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1903 Safety Guidance
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Frank Key. PLANT & TOOL HIRE

# Mini Excavator

**The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.**

## It is important to read all of this leaflet BEFORE you use the Mini Excavator

1. Plan work and think ahead to ensure work will always be carried out safely.
2. Diesel fuel is highly flammable. Take care not cause a fire or explosion.
3. The mini excavator is designed for digging trenches and larger excavations. It is also used for loading earth-moving vehicles.
4. The action of the mini excavator can cause injury or damage if the equipment is not used in a careful and controlled way.
5. Do not drive this excavator unless you have previous experience or have had a course of instruction from a responsible body. Drivers of this vehicle should have at least a current site safety awareness certificate.
6. A Certificate of Training Achievement (CTA) for Construction Plant Operators is required on most construction sites. Training to achieve a CTA is available from CITB appointed bodies.
7. Do not attempt to load or unload the machine from a truck or trailer unless fully experienced in doing so.
8. The following items of personal protective equipment is the minimum required: Ear Muffs or plugs giving protection at the ear of levels up to 85dB(A); safety helmet; safety boots; high visibility vest or similar reflective garment.
9. The excavator must not be used by minors or by anyone under the influence of drugs or alcohol.
10. The excavator is designed for operation by an able bodied adult. Anyone with either a temporary or permanent disability must seek expert advice before using the machine.

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# Using the Mini Excavator

1. Be aware of what is happening all around. Do not assume that other persons or obstacles will move out of the way.
2. Stay within the cab until parked up properly. Do not lean out to move obstacles or give assistance.
3. Watch out for hazardous areas such as soft ground, trenches or overhead obstacles.
4. Be careful on slopes – avoid turning on them if possible.
5. If there is any possibility of a power cable or gas pipe in the area where digging is to occur, do not dig with the excavator.
6. Use a cable avoidance tool to locate the metal pipes and cables. Contact the hire company if you require such a tool.
7. If any pipe or cable is damaged, the repair bill may have to be paid by you.
8. If a trench is going to be more than 1 metre deep it should be properly supported with trench props to prevent it collapsing. Contact the hire company who will be able to supply any additional equipment required.
9. Never move the excavator adjacent to any trench where men are working.
10. If an open vehicle, such as a dumper, is being loaded then the driver must not be seated and should move a safe distance away.
11. All open trenches and excavations must be cordoned off and warning signs erected.
12. Take care not to drive forward over a trench; always move back and away from the trench.
13. Use the dozer blade, not the side of the bucket to fill trenches.
14. Do not force the excavator to do more than it is capable of. This can cause it to become unstable. Take time and work steadily, the job will be done better and safer.
15. At night in public places, the work area must be lit. The hire company will be able to supply any additional equipment required.
16. Always stop on firm level ground away from the work area and other traffic.
17. In freezing conditions, park the excavator on timbers to prevent the tracks becoming frozen.
18. Lower the bucket and dozer blade, stop the machine, apply the parking brake and remove the key before leaving the excavator unattended.
19. If the equipment does not work properly, do not attempt to repair it. Contact the hire company.

***Please keep this leaflet safely as it may be required for future reference***

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## Useful Reference Points • www.hae.org.uk/businessguard

## Before Starting Work...

### Before Starting Work WORK AREA

1. Do not use the mini digger where there is a danger of explosion. It will ignite fumes from petrol or gas cylinders.
2. Using this equipment indoors or in confined spaces could cause **fatal** carbon monoxide poisoning. **Never** use it in domestic premises and only use it in other indoor situations if its suitability and the ventilation required has been **fully** assessed. Mechanical extraction ventilation will almost always be required.
3. Never operate on any public road or highway unless the machine is insured and complies with road traffic regulations. In addition, you must have an appropriate driving licence.
4. Check there are no underground power cables, gas or water pipes or other services in the area where the dig is to take place.
5. Check the work area for soft ground, slopes, holes and trenches or objects that may damage the tracks.
6. Ensure there are no tree branches, scaffolding or anything else that may cause a hazard.
7. Keep well away from any overhead power lines unless they are at least 5m (16ft) above the highest part of the raised skip. Do not forget that high-voltage electricity can jump across large gaps.
8. If the work area is complex or noisy, always work with a banksman.

### OPERATORS

1. The following items of personal protective equipment (PPE) are the minimum that should be worn whenever using the small dumper. Particular jobs or environment may require a higher level of protection.
2. The equipment is likely to cause noise levels up to 85 dB(A) – wear appropriate ear muffs or plugs giving hearing protection for this level as a minimum.
3. A safety helmet must be worn when using the machine on a construction site.
4. Safety Boots must be worn when working with the mini excavator.
5. A reflective vest or similar high visibility garment must be worn when working with the mini excavator.
6. If fitted the seat belt must always be worn when using the mini excavator.
7. Anyone who is working near the mini excavator will also need to wear the appropriate personal protective equipment.

### MINI EXCAVATOR

1. Check the machine, engine, tracks, bucket and all equipment. Do not use anything found to be damaged – contact the hire company.
2. Check the excavator each time it is used. It will have been supplied in good condition and ready to use by the hire company – ensure that it has not been damaged or altered in any way since then.
3. Most excavators have control locks which disable the hydraulic controls. The control lock must be released to commence work and re-engage when leaving the machine.
4. When working on or near a public highway, inside industrial premises or construction sites the flashing amber beacon on the excavator must be used.
5. Do not use the excavator as a crane.
6. Do not use the bucket as a temporary work platform.
7. Never carry passengers on any part of the excavator.
8. Never tow anything with this machine.
9. If you have not driven this type of excavator before, carefully look at all of the controls before starting the engine. Don't forget the control levers may not be in exactly the same position as other machines. Ensure you know which is which.
10. Before starting work let the engine run at part throttle, drive into a clear area and carefully practise all control movements and machine actions until familiar with them.
11. Remember when moving with the cab rotated 180° the effect of the travel controls will appear to be reversed.

### INSURANCE

1. Under the terms of hire, you are responsible for the safe custody of the machine. The hire company must be indemnified against loss or unreasonable damage such as vandalism. The best way to achieve this is by insurance.
2. However the machine must always be secured against theft or vandalism.
3. Some hire companies will offer insurance cover at an extra charge.
4. In addition, be aware that if damage is caused to property belonging to a third party or if involved in a highway accident, it is unlikely that normal insurance policies will give any protection.
5. If in any doubt regarding the insurance cover, check with the hire company or insurer immediately.

### REFUELLING

1. No smoking.
2. If possible, drive the mini excavator to a safe place away from the work area.
3. Stop the engine and let it cool down.
4. Clean the filler cap and the area around it to prevent dirt falling into the diesel tank.
5. Use clean diesel when refuelling. If there is not a fuel pump available use a funnel. Do not spill any diesel on yourself or the excavator.
6. Wipe any spilt fuel off the machine. Dispose of the diesel soaked cloth carefully.
7. If any fuel is spilt on the ground, wipe it up or cover with soil.
8. If any diesel is spilt on clothes, change them immediately.
9. Replace all fuel caps properly and leave the fuel container in a safe, cool place.

### STARTING THE MACHINE

1. Ensure no one is with the work area of the excavator.
2. Fasten the seat belt if one is provided.
3. Set all hydraulic controls to neutral position, move the throttle to its middle setting and insert the ignition key.
4. For a cold start turn the key to the preheater position for 10 seconds, then turn to the start position to engage the starter motor for about 5 seconds.
5. If the engine fails to start turn the key off for a few seconds then repeat the preheater cycle.
6. In warm temperatures or if the engine is warm turn the key to the start position.
7. If any fuel is spilt on the ground, wipe it up or cover with soil.

### STOPPING THE ENGINE

1. Set the bucket and dozer blade on the ground.
2. If the excavator has been under heavy load, do not switch off engine immediately. Reduce the throttle and allow the engine to tick over for a few minutes to cool down.
3. Close the throttle fully and turn the ignition key to the off position.
4. Remember to remove the key.

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