

## GETTING STARTED

On some models, the rear handle rotates, to position the ON/OFF trigger for grinding or cutting. **Just twist and click it into place.**

**Fit the right disc for the job.** HSS Hire Shops offer cut-off, grinding and diamond discs.

**Never use a grinding disc for cut-off work or vice versa.** If in doubt, contact your local HSS Hire Shop.

As the work progresses, the disc diameter will diminish. This means that the maximum depth of cut will be effected.

**Regularly check the discs condition and replace if worn or damaged,** using only discs supplied by HSS Hire Shops.

**Ensure replacement discs are distortion free and undamaged** and that the paper washers are not wrinkled or torn. **NEVER FIT SUBSTANDARD OR OLD, USED DISCS.**

**To fit a disc,** switch OFF and unplug the tool, then immobilise the back flange by depressing the spindle-lock button (see diagram).

**Remove the lock nut** with the 'pin' spanner and **check the condition of both flanges.** If either is damaged, return the tool to your local HSS Hire Shop.

**Now, locate the disc on the back flange plate,** making sure that the diameter and the arbor (centre hole) of the disc are the correct size for the machine.

**Finally, secure the disc in place by screwing on the front flange.** Either with the boss outer-most, for cutting discs or inner-most, for grinding discs (see illustration).

Some models are fitted with a spanner free lock nut, simply tighten by hand. To release, unscrew by hand.

**Take care not to over-tighten, then check that the new disc rotates freely and does not foul the guard, before use.**

**Set the safety guard in the correct operating position** by loosening off the lock screw, adjusting the guards position then re-tightening the lockscrew (see illustration for correct position).

**Plug the tool into its power supply.**

When using a dust extraction unit, the machine will be supplied with a dust extraction hood/guard. **To fit the disc, firstly loosen the securing wing nut then slide the cover up and fit the disc as above. Slide the cover back and re-tighten the wing nut.**

Before starting **connect the hose from the dust extraction unit to the dust port on the guard.**

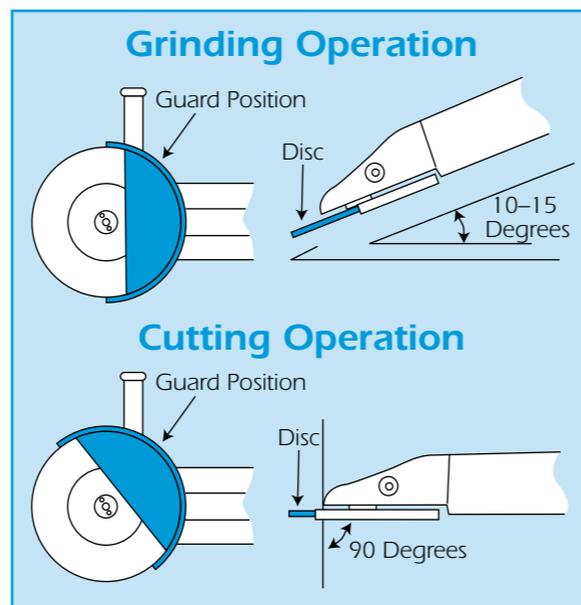
## BASIC TECHNIQUES

Where appropriate, **secure the workpiece in a vice or with clamps, supporting it on both sides of any cut line** to stop the cut-off disc becoming trapped.

Next, **grip the tool firmly in both hands and adopt a comfortable, stable stance** that lets you see what you are doing while keeping the whole of your body behind the grinder's disc.

**With the disc clear of the workpiece, you can now switch the grinder ON** and wait for the disc to reach working speed.

**To switch ON** either depress or push forward the lock off button and squeeze the ON / OFF trigger.



**If GRINDING...**

**Work the tool back and forth across the surface, holding the disc at an angle of 10 to 15 degrees** – a new disc may only require a single pass.

**If CUTTING...**

**Move the tool along the cut in a straight line, keeping the disc at a constant angle. Never twist the tool or apply sideways pressure** – the disc could break up and cause damage or serious personal injury.

**When using dust extraction, the full depth of cut must be used.** This means that shallow passes are not an option. Take care not to twist the tool or apply sideways pressure.

**WHATEVER you are doing...**

**Apply just enough pressure to ensure reasonable**

**progress.** Too much pressure will damage the disc, the workpiece, and the machine's motor.

Be aware of the gyroscopic effect created by the machine once it is switched OFF. **Hold the machine still until the blade has stopped rotating.**

## EQUIPMENT CARE

**Never push the equipment beyond its design limits.** If it will not do what you want with reasonable ease and speed, assume you have the wrong tool for the job. Contact your local HSS Hire Shop for advice.

**Keep the equipment clean** – paying special attention to the air vents. You will find this less of a chore if you clean regularly, rather than wait until the end of the hire period.

**Regularly check that the disc and safety guards have not vibrated loose, if either have STOP and contact your local HSS Hire Shop for advice.**

**When not in use, store the equipment somewhere clean, dry and safe** from thieves.

## FINISHING OFF

**Having lifted the disc clear of the workpiece, release the ON/OFF trigger to the OFF position** and wait for the disc to stop before putting the tool down.

**Unplug the tool, remove and dispose of the disc, NEVER re-use a used disc!**

**Finally, neatly coil the flex and give the tool a final clean-up ready for return, to your local HSS Hire Shop.**



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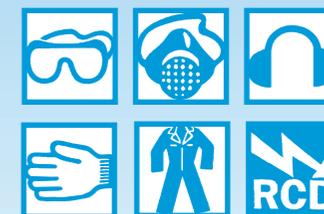
## Operating & Safety Guide 633

# HSS Hire Shops



# 230mm Angle Grinder

**The 230mm ANGLE GRINDER:** for heavy-duty grinding, facing and cutting masonry and metal. As a cut-off machine it has a 64mm (2.5in) depth of cut.



Code 06331

## GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire Shop.

Keep children, animals and bystanders away from the work area.

Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

This equipment should only be used by a competent person who has read and understood these instructions.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.



**Safety Goggles MUST be worn by everyone in the work area.**



Some materials when cut contain substances which, when inhaled, can be harmful to health. A suitable mask must be worn when using this equipment.



This equipment generates potentially harmful noise levels. To comply with health and safety at work regulations, ear defenders must be worn by everyone in the vicinity.



Wear practical, protective clothing, gloves and footwear. Avoid loose garments and jewellery that could catch in moving parts, tie back long hair.

Ensure the work area is well lit and ventilated, if in doubt, ask about dust extraction and ventilation equipment at your local HSS Hire Shop.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance – at least 5m.

If working above ground-level, work from a suitable, stable platform – an access tower for example. Never work from ladders or steps.

Take special care when cutting into anything containing pipework or electrical cables. If in doubt, hire a cable avoiding tool from your local HSS Hire Shop, to determine the exact position of such hazards.

Stop the machine if you experience discomfort or numbness during use.

Make sure you know how to switch this machine OFF before you switch it ON, in case you get into difficulty.

Always switch OFF and unplug the tool before making adjustments to it. Check that it is switched OFF and that you have removed all spanners and keys before plugging it back in.

Having switched OFF, always wait for the disc to come to rest before putting the tool down.

Never carry or pull the equipment by its flex.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire Shop.

Ensure side handles and guards are correctly adjusted and secure before starting work.

Watch your footing. Take special care if working other than on firm, level ground.

Information on COSHH regulations is available from your local HSS Hire Shop.

## ELECTRICAL SAFETY

Most HSS angle grinders plug into a standard 13amp power socket. However, 110V grinders (with a round yellow plug) must be provided with a suitable 110V generated supply, or powered from the mains via a suitable 110V transformer (minimum 3kVA tool rating).

If the equipment fails, or if its flex or plug gets damaged, return it. Never try to repair it yourself.

Keep flexes out of harm's way, and clear of the work area.

Extension leads should be fully unwound and loosely coiled, away from the equipment. Never run them through water, over sharp edges or where they could trip someone.

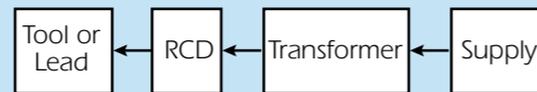
Using electrical equipment in very damp or wet conditions can be dangerous.

To reduce the risk of electric shock, use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire Shop, or power 240V (not 110V) equipment from a power circuit with a built-in RCD.

### Siting an RCD

When used with a transformer an RCD will only protect the user if fitted between the transformer and the tool being used.

An RCD fitted between the power supply and the transformer only protects up to the transformer.



If using a transformer to provide power, ensure that the total power load is less than 75% of the unit's power rating.

Ensure the angle grinder and power socket are switched OFF before plugging into the power supply.

