



## MACHINES WITH PETROL OR DIESEL ENGINES

- 15 Before starting an engine the operator should familiarise himself on how to stop it.
- 16 **DO NOT** smoke when refuelling. **NEVER** refuel with the engine running.
- 17 Replace the fuel caps securely on the engine and fuel container. Wipe up any spillage immediately.
- 18 Fuel containers should be in good condition and leak proof.
- 19 **DO NOT** use the machine in a hazardous or explosive atmosphere, or where fuel has been spilt.
- 20 **DO NOT** run the machine in a badly ventilated area or where exhaust fumes can sink into basements or excavations.
- 21 If the machine has to be used in an enclosed area, fan assisted ventilation must be considered.
- 22 **CHECK** that there is no combustible material lying on or against the exhaust system. The exhaust pipe and silencer get very hot.
- 23 In the event of a leak of fuel or oil developing, switch the engine off immediately.

## MACHINES WITH ELECTRIC MOTORS

- 24 **CHECK** that the voltage of the supply is correct. The machine will be either 110 volts, 230 volts or 380 volts 3 phase.
- 25 The use of a low voltage machine at 110V (CTE) will effectively eliminate the risk of death and greatly reduce the degree of injury from an electric fault.
- 26 **DO NOT** use domestic plugs and sockets on construction sites, they are not robust enough.

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**When using 230V or 380V 3 phase equipment, the risk of injury or death from electric shock is unacceptably high unless the following precautions are taken:**

- a) use RCD power breakers at the supply socket to give protection for both the equipment and its power cable.
- b) the RCD should be protected from dust, wet weather, mechanical damage and vibration.
- c) position power cables where they are less likely to be damaged.
- d) The equipment 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 equipment 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 equipment
  - **CHECK** the operation of the RCD power breaker by operating the test button.

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A machine using 110 volts should be checked weekly as in 27 (d) above.

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**CHECK** regularly that all ventilation grills or holes on motor housings are clear and free from dirt.

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If the automatic cut-out operates, allow the motor to cool before re-starting.

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**DO NOT** use the machine in damp, wet or flammable conditions.

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**DO NOT** disconnect a plug by pulling its cable.

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Always switch off the power when the machine is not being used.

## MACHINES WITH COMPRESSED AIR MOTORS

- 34 **CHECK** that hoses and couplings are not damaged. Failure can cause injuries.
- 35 Air hoses must be blown out before connecting to a pneumatic tool. Hold the open end securely and open the air cock **CAREFULLY**. A blocked hose can become an air gun.
- 36 **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.
- 37 **DO NOT** carry the tool by its air hose.
- 38 When noise levels are uncomfortably high at 85-89 dB(A), it is advisable to wear hearing protectors.
- 39 At still higher noise levels, when it is necessary to shout to be heard, (90 dB(A) and above) the law requires that hearing protectors must be worn.
- 40 Only use compressed air for cleaning down equipment with extreme caution. Use eye protection and ear defenders.
- 41 **DO NOT** use compressed air to clean yourself and **DO NOT** direct it at another person.
- 42 **CHECK** that air pressure is released from the hose before disconnecting a coupling.