

## Using the Cut-off Saw

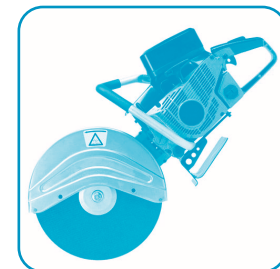
1. Wear protective equipment including goggles and dust mask.
2. Check that the cutting wheel is fitted securely, and that the guard is properly adjusted.
3. Always hold the machine securely with, both hands: left hand on the front handle, right hand on the rear.
4. Be prepared for the reactive force when the wheel contacts the surface to be cut: the machine will pull away from you, or pull up a vertical surface.
5. Use full throttle: make sure the wheel is running at full speed before lowering it carefully onto the surface.
6. If the machine starts to labour and slow down do not force it so hard. Do not overload the machine. Long shallows cuts keeping the wheel speed up are more effective than aggressive pressure.
7. When you come towards the end of the cut, release some of the pressure on the machine and be prepared for it to come free from the material.
8. The machine can only cut in straight lines. Do not try to go round corners.
9. Only use the machine up to shoulder height. Arrange a suitable working platform if you need to cut higher than this.
10. Watch out for signs that vibration from the work may be affecting your hands. If fingers start to tingle or feel numb, take a short break from cutting work. Exercise fingers to encourage blood circulation. Find out more about vibration. **Ask the hire company for a copy of the HAE leaflet no. 2150 – Hand-arm vibration or visit [www.hse.gov.uk/vibration](http://www.hse.gov.uk/vibration)**
11. To help prevent vibration affecting hands, operate the machine for shorter periods. Keep hands warm – wearing gloves may help do this.
12. Stop the engine if leaving the machine unattended.
13. If the cut-off saw does not work properly do not attempt to repair it. Contact the hire company.
14. You may want to read this leaflet again. Please keep it safely until you have finished work.

## Cut-off (Abrasive) Saw

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 Cut-off Saw

1. Plan your work and think ahead to make sure you will always be working safely.
2. Petrol mixture is highly flammable. Take care not to cause a fire or explosion.
3. This cut-off saw is designed to cut concrete, masonry, asphalt, steel, cast iron and similar materials using the appropriate abrasive or diamond wheel. Do not use it for anything else. Carelessness or misuse could cause a serious or fatal accident.
4. This machine will damage property if it is not used carefully. Practice on some scrap material if you have not used it before.
5. Make sure that there are no hidden electricity cables, gas or water pipes where the cut is to be made. Consider using a cable and/or pipe detector, ask the hire company for suitable types available. **Ask the hire company for HAE leaflet no.1415 – cable location and signal generator.**
6. The following items of personal protective equipment must be worn: goggles; dust mask- a minimum of FFP3 protection; ear muffs or plugs giving protection to reduce exposure to 87dB(A) at the ear; Safety boots; industrial gloves.
7. A personal first-aid kit should be available.
8. This machine must not be used by young persons, or by anyone under the influence of drugs or alcohol.
9. This machine is designed for operation by an able bodied adult. Anyone with either temporary or permanent disability must seek expert advice before using it.
10. Although most cut-off saws are designed for one person operation you should always be careful not to lift beyond your own capabilities.



## WORK AREA

1. Do not use this machine 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. Make sure that the work area is clear and safe and that no-one is close by and could cause distraction.
4. Protect other people from the noise.. Warn others to keep away, set up an exclusion zone around the area where the cut-off saw is being used with physical barriers, barrier tape and signs. Keep children and animals away when using this equipment.
5. Work should stop immediately should anyone, other than those directly assisting with the work, enter the exclusion zone.
6. Clear the area of trip hazards such as rubble, rubbish etc.

## OPERATORS

1. The following items of personal protective equipment (PPE) are the minimum that should be worn whenever using the cut-off saw. Particular jobs or environments may require a higher level of protection.
2. Goggles and dust mask – a minimum of FFP3 protection; must be worn when working with this machine.
3. This equipment is likely to cause noise levels up to 93 dB(A) - wear appropriate ear muffs or plugs giving hearing protection for this level as a minimum.
4. Safety boots must be worn.
5. Vibration from using this machine can be hazardous. Warm hands up before commencing work, and wear industrial quality gloves to keep hands warm while working. Find out more about the effects of vibration - **Ask the hire company for a copy of the HAE leaflet no. 2150 – Hand-arm vibration or visit [www.hse.gov.uk/vibration](http://www.hse.gov.uk/vibration)**
6. Anybody who is working close by will also need to wear identical personal protective equipment.

## CUT-OFF SAW

1. Check your machine, including the engine, fuel tank and guards. If anything is found to be damaged, do not use the cut-off saw. Contact the hire company.

# Before Starting Work...



2. Any work that is not part of a fixture should be securely clamped or held in a vice.
3. You must not fit or change any abrasive or diamond wheel unless you are competent to do so. Ask the hire company for HAE leaflet no. 0403 – abrasive wheels
4. Make sure the correct type of cutting wheel as recommended by the hire company for the material being cut is used.
5. Look at the speed stated on the label of the cutting off wheel being used, and the speed shown on the cut-off saw. Check that the cutting off wheel is certified to a higher speed than that shown on the machine.
6. When fitting diamond wheels, you must check that the bore size is the same as the spindle diameter. You must also comply with the direction of rotation mark on the wheel.
7. Abrasive wheels fitted to this cutoff saw are for cutting on the edge only. Any side pressure could shatter them. Do not try to carry out any grinding work.
8. Make sure the guards around the wheel are in place and adjusted correctly.
9. Check that there are no hidden electric cables, gas or water pipes where the cut is to be made. Consider using a cable and/or pipe detector, ask the hire company for suitable types available. Ask the hire company for HAE leaflet no.1415 – cable location and signal generator.
10. Do not use this machine to cut asbestos or materials containing asbestos.
11. Make sure that you understand all of the controls. Before starting the machine, know how to stop it.

## CONTROLS

1. This section describes the controls and symbols found on most cut-off saws. Check the saw to find the controls before trying to start it.

2. There is an interlock control on the throttle trigger, to prevent the throttle being squeezed or pressed accidentally. The interlock always needs to be pressed in before the throttle can be squeezed.
3. The main control lever has three positions. Under normal running, it is at the 'on' position. Push the control lever forward to stop the saw. The rear position is only used when starting the engine.
4. The machine may have a decompression valve. This is only used when starting the cut-off saw - it needs to be pressed before each fresh attempt to start the engine.
5. The choke control should only be used when first attempting to start an engine from cold.
6. When stopping the saw, push the control lever forward.

## REFUELLING

1. No smoking.
2. Use a fresh mixture of two stroke engine oil with petrol. If the hire company has given special instructions on how much oil to use, follow them. Otherwise use 1 measure of petrol (40ml per litre).
3. Stop the engine and let it cool down.
4. If possible move the machine away from the work area.
5. Clean the filter cap and the area around it to prevent dirt falling into the fuel tank.
6. Shake the fuel can to mix the petrol and oil.
7. Use a funnel when refuelling. Do not spill any fuel on yourself or the machine.
8. Wipe any fuel off the machine. Dispose of fuel soaked cloth carefully.
9. If small amounts of fuel are spilt on the ground, wipe it up or cover it with soil.
10. If any fuel is spilt on your clothes, change them straight away.
11. Put all fuel caps back on properly, and move the fuel can to a cool, safe place.

## STARTING WHEN COLD

1. This section describes the starting procedure for most cut-off saws. If the hire company has given you special instructions for the saw, follow them. Otherwise, follow the instructions given below.
2. Press the interlock and the throttle at the same time. Whilst keeping these pressed in, pull the control lever back to the starting position.
3. Now release the throttle, control lever and interlock: the throttle is now in position ready to start.
4. Set the choke lever to on. If the engine has run but is still cold, the choke control should be in the off position.
5. If the saw has a decompression valve, set it. The decompression valve needs to be set each time a fresh attempt is made to start the engine.
6. Place the cut-off saw squarely on its base plate on the ground. Make sure that the cutting disk is not touching the ground or any obstruction.
7. Hold the saw down firmly, with your left hand on the front handle.
8. With your right hand, pull out the starter handle slowly until you can feel that the starter has engaged with the engine, then pull it quickly and strongly. Don't pull it too far, or it may break.
9. Guide the cord back into place so that it recoils correctly.
10. If the engine did not start, set the choke control to on, set the decompression valve, and pull the starter cord again.
11. If the engine is now running, squeeze and release the throttle trigger. The control lever will revert to its normal position and the engine will idle. Set the choke control to off.
12. In cold weather, you may need to let the engine warm up by gently opening the throttle, before starting work.

## STARTING WHEN WARM

1. Press the interlock and the throttle at the same time. Whilst keeping these pressed in, pull the control lever back to the starting position.
2. Now release the throttle, control lever and interlock: the throttle is now in position ready to start.
3. Set the choke lever to the off position.
4. Follow the rest of the instructions from instruction 5 onwards, given in the section starting from cold.