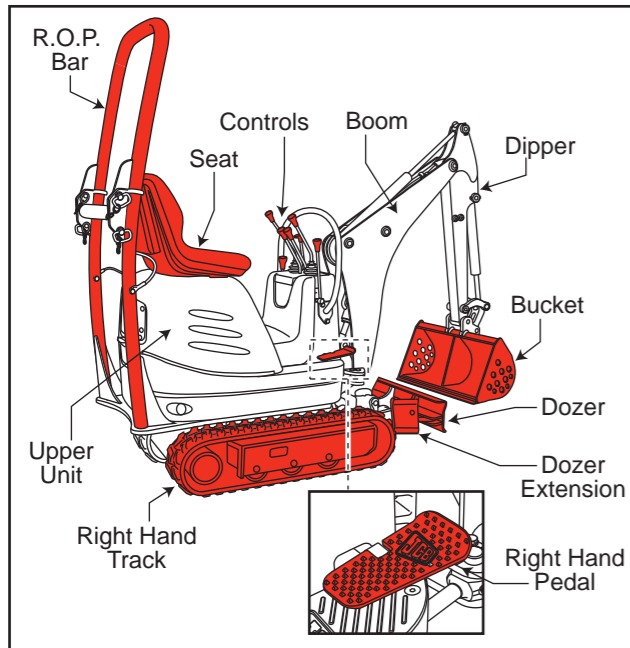


OPERATING THE UNIT

Pre-inspection

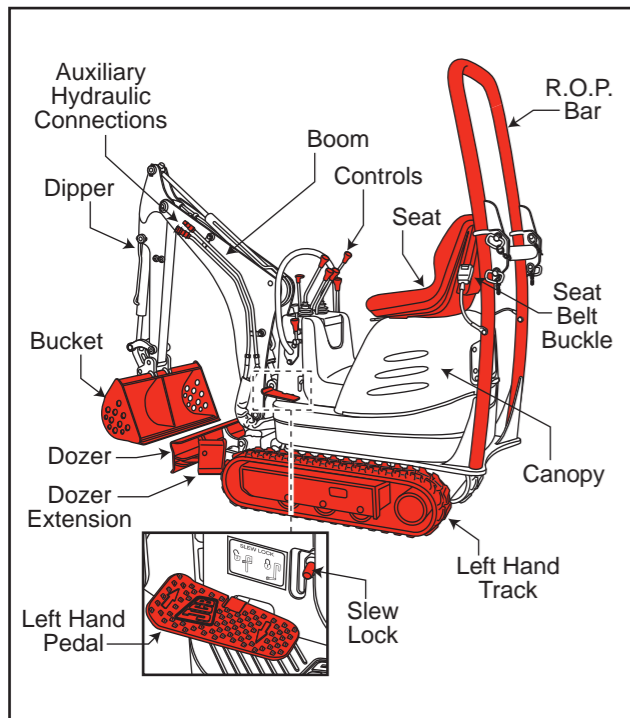
Walk around the digger and make a full visual inspection of hoses, linkages, tracks, covers and rams. If anything looks unserviceable, contact the hire company for advice. **DO NOT** use the Micro Digger unless you are fully satisfied that it is safe to do so.

During operation you **MUST** ensure that no one is allowed close to the Micro Digger, to avoid anyone being hit or trapped by the mechanism.



Fully inspect the work area and check for hazards such as pot holes, overhead cables and the path of other site traffic.

Start the engine then raise the dozer. Bring both boom and dipper in towards the operator then set the bucket 150mm (6in) off of the ground. Where applicable, unlock the slew lock.



Carefully drive the unit to the work area and position it ready to begin work.

Load the bucket making sure that the load is not higher than the bucket's walls. **DO NOT** allow the load to over hang from the bucket.

DO NOT TAKE RISKS

Falling debris can cause fatal injury.

DO NOT shake the bucket to free the load. If a load is stuck, lower the bucket and free it manually.

EQUIPMENT MAINTENANCE

Regularly check fuel and oil levels and top up as necessary. When not being used, store the unit in a clean condition and in a safe place with the key removed. Keep this equipment away from unauthorised users.

FINALLY

When you have finished with the Micro Digger, park it in a safe place with the dozer and the bucket lowered.

Switch off the engine and remove the key then set the slew lock and excavator control lock levers to on.

Finally, give everything a thorough clean ready for return.

NOTE

Failure to clean the equipment thoroughly may make you liable to a cleaning charge.

110010



Hire Station

Tools for Industry, Construction & DIY

Micro Digger JCB Micro

BASIC SAFETY

Before using this equipment and to avoid personal injury, carefully read and understand these instructions. If there is anything you do not understand, **DO NOT** use this equipment, contact the hire company for advice.

These instructions are not intended as a replacement for the manufacturer's Manual/Operator Handbook. You must use these instructions in conjunction with the manufacturer's manual.

These instructions have been written to inform the hirer / operator of how to set up and operate the Micro Digger. They are not, however, a guide to excavating. **YOU** are responsible for all risk assessments, safe practices and abiding by all relevant Health and Safety laws. It is presumed that the hirer / operator has the necessary qualifications, experience, training and skill to operate this equipment safely.

Make sure you are aware of all safety requirements and that this equipment is suitable for the task you wish to undertake. The work area must be cordoned off from the general public and bystanders.

Legal Requirements

This Micro Digger is **NOT** designed for use on the public highway or on public footpaths.

It is the hirer's sole responsibility to ensure that the driver/operator works within the law and has suitable insurance, training and experience before operating this equipment.

This equipment must not be operated by persons who are under the influence of alcohol or drugs. Do not use this equipment if you are tired or unwell.

You **MUST** perform a risk assessment before using this equipment to ensure your safety and the safety of others.

This equipment must only be used by persons who are medically fit to do so. If you have any medical condition, are recovering from any medical condition or suffer from any mental or physical disability, you **MUST** seek professional medical advice before using this equipment.

Wear the correct Personal Protective Equipment for the task ahead.

Wear gloves when operating this equipment. Wear suitable clothing. Steel toe cap boots must be worn. Wear a hard hat.

This equipment produces noise levels above 94 dB(A), ear defenders must be worn.

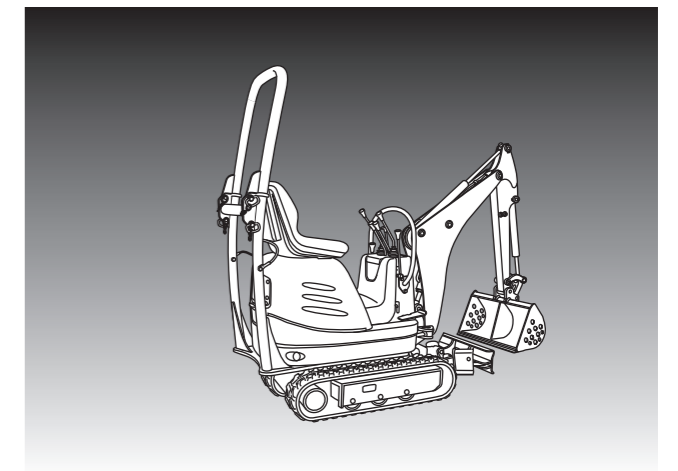
If the work environment requires, wear a dust mask or suitable respiratory protective equipment.

Do not wear loose jewellery or clothing that may get in the way or become trapped in the equipment. Tie back long hair.

Inform everyone in the work area of what you are doing. Always switch **OFF** the engine when cleaning, making adjustments or when left unattended.

The engine produces exhaust gasses that can kill so safeguard against the risk of carbon monoxide poisoning. Do not operate this equipment within a building or in a confined space, ensure adequate ventilation.

SAFETY & OPERATING GUIDE



110010 MICRO DIGGER – JCB MICRO

Diesel engines become hot in use so avoid contact with the engine until it has cooled. Only operate this equipment in a well lit and ventilated area.

Diesel Do's and Don'ts

Do clear up diesel spillages immediately.
Do store spare fuel in a cool, safe place in an approved sealed container.
Don't refuel the engine when it is hot or running.
Don't smoke or use a naked light when refuelling.

DO not work near flammable materials.
GET FAMILIAR! You must understand how to switch this machine **OFF** quickly in case of an emergency.

HAVS

Hand-Arm vibration syndrome is a disease that can lead to permanent disability. This can be caused by prolonged use of any tool or powered equipment that vibrates during operation. This equipment has a vibration level of 2.88m/s² and should be classed as

LOW RISK

As a precaution, stop working if you experience discomfort or numbness when operating the equipment.

DO NOT allow anyone under the bucket, boom or dipper for any reason. Do not use this equipment where there are overhead power lines, close to ceilings or similar hazards.

Before digging into anything that may contain pipe work or electrical power cables, check the area using a metal detector or a cable avoidance tool. Where available, liaise with the site manager.

Whole Body Vibration

The manufacturer of this equipment have given this machine a WBV rating of 1.2 m/s².

DO NOT use this equipment to tow, move or bump anything. It must not be used as a crane or for supporting the weight of a structure. This equipment may only be used on surfaces which are able to bear its weight and its load.

Always remove the key when left unattended.
DO NOT use this equipment to carry personnel.
When moving a loaded unit or with a raised bucket, keep to a slow speed and **DO NOT** turn quickly. Fast speeds and quick manoeuvres may cause the unit to over turn.

Always make sure that the load is evenly distributed within the bucket.

DO NOT exceed the units maximum safe working load which is governed by the size and type of bucket being used. For further information contact the hire company.

Carefully inspect the equipment before use, if there is any doubt about its condition, **DO NOT USE IT.**

PREPARATION

With the Micro Digger positioned on firm level ground, check fuel and engine oil levels and top up as necessary.

To gain access to the fuel tank and engine, firstly ensure the engine is switched **OFF**.

To unlock the engine canopy, insert the ignition key into the lock and turn anticlockwise.

Remove the oil dipstick and check that the oil level is in line with the maximum marker. Top up as necessary with suitable engine oil then replace the dipstick.

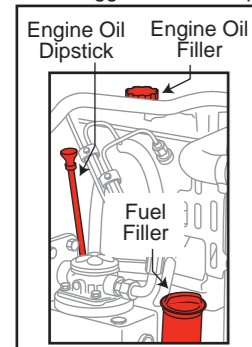
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Information on vibration levels, weights and sound levels in this guide were obtained from the manufacturer and correct at time of print. No liability will be accepted for any inaccuracies.

Check the fuel level and top up if required with clean fresh diesel. Always ensure that you replace the fuel cap, never operate the Micro Digger with the cap missing.



Lower the canopy until it clicks shut, then turn the key clockwise to lock.
ROP (Roll Over Protection Bar)...
 This bar can be lowered for access through low openings and when transporting.
 NEVER operate the Micro Digger with the ROP Bar lowered unless driving through a restricted entrance.
 If lowered, remove the two R clips followed by the pins. Raise the ROP Bar and lock in the upright position using the pins and clips. Make sure all pins and clips are correctly positioned and fitted.

To lower the ROP Bar, reverse the instructions making sure that you remove the beacon and stow it under the engine canopy for safe keeping.

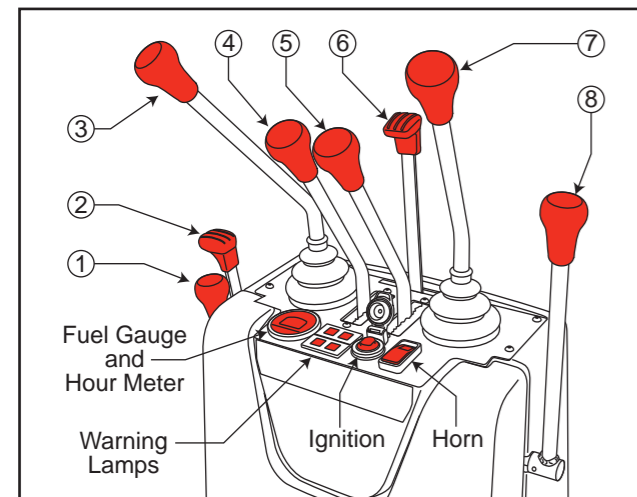
SEATING

You should sit on the seat and adjust both back rest and forward position to suit your build. Finally, adjust the seatbelt to suit. Whenever seated, you MUST wear your seat belt.

CONTROLS

There are 8 control levers and you should ensure that you understand what they are for and how they respond to being moved.

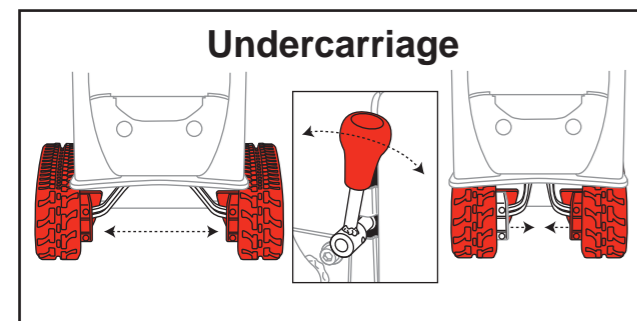
The following description of the controls is based upon the operators view when seated on the Micro Digger. Please see illustrations for the respective number reference.



ALL levers except No 2 and 6 can be moved progressively, the further the lever is moved, the faster the specific operation. When released, the levers will self centralise to neutral, if not, stop the unit and contact the hire company for advice.

(1) Undercarriage Extension Lever...

This lever is used to control the undercarriage (tracks). The tracks can be retracted to allow entry through a narrow doorway. When fully retracted the unit can pass through a 700mm (2ft 4in) doorway. Move the lever back to retract and forward to extend. Only operate this lever in accordance with the instruction under DOORWAY ACCESS.

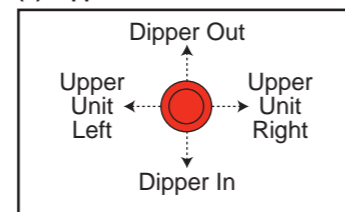


NOTE; Access through a narrow doorway is only possible if the dozer extensions are also retracted.

(2) Throttle Lever...

Controls the engine speed, move forward to increase engine speed, move back to decrease.

(3) Dipper and Slew Lever...



Dipper; arm section connected to the main boom and bucket.
 Slew; Rotation of the main unit on its undercarriage, NOT to be operated with the slew lock engaged.
 This lever can be moved in four directions.

Forward movement will cause the dipper to move out (away from the operator).

Backward movement will cause the dipper to move in (toward the operator).

Left movement will cause the upper unit to rotate to the left.

Right movement will cause the upper unit to rotate to the right.

WARNING: When the main unit is turned 180°, you must reverse the action of Track Levers number 4 & 5. REMEMBER, forward will be reverse and reverse will be forward and the track to your left-hand side will be operated by the right-hand lever, and vice versa.

(4) Track Lever (Left Hand)...

Controls the left set of tracks. Moving it progressively forward will make the track move forward, moving the lever back makes the tracks move back.

When operated on its own, the Micro Digger will turn right when moved forward and left when moved back.

(5) Track Lever (Right Hand)...

Controls the right set of tracks. Moving it progressively forward will make the track move forward, moving the lever back makes the tracks move back.

When operated on its own, the Micro Digger will turn left when moved forward and right when moved back.

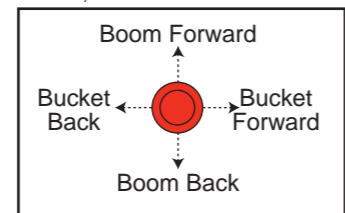
(6) Excavator Controls Lock Lever...

This lever is used to lock the excavator levers 3 and 7 in their central (neutral) position. Move the lock lever to the right to lock and to the left to unlock.

Lock the levers when travelling or if using the dozer.

(7) Boom and Bucket Lever...

Boom; arm section connected to the main unit and the Dipper.
 Bucket; connected to the end of the Dipper.



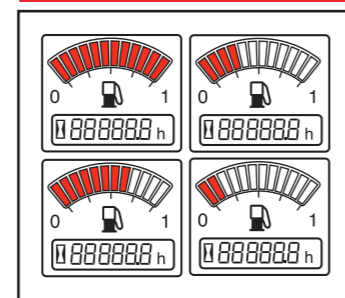
This lever can be moved in four directions.
 Forward movement will cause the Boom to move forward and down.
 Backward movement will cause the Boom to move back and up.
 Left movement will cause the Bucket to move back in a scooping action (towards the operator).

Right movement will cause the Bucket to move forward in a discharging action (away from the operator).

(8) Dozer Lever...

This lever operates the dozer fitted to the front of the Micro Digger. Move the lever forward to lower the blade and back to raise. Always check between the rear of the dozer blade and the tracks for foreign objects before lowering.

DASHBOARD



The dashboard houses the fuel gauge, hour meter, warning lamps and the ignition key.

The fuel gauge has a segmented level LCD to indicate fuel remaining. As the level drops, so the segments extinguish.

When the level falls below 4 segments, a buzzer will sound three times and the pump symbol will flash. DO NOT wait, refuel BEFORE the last segment extinguishes as there is NO reserve.

If all segments flash at the same time, regardless of fuel level, there is a fault with the fuel system. If all segments flash, switch OFF the engine and contact the hire company for advice.

Charge, Coolant Temperature and Engine Oil Indicators...

If one or more of these lamps remain on when the engine is running, STOP the engine immediately and contact the hire company for advice. These lamps warn of a charge fault, low oil pressure and an overheating engine and must not be ignored.

FOOT PEDALS

There are two pedals, each are rocked forward or backward.



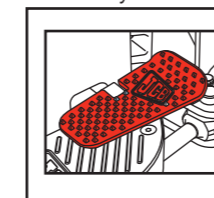
Left Hand Pedal...

Used to control the boom when swung to the left or right. The pedal will only operate if it is firstly depressed centrally by the foot. Once depressed, the pedal can then be pivoted forward or back.

The pedal will spring back up to neutral once you release the pressure.

To swing the boom to the left, depress the pedal then pivot the rear with your heel.

To swing the boom to the right, depress the pedal then pivot the front with your toes.



Right Hand Pedal...

This pedal operates in the same way as the left and is used to control hydraulic flow to an approved attachment fitted in place of the bucket.

For information on any attachment, please contact the hire company or read the additional Operating and Safety Guide supplied with it.

SLEW LOCK

Positioned just above the left hand foot pedal and used to lock the main body in a forward position over the undercarriage.

The lock should be engaged when loaded in a transport vehicle or when driving through a doorway.

To set the lock on, firstly set the unit straight. Raise the lock lever, move it to the left and release. Always double check that it is correctly engaged when required and released whenever it is not! To disengage, fully raise the lever, move to the right and release.

STARTING THE ENGINE

WARNING

Before starting the engine, ensure that you are seated and that the Micro Digger is clear of other personnel.

To start the engine, firstly check fuel and oil levels.

Set the throttle lever (2) to the halfway position then insert the key into the ignition.

If the engine is cold, turn the key clockwise to position II and wait for the heat warning lamp to extinguish.

If the engine is already warm, preheat is not necessary.

Now turn the key clockwise to position III (start) and hold for a maximum 15 seconds or until the engine fires.

If the engine fails to fire, return the key to O (off) and wait a minimum 30 seconds before repeating the start procedure.

Once running, return the key to position I (run), set the throttle to idle and allow the engine to warm-up for at least 5 minutes.

To stop the engine, turn the key to the O (off) position.

If any of the warning lamps remain on and a buzzer sounds, note which lamp is in question, switch the engine OFF and contact the hire company for advice.

OPERATIONAL CHECKS

Once warmed up, operate each hydraulic lever to ensure that everything is working correctly. Pay special attention to the levers returning to neutral when released.

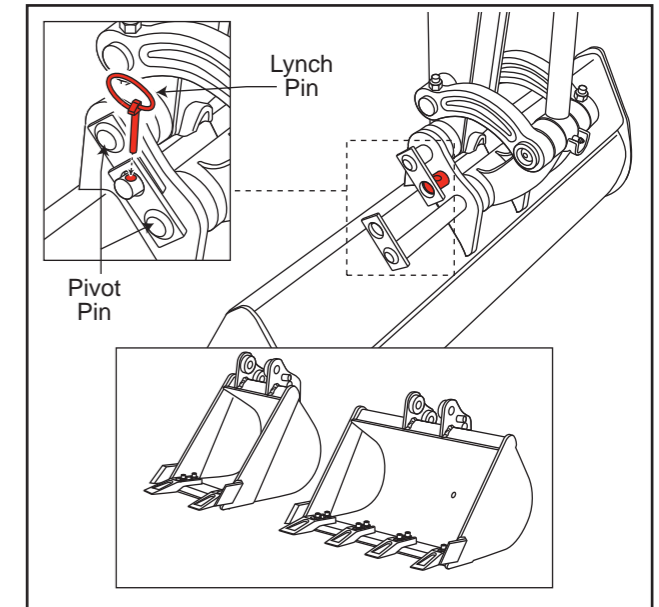
Carrying out these checks will also help to warm up the hydraulic system.

BUCKET ATTACHMENT

WARNING

When changing buckets or attachments DO NOT place your fingers through any of the location holes nor between linkages, buckets and similar parts. DO NOT attempt to lift a bucket or attachment on your own, always get suitable help.

If the bucket needs to be changed, carefully lower the existing bucket so that it is just on the ground then switch the engine OFF and remove the key.



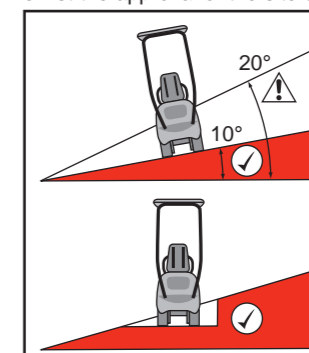
Remove the lynch pin followed by the two pivot pins. Start the engine and raise the boom so that the dipper separates from the bucket.

Position the new bucket in the same place as the one you are removing then lower the dipper aligning it with the bucket.

Switch off the engine and remove the key once more. Insert the pivot pins and replace the lynch pin.

DRIVING ON A SLOPE

This machine can be operated on a gradient provided that the following information and warnings are observed. Where applicable, enlist the approval of the site safety officer.



Figures given are based on the undercarriage being fully extended and the dozer lowered for additional stability.

The digger can be used safely on gradients up to 10 degrees with the dozer positioned on the lower side of the slope.

The maximum gradient this machine can be operated on is 20 degrees BUT only with extreme caution and after a thorough risk assessment. If in doubt don't proceed.

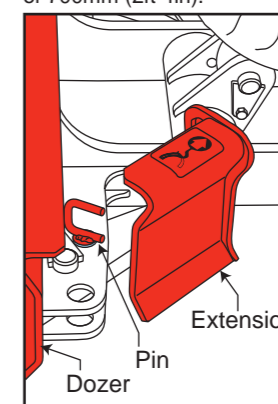
Where possible, use the digger to dig out a level space for the machine to sit on. This can then be back filled afterwards.

When driving on a gradient, try to drive up and down rather than across.

Keep speeds to a Minimum. Keep the bucket lowered and back.

DOORWAY ACCESS

When required, the undercarriage and dozer can be set to a width of 700mm (2ft 4in).



Firstly, fold in the dozer extensions. Remove the pin, swing the extension in and lock in place with the pin. Repeat this on both sides.

Next lower the dozer fully, slew the machine 90 degrees across the tracks then lower the bucket to the ground until it causes one set of tracks to lift from the ground.

Move the undercarriage lever back to retract the tracks fully. Once retracted, raise the bucket to bring the unit back on both tracks and raise the dozer.

Slew the unit so that it is inline with the tracks, then apply the slew lock and the excavator control lock lever to prevent accidental operation.

Drive through the doorway and once clear, reset the dozer and undercarriage to normal width.

NEVER continue travelling or operating the digger with undercarriage retracted.