

The stone magnet is fitted with a two-stage pump system. Under normal conditions, the pump ON / OFF switch should be set to the 'I' position. If the item being lifted is porous set the switch to the 'II' position for a more powerful vacuum.

The pressure release valve fitted next to the pressure gauge must be closed before the vacuum is switched ON and needs to be opened to release the vacuum.

As an added safety feature, the unit is fitted with a warning strobe light, which only operates when the vacuum is running. The strobe light will stop flashing once the required vacuum pressure has been reached.

To switch the unit ON, move the ON/OFF switch to the 'I' or 'II' position, to switch OFF move the switch to the central 'O' position. Once switched ON the vacuum pump will start.

The vacuum pump will automatically stop once the required vacuum pressure has been reached and will restart if the pressure drops.

## BASIC TECHNIQUES

Take the stone magnet to the work area. Place the unit over the slab ensuring the vacuum skirt covers the slabs face.

Determine the weight and centre of gravity as accurately as possible.

Close the pressure release valve and switch the vacuum pump ON, the motor will run creating a vacuum and the unit will adhere to the slab ready for lifting.

Observe the reading on the vacuum gauge, the needle must be within the green area before the lift. Observing the gauges behaviour will help you determine whether the lifter has a sufficient hold on the slab in comparison to its weight.

Attach the lifting equipment to the lifting eye then lift the slab a nominal distance to check balance and security of the load.

Once you are sure it is safe to lift and move, lift the unit and take the slab to the required location.

Lower the slab into position then switch OFF the vacuum.

DO NOT release the vacuum if the slab is in mid air, always have the slab resting on the ground.

## EQUIPMENT CARE

Never push the equipment beyond its design limits. If it will not safely do what you want with

reasonable ease and speed, assume you have the wrong equipment for the job. Contact your local HSS Lift & Shift Depot for advice.

This unit is fitted with a water drain off valve, which must be closed during use. As water collects within the system, the water must be drained once each working day. To drain the water, switch the power unit OFF and release any pressure. Open the water drain off valve (see illustration) and close once the water stops.

Keep the equipment clean, you will find this less of a chore if you clean it regularly, rather than wait until the end of the hire period.

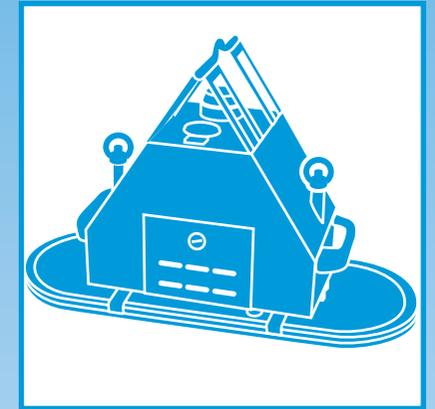
When not in use, store the equipment somewhere clean, dry and safe from thieves.

## FINISHING OFF

Lower any raised load and switch OFF the vacuum.

Give the unit a final clean ready for return to your local HSS Lift & Shift Depot.

# HSS Lift & Shift



## Stone Magnet

A battery operated vacuum lifter for attachment to any suitable crane or hoist for lifting stones and concrete slabs.



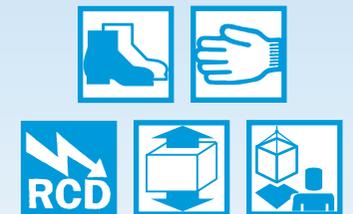
### ...any comments?

If you have any suggestions to enable us to improve the information within this guide please fax your comments or write to the Product Manager at the address below

Fax: 020 8687 5001

©HSS Hire Service Group Plc 2001 No. LS134/01  
Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

Web Site: <http://www.hss.co.uk/liftandshift>



Code 69254

## GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Lift & Shift Depot.

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

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment is designed to be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability should seek expert advice before using it.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Lift & Shift Depot.

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

 Wear practical, protective clothing, gloves and footwear. Avoid loose garments and jewellery that could get in the way, tie back long hair.

 Use this equipment for vertical lifts only and use on a level area able to take the combined weight of the load and the equipment.

 Ensure the load is balanced, stable and that personnel stand clear of the raised load.

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

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

Make sure you know how to operate this equipment safely and are aware of its limitations before you use it.

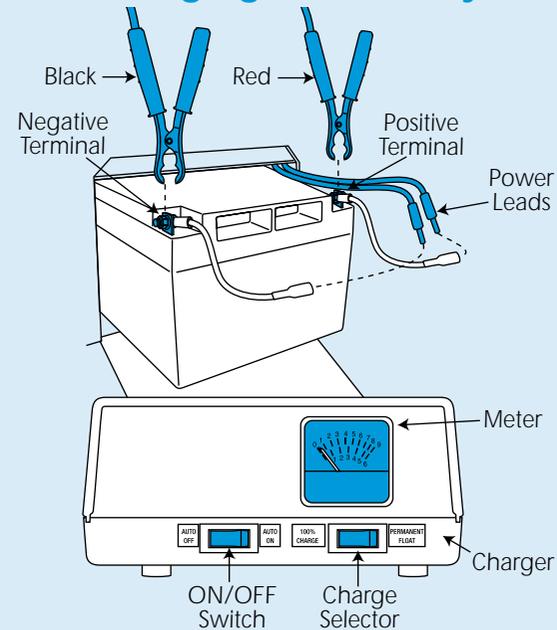
Make sure that anyone in the immediate work area is warned of what you are doing. Never allow anyone under a raised load or in a position where they are at risk if the load shifts.

Make sure the landing area is unobstructed and able to accept the load in size and weight.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Lift & Shift Depot.

## ELECTRICAL SAFETY

### Charging The Battery



Before use, check the battery condition. Set the units ON/OFF switch to the 'I' position and observe the three small lamps on the side of the unit then return the switch to the central OFF position.

Amber, battery is fully charged.

Green, normal.

Red, battery needs charging.

If the battery needs charging, open the access cover using a coin. Slide the battery from its housing and disconnect the power leads. Connect the chargers black clip to the batteries negative terminal and the chargers red clip to the batteries positive terminal.

Plug the charger into the power supply and switch the supply ON. Set the chargers ON/OFF switch to the ON position and the charge selector to the 100% charge position. The 'permanent float' option should be used to trickle charge over a long period.

When the battery is fully charged, the chargers meter will register '0'.

The HSS Stone Magnet is powered by a rechargeable battery, housed within the unit. A charger is supplied with the unit and it requires a 240V 13amp power supply.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself.

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, always use a suitable RCD (Residual Current-Operated Device) available from your local HSS Lift & Shift Depot.

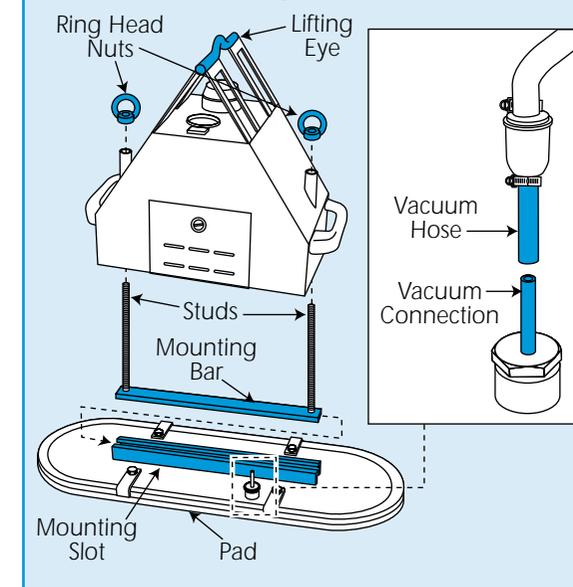
## GETTING STARTED

Check the battery charge level, see 'ELECTRICAL SAFETY'.

Visually inspect the unit, paying special attention to the condition of the vacuum skirt, if it shows signs of damage DO NOT USE IT.

Check that the Vacuum Slab Lifter you have hired has a sufficient Safe Working Load (SWL) for the item being lifted. This model is available with two sizes of lifting pad and each has a different SWL.

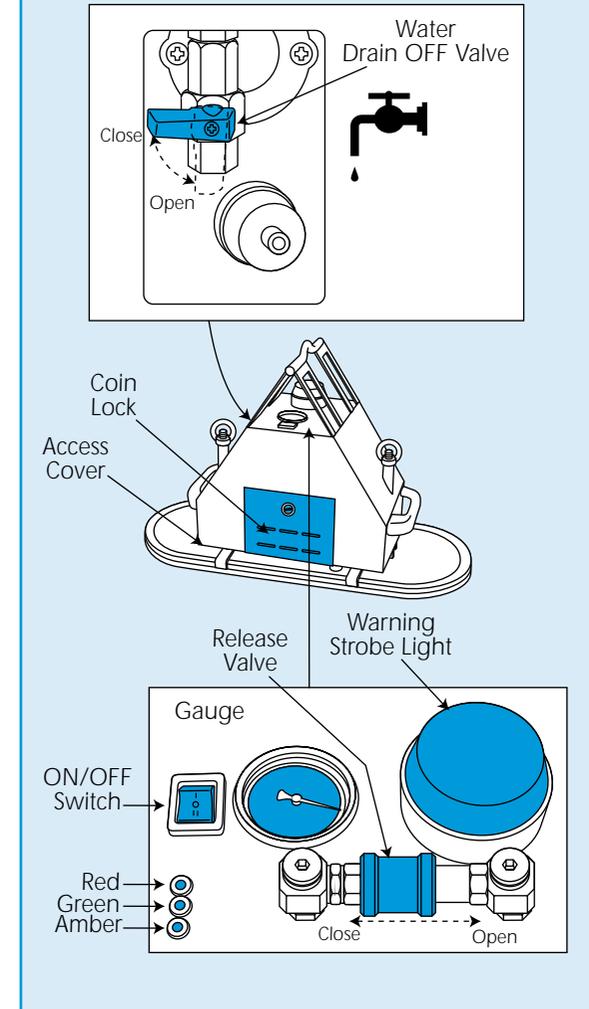
### Components



HSS offer a 200Kg and a 400Kg pad. If you need to change the pad size fitted to the unit, firstly ensure the unit is switched OFF.

Place the unit on a firm level base open the access cover using a coin then disconnect the vacuum hose from the vacuum connection on the pad.

## Stone Magnet



Undo the two ring head bolts, then with help, lift the power unit clear and place somewhere safe.

Slide the mounting bar from the pads mounting slot and place the pad somewhere safe.

Slide the mounting bar into the mounting slot on the replacement pad, then lower the power unit onto the mounting bar studs ensuring that the pads vacuum connection is on the same side as the access cover.

Reattach the vacuum hose to the pads vacuum connection then close and lock the access cover.

Finally, refit the two ring head bolts ensuring that they are fully tightened.