heater will be hard to start or will not start due to fuel starvation.

**EQUIPMENT**

Diesel fuel systems left exposed at night will cool quickly. Storage under cover in a shed or covering with a tarpaulin or blanket will reduce heat loss and waxing problems. Changing the fuel filter can often assist, as an old partially blocked filter will be less tolerant to small amounts of wax crystals.

**EMERGENCY PROCEDURE FOR COLD START**

1. Attempt to start the heater. If the heater fails to start then check fuel filter for wax. If the fuel won’t flow or is hazy then the filter body and fuel lines will need to be heated using an external heat source such as a blow heater or steam cleaner.
2. Once the heater starts to run, monitor the performance for approximately 5 minutes.

**BLENDING DIESEL**

If you are in low temperature regions such as Alpine/highland/inland or unseasonably cold weather, a diesel blend may provide some relief to lower the cloud point.

* Kerosene at 5 litres for each 100 litres of Diesel

Please note that above ratio would cover most regions in Australia. To ensure optimal blending, consult AS 3570-1998 for accurate kerosene ratios.

**NEVER** light a fire under the fuel tank.
**NEVER** add petrol to diesel fuel. Petrol has a low flash point, viscosity and cetane and the resulting blend may result in increased fuel system wear and operational problems.