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MINI EXCAVATOR - (Diesel)

SAFETY PRECAUTIONS & WARNINGS

It is in the interests of those operating this equipment, and for the safety of others, that these **SAFETY PRECAUTIONS & WARNINGS** are carefully read and understood before operating this equipment.

PURPOSE

1. This equipment is designed for digging small trenches and undertaking larger excavations. In addition it can be used as a small earthmover and for loading piles of soil onto earth moving vehicles.

PERSONAL SAFETY

2. This equipment is designed for operation by an able bodied adult. Anyone with either a temporary or permanent disability must seek expert advice before using it. It must not be operated by minors, or by anyone under the influence of drugs or alcohol.
3. If the equipment is not used in a safe, careful and controlled way, personal injury, injury to others and damage to other equipment and structures may result.
4. Be aware of the conditions of insurance before operating this equipment (see under 'INSURANCE' below).
5. Do not attempt to operate this equipment unless you have had previous experience operating similar equipment, or the requisite course of instruction from an authoritative body.

Note: A Certificate of Training Achievement (CTA) for Construction Plant Operators is a requirement on most building/construction sites.
6. Operators of this equipment should have a current Site Safety Awareness Certificate.
7. Before attempting to operate this equipment, familiarise yourself with the equipment, its controls and operating characteristics.
8. You must always wear a seat belt when operating the equipment. This is essential if the equipment is fitted with a Roll Over Protection Frame (ROPF) as the ROPF can be a potential danger to the operator if a seat belt is not worn and the equipment overturns.
9. No attempt must be made to either load or unload this equipment from its transporting vehicle unless you have previous experience in such operations (see 'UNLOADING FROM A TRAILER' below).
10. Always have an additional person(s) present to provide assistance when loading or unloading this equipment.
11. Before starting your work, think and plan ahead to ensure you will be working in a safe environment.
12. When operating this equipment, it is recommended that the following items of Personal Protective Equipment (PPE) be worn:
 - Safety boots to EN345 or BS1870/4972.
 - Ear defenders giving protection for levels up to 100dB(A).
 - Safety helmet to EN397 or BS 5240.
 - High visibility vest or similar reflective clothing.

NOTE: Other types of work, or environment, may require a higher level of PPE.

INSURANCE

13. You are responsible for the safe custody of this equipment whilst it is on hire, under the terms of the insurance. You must indemnify, through insurance, the hire company against loss or unreasonable damage (i.e. vandalism, etc.).

Note: Some hire companies can offer insurance at an additional cost.

14. It is the hirer's responsibility to take all necessary care to make this equipment (i.e. remove the ignition key, battery, lock the fuel cap, etc.) against theft and vandalism at all times.
15. Be aware that if you are involved in a road accident, or damage a third parties property; the insurance cover may not protect you.

Note: If in any doubt concerning any aspects of the insurance cover, consult the hire company or the insurance company.

OPERATING AREA SAFETY

WARNING: If used indoors or in confined spaces this equipment could cause fatal carbon monoxide poisoning. Never use it in domestic premises and if used in other indoor situations you must ensure you first assess its suitability and the ventilation required for safe use. Mechanical extraction ventilation will be required in almost every case.

16. The equipment must not be operated on public highways unless it complies with the necessary traffic regulation, has the necessary insurance cover and the operator has the appropriate driving licence.
17. Before commencing work, ensure that the area you are to operate the equipment in a safe environment.
18. Make sure that the work area is clear of obstructions, soft ground, trenches, slopes, holes, low tree branches, scaffolding, etc. that may present a hazard.
19. Ensure that whilst operating the equipment that there is no one is near you that could distract you.
20. Be aware that operating this equipment may damage pipes or cables laid just beneath the surface.
21. Never run the equipment inside buildings, or in poorly ventilated locations, where they may be risk of serious or fatal injury from inhaling exhaust (toxic) fumes. **See warning above.**
22. Ensure that there are no overhead power lines less than 5m (16ft) above the raised and tilted bucket.
23. Anybody who is working near to you will also need to wear the appropriate PPE.
24. Before commencing work, warn others who may be working in the vicinity of the equipment, to keep clear. If possible, place safety barriers and signs around your work area.
25. Where at all possible, protect others working in the vicinity, from the noise, debris and dust.
26. Do not use this equipment where there is a danger of igniting fumes from petrol, or gas cylinders.

CONTINUED ON OVERLEAF >>>

OPERATING THE EQUIPMENT

Note: If the hire company has provided you special or additional instructions, you must follow them. Otherwise, follow the instructions given below.

SAFETY CHECKS

27. Visually check your equipment and all its accessories for serviceability (completeness, damage and undue wear). Do not use the equipment if found damaged or worn - contact the hire company immediately.
28. Before starting work, correctly adjust the driving seat and always wear the seat belt when in the cab.
29. Before attempting to operate the equipment, familiarize yourself with the equipments controls. Make sure you understand their purpose and function.
30. Be aware of underground pipes, cables and trenches.
31. Be aware of low tree branches, overhead electrical cables (less than 5m (16ft) above the highest part of the raised bucket/jib), scaffolding, etc.
32. Ensure your route is clear of people, obstacles and obstructions.
33. Check for the correct functioning of the bucket and check the equipments oil and fuel levels.
34. Before you start the equipment, you must know how to **STOP** it in an emergency.
35. You must operate the equipments amber flashing light when operating on or near a public highway, around industrial premises, construction/building sites, etc.

UNLOADING FROM A TRAILER

36. No attempt must be made to either load or unload this equipment from a transporting vehicle unless you have previous experience in such operations.
37. If possible, load/unload the equipment in an area that is level that provides ample room for manoeuvring.
38. To provide additional stability, leave the towing vehicle attached to the trailer.
39. If jacks are fitted to the trailer, these must be lowered and secured before loading/unloading the equipment.
40. Ramps to aid loading/unloading must be of the correct type (i.e. size, load bearing, etc.) and be securely fixed to the trailer at the correct angle.
41. Always drive the equipment off the trailer and reverse on to it.
42. Always have an additional person(s) present to provide assistance when loading or unloading this equipment.

USING THE EQUIPMENT

43. Always be aware of what is happening around you.
44. Study and familiarise yourself with the equipments controls before switching-on the engine. They may operate differently to previous equipments you have used.
45. The majority of excavators have a control-locking lever that disables the hydraulic controls. This must be released to start work and re-engaged on completion of work.
46. With the cab is rotated 180°, remember the controls for traveling will appear to be reversed.
47. Before starting-off, ensure your route is safe and clear of steep slopes, obstructions and obstacles.
48. Always stop the equipment on firm, level ground and clear of other traffic.
49. Never transport passengers on any part of the equipment.
50. Do not use the equipments bucket as a working platform or crane.
51. Do not use the equipment as a crane or as a tow vehicle.
52. Only use the dozer blade to fill-in trenches, not the side of the bucket.

53. Never exceed the safe working load (SWL) of the equipment.
54. Be aware of slopes and trenches.
55. Always keep bucket as low as possible and below your line of vision.
56. Stay in the vehicle until you have parked correctly. Always apply the handbrake when stationary.

STARTING THE EQUIPMENT

57. Check fuel and oil levels. Top-up if necessary.
58. The bucket and dozer blade must be carefully lowered to the ground before starting the engine. This is possible even without the engine running.
59. Set all the hydraulic controls to '**NEUTRAL**'.
60. Set the throttle lever to the '**IDLE**' position and insert the ignition key.
61. For cold starting, turn the ignition key to the (I) position for approximately 10secs and then rotate the ignition key further to the (II) position for approximately five seconds and the engine should start. Release pressure on the ignition key.
62. Should the engine fail to start, wait a few seconds and repeat the steps 59 to 61.
63. With a warm engine, go straight to ignition position (II).
64. Allow the engine to warm-up before commencing work.

DRIVING THE EQUIPMENT

65. This equipment does not have any gears but relies on a hand throttle for traction speed. Do not over work the engine; drive at speeds consistent with the work to be undertaken.
66. The hand throttle also serves as a brake control for the equipment. Pushing it forward to '**IDLE**' speed applies the equipments brake.
67. Do not use the service pedal as a 'foot rest'.
68. When it is safe and you are ready to move-off, operate the throttle to obtain the desired speed and operate the track control levers (left and right) to steer the equipment.

SWITCHING-OFF THE EQUIPMENT

69. The bucket and dozer blade must be lowered to the ground before switching-off.
70. If the equipment has been subjected to a heavy load, do not switch the engine off immediately, move the throttle to the '**IDLE**' position and allow the engine to idle for a few minutes.
71. Turn the ignition to the '**OFF**' position and remove the ignition key.
72. Never leave the equipment running when it is unattended.

REFUELLING

73. Refuel with diesel only.
74. Before refuelling, move the machine to a safe environment.
75. **STOP** the engine and allow it to cool down.
76. Do not smoke whilst refuelling, as diesel is inflammable.
77. Ensure the area around the filler cap is clean.
78. Use a funnel and clean diesel when refuelling.
79. Be careful not spill any fuel on yourself or the machine. Should a spillage occur, wipe clean and dispose of all fuel soaked material carefully and safely.
80. Replace the fuel cap and secure correctly.

CONTINUED ON OVERLEAF >>>

SECURITY AND MAINTENANCE

- 81. Visually check the condition of the equipment at the start of each day.
- 82. If the equipment operates erratically, or incorrectly, do not use and do not attempt to repair it. Inform the hire company.
- 83. Periodically clean the equipment to ensure it is free from debris.
- 84. In freezing weather, this equipment should be left parked on timbers to prevent the tracks from freezing.
- 85. When the equipment is left unattended for long periods (i.e. overnight), ensure it is made secure to prevent unauthorised use or loss.

COLLECTION & PICK-UP

- 86. For safety reasons this equipment requires you to use a **LORRY**.

