

ELECTRIC PUMPS

- 14 **CHECK** that the voltage of the supply is correct. The pump will be either 110 volts or 230 volts.
- 15 The use of low voltage pumps at 110V (CTE) will effectively eliminate the risk of death and greatly reduce the degree of injury from an electric fault.
- 16 Use a pump with the lowest possible voltage to suit the job.
- 17 **DO NOT** use domestic plugs and sockets on construction sites, they are not robust enough.
- 18 **When using a 230V pump the risk of injury or death from electric shock is unacceptably high unless the following precautions are taken:**
- Use RCD power breakers at the supply socket to give protection for both the tool and its power cable.
 - The RCD should be protected from dust, wet weather, mechanical damage and vibration.
 - Position power cables where they are less likely to be damaged.
 - The pump, cables and RCDs should be checked every day (or every shift) using the following as a guide:
 - CHECK** that bare wires are not visible
 - Make sure that cables are not damaged and free from cuts and abrasions (apart from light scuffing).
 - CHECK** that the plug is in good condition, the casing is free from cracks, the pins are not bent or the socket is not blocked with debris or dirt.
 - ENSURE** that there are no taped or other non-standard joints in the cable.
 - CHECK** that the cable covering has not been pulled out of the grips at the plug or equipment. (The coloured insulation of the internal wires should not be visible).
 - CHECK** the outer casing of the tool for damage and **CHECK** for loose or missing parts or screws.
 - Make sure that there are no overheating or burn marks on the plug, cable and pump.
 - CHECK** the operation of the RCD power breaker by operating the test button.
- 19 Pumps using 110 volts should be checked weekly as in 18. (d) above.
- 20 **CHECK** regularly that all ventilation grills or holes on the motor housing are clear and free from dirt.
- 21 If the automatic cut-out operates, allow the motor to cool before re-starting.
- 22 **DO NOT** carry the pump by its cable or disconnect a plug by pulling its cable.
- 23 Unplug from the power supply before making adjustments or repositioning the pump.

PETROL OR DIESEL POWERED PUMPS

- 24 Position equipment on firm and level ground. Secure if necessary to prevent accidental movement.
- 25 **CHECK** that guards are secure. **NEVER** operate the pump with missing or defective guards.
- 26 Before starting the pump check how to stop it.
- 27 **DO NOT** smoke when refuelling. **NEVER** refuel with the engine running.
- 28 Replace the fuel caps securely on the engine and fuel container. Wipe up any spillage immediately.
- 29 Fuel containers should be in good condition and leak proof.
- 30 **DO NOT** use the pump in a hazardous or explosive atmosphere, or where fuel has been spilt.
- 31 **DO NOT** run the pump in a badly ventilated or enclosed area where exhaust fumes can sink into a basement or excavation.
- 32 If the pump has to be used in an enclosed area ducting may be used to discharge exhaust fumes to a safe place.
- 33 **CHECK** that there is no combustible material against the exhaust system. The exhaust pipe and silencer get very hot.
- 34 In the event of a leak of fuel or oil developing, stop the pump immediately.
- 35 If warning lights show or gauges register outside normal limits, switch off the engine.
- 36 **DO NOT** top up with coolant while the engine is running. Allow the radiator to cool before removing the radiator cap and topping up.
- 37 When noise levels are uncomfortably high at 85-89 dB(A), it is advisable to wear hearing protectors.
- 38 At still higher levels when it is necessary to shout to be heard, (90 dB(A) and above) the law requires that hearing protectors must be worn.

PUMPS WITH COMPRESSED AIR MOTORS

- 39 **CHECK** that hoses and couplings are not damaged. Failure can cause injuries.
- 40 Air hoses must be blown out before connecting to the pump. Hold the open end securely and open the air cock **CAREFULLY**. A blocked hose can become an air gun.
- 41 **CHECK** that all couplings are secure. If a coupling parts the hose will "whip". **NEVER** attempt to catch and hold it down, turn off the air.
- 42 **DO NOT** lift or lower the pump using its air hose.
- 43 Only use compressed air for cleaning down equipment with extreme caution. Use eye protection and ear defenders.
- 44 **DO NOT** use compressed air to clean yourself and **DO NOT** direct it at another person.
- 45 **CHECK** that air pressure is released from the hose before disconnecting any coupling.