

## BASIC TECHNIQUES

Make sure the lift-up safety rail drops back into place after you have climbed into the cage, then secure your personal restraint harness to the fixing point (see illustration).

Insert and turn the safety lock key source at the cage-mounted controls to the required power.

If you wish to use the battery system, turn the key anticlockwise to position 'I' then select the speed you wish to travel at with the drive speed selector switch. If you wish to use the diesel engine to power the unit turn the key clockwise to position 'II'.

To start the engine turn the engine speed selector to max (if the engine is cold, turn the glow/start switch to the left for 10 seconds, release then) turn the glow/start switch fully to the right until the engine starts, then release (in the same way as starting a car). Whichever power source you are using... Now hold in the green START button to activate the hydraulic motor, then operate the appropriate control lever as directed on the control panel to position the unit and the cage as required.

The first lever controls the direction of turn and the direction of travel. Up for forward, down for reverse. Move the lever to the right to turn right and to the left to turn left.

The second lever moves the cage back or forward to allow you to keep it level during use. Raise the lever to move the cage forward (in) and lower the lever to move the cage back (out).

The third lever operates the telescopic boom, to extend the boom lift the control lever and to retract, lower the lever.

The fourth and fifth levers raise/lower the primary and secondary booms respectively; the boom speed depends on how far you push the lever in the appropriate direction.

The sixth lever rotates the lift. If it doesn't, you have gone too far in one direction so simply move the lever to rotate the lift in the other direction.

Always begin by lifting the primary boom before positioning the cage.

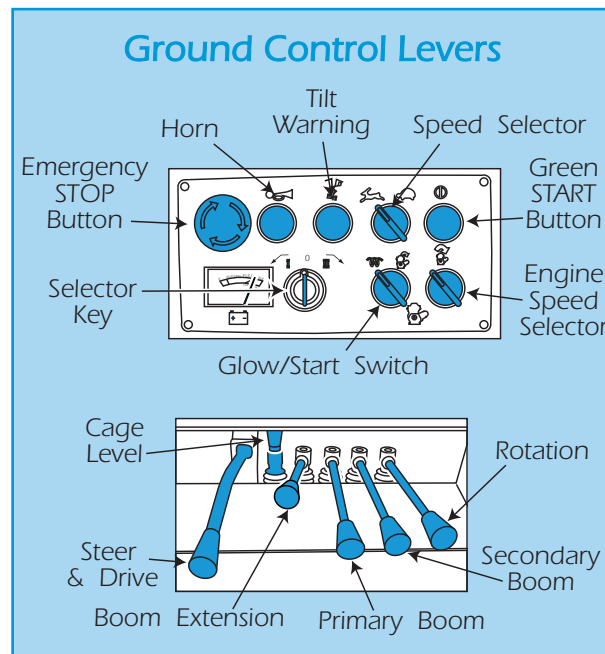
Upon final descent, rotate the cage to its resting position.

Carefully lower the primary boom then the secondary boom ensuring it is correctly located onto the boom rest.

At the end of each individual manoeuvre, release both START button and control lever.

Take care when driving the unit, particularly with the cage elevated and/or when reversing. Watch where you

are going, especially for obstructions and other hazards – both overhead and at ground-level.



When fully lowered the unit can be driven at up to 2.1 miles per hour, when raised the speed is reduced to a maximum of 1 miles per hour. To prevent damage to the cage its necessary to elevate the booms a minimum of 250mm from the stowed position before stowing.

## 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 equipment for the job. Contact your local HSS Hire for advice.

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.

Check the oil level before starting and every 8 hours thereafter. Withdraw the dipstick, wipe it clean, and then replace it. Remove it a second time to verify that a oil level is between the Min and Max lines. Top up if necessary.

Regularly check the fuel level. Use the correct fuel: DERV.

When not in use, store the equipment somewhere clean,

dry and safe from thieves and unauthorised users.

The Hirer/machine user is responsible for checking the condition of the machine battery (S).

Remove the caps individually and check that the distilled water is showing above the lead plates.

Each cell should be checked and if the distilled water level is low top up as necessary.

Low distilled water could result in battery charge failure and effect machine run time performance .

Check the Positive and Negative battery cables are tight. Note: Some machines models will be fitted with an AGM or Gel maintenance free battery so performing the above check is not a required.

## FINISHING OFF

Lower the cage as far as it will go using the cage controls.

Turn the safety lock key in the cage-mounted controls to the '0' position and remove it from the lock.

Press both red emergency STOP buttons and the

## Emergency Descent

If the lift loses power, lower the cage to the ground as quickly as possible, taking care to avoid any obstructions.

Extreme care must be taken to ensure that the person carrying out this procedure does not get trapped in the descending structure.

Each boom can be lowered by operating the ground control levers whilst operating the emergency manual hydraulic pump (see illustration).

Firstly the hydraulic selector valve lever must be set horizontally.

Lower the primary boom first followed by the secondary, rotate the lift as necessary to align the cage with the boom rest in stages.

Do not use the boom lift after an emergency descent, remove the key and press all red emergency STOP buttons and contact your local HSS Hire.

Give the Lift a final clean up ready for return, to your local HSS Hire.



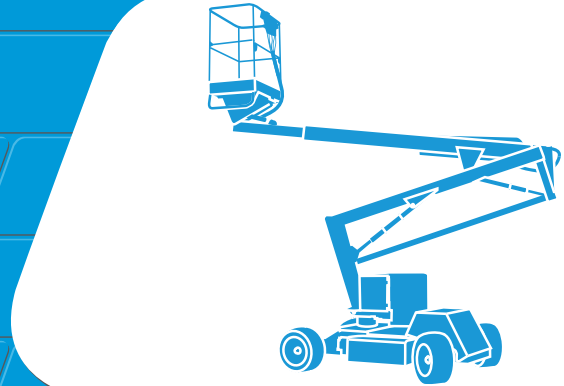
## ... have you been trained

The law requires that personnel using boom lifts must be competent and qualified to do so. Self Propelled Boom Lift training available at HSS Training Solutions 0345 766 7799

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# Self Propelled Boom Lift

A driveable twin boom lift, providing the option of bi-energy or electrically powered models.



Code 69967/9

## GENERAL SAFETY

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



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 Hire.

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

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

 You are advised to wear a personal restraint harness when using this equipment. Available for sale from your local HSS Hire.

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.

Do not carry large sheet material i.e. glass, plywood or PVC. Never stand or place loads on the cage guard-rails. Switch OFF and remove the key before leaving the lift unattended.

Never exceed the equipment's safe working load of 200kg.

Never operate the equipment alone. Ensure a competent adult is always within shouting range to operate the emergency descent system or come to your aid if anything should go wrong.

Ensure the tyres are in good condition. Note that the tyres are foam filled and do not require checking for correct inflation.

This equipment is NOT insulated, do not use the lift within 3 metres of any electrical power line.

Never use the lift in wind speeds greater than 25mph.

The HSS Self Propelled Boom Lift gives the user the option of using either traditional battery power or the diesel engine. If the unit is to be used indoors, DO NOT operate the diesel engine.

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.

### Exhaust Danger

NEVER operate diesel engines indoors or in a confined space.  
The exhaust contains gases that can kill.

Engines, especially the exhausts, get very hot so switch OFF and allow to cool before touching them.

### Fuel Safety

NEVER refuel while the engine is hot or running. Never smoke or allow naked lights into the area while refuelling.  
Never inhale fuel vapour.  
ALWAYS mop up any spillage as quickly as possible, and change your clothes if you get fuel on yourself.  
ALWAYS store fuel in a purpose-made sealed container, in a cool, safe place well away from the work area.

Check the equipment's condition before use and at regular intervals thereafter. If it shows signs of damage or excessive wear, DO NOT USE IT. Return it to your local HSS Hire

## ELECTRICAL SAFETY

### Fire Warning

Batteries generate highly flammable and potentially EXPLOSIVE hydrogen gas when charging, so, until charging is over and the gas has dispersed...  
ALWAYS stand the lift in a well-ventilated spot, preferably in the open air.  
ALWAYS open the battery compartment cover.  
NEVER smoke or allow naked lights and other ignition sources into the area.

The HSS Self propelled boom lift is powered by 6 volt and 12 volt battery systems. Always fully charge before use and recharge at regular intervals. The battery charger is built in to the unit and can be powered by a 110V or a 230V power supply. There are two connectors both 16A, the blue is for a 230V supply and the yellow for a 110V supply.

To charge the batteries first check that the power supply lead is fitted with the correct type of socket to suit the supply voltage available (do not connect a 110V supply to the blue connector and vice versa).

Connect the supply lead to the respective connector on the unit then plug the lead into the power supply and switch the supply ON.

A red lamp will illuminate to confirm charging is taking place, followed by a green lamp once charging is complete – normally after 8 to 10 hours. If the green lamp flashes, the charge is near completion.

Never operate the lift when charging the battery. After charging, switch OFF the power supply and disconnect the power supply lead from the charger.

If the charger fails, return the unit. Do not attempt to repair anything yourself.

Keep the charger dry at all times. Using electrical equipment in wet or damp 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 Hire..

## GETTING STARTED

Familiarise yourself with the work area, check for possible hazards such as pot-holes, ramps, slopes and overhead obstructions that could affect the safe use of the equipment.

With the lift parked on level ground, open the engine compartment. Check the engine oil and fuel levels (see 'EQUIPMENT CARE') then close and lock the compartment

Open the right-hand compartment and check the hydraulic reservoir level. Top up as necessary using grade 22 hydraulic oil.

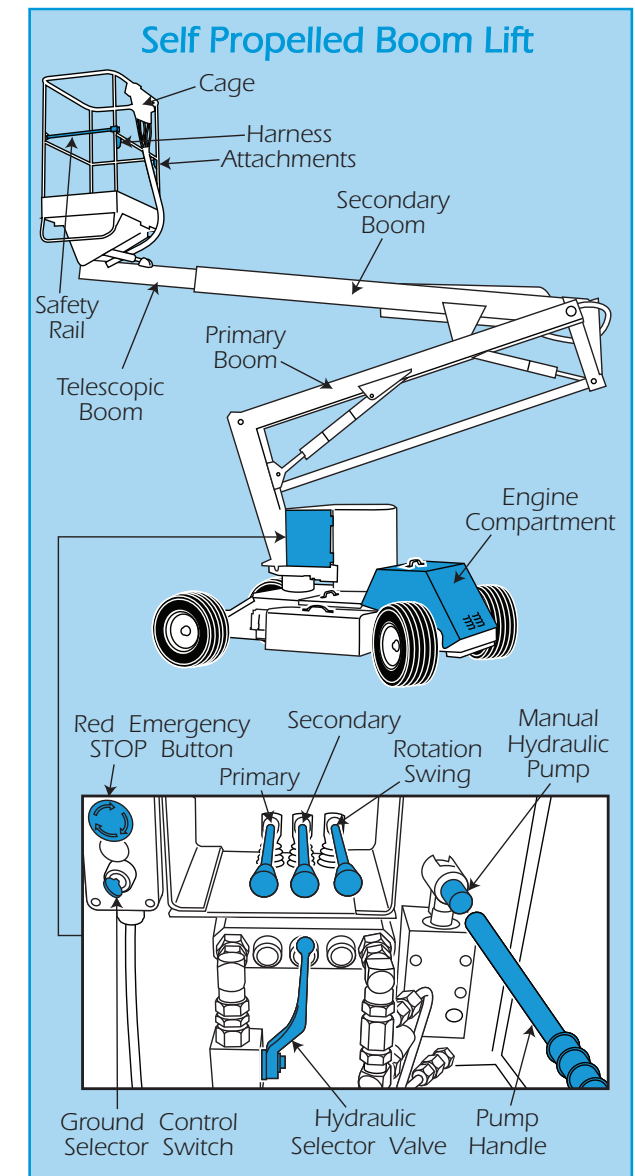
Turn the ground control selector key to the 'platform' position and check that the red emergency STOP button is in the ON position. To reset the STOP button, turn it clockwise until it pops up.

To the side of the control box is a hydraulic selector valve lever that must be set vertically when operating the lift from the cage controls. The lever is set horizontally if the ground controls or manual pump (used in an emergency descent situation) are used.

You can now close and lock the compartment. There are two sets of controls with this unit, one in the cage and one set of ground controls situated inside the right hand compartment.

Both are fitted with a red emergency STOP button which, if pressed, isolate the power in case of an emergency.

Both STOP buttons MUST be in the ON position to operate any part of the controls, if a STOP button



has been pressed, reset it by turning clockwise until it pops out.

Set the battery-isolating switch (found inside the engine compartment) to ON by pulling it out, this switch should be pushed in whenever the unit is left unaccompanied. Place the safety lock key into the lock on the lower control box and turn clockwise to select the cage controls. Insert the second key into the cage key switch select the required function, put your foot on the foot pedal.

The lift should now be ready to use.

## **SiOPS™ - Load Sensing Bar (if fitted)**

**WHEN OPERATING THIS MACHINE THE USER MUST BE AWARE OF ANY OVERHEAD OBSTRUCTIONS.**

This machine incorporates a load sensing bar that senses if the operator has been pushed or has fallen against it. If the load applied to the front of the bar is greater than the pre-determined amount, the footswitch will be disabled to increase operator safety and reduce the possibility of sustained involuntary operation of the cage controls.

**Note:** The green button will illuminate once the footswitch has been disabled, but continues to be available for use at all times. This allows the operator to use the cage control functions and manoeuvre the machine to a safe position.

To reset the footswitch:

- 1) Release the load from the front of the bar
- 2) Ensure cage controls are in the neutral position and clear of objects
- 3) Raise foot clear of footswitch then lower foot onto footswitch
- 4) Footswitch is now active and full control has been restored

**Note:** If SiOPS™ has been activated and the footswitch is not reset within **15 seconds**, then the blue warning beacon will flash (if fitted, located on the outside of the cage) and a warning announcement will sound until the footswitch is reset as described previously.

**IN ORDER TO MAINTAIN THE SAFETY OF THE MACHINE, THE OPERATION OF THE LOAD SENSING SAFETY BAR SHOULD BE CHECKED EACH DAY BEFORE USE. IN THE CASE OF A MACHINE NOT RESPONDING TO THE OPERATION OF THE SAFETY BAR IT SHOULD BE REMOVED FROM SERVICE IMMEDIATELY.**

**UNDER NO CIRCUMSTANCES SHOULD THE SAFETY BAR BE REMOVED OR DISABLED BEFORE USING THE MACHINE. IF IN DOUBT, INFORM YOUR SUPERVISOR BEFORE USING THE MACHINE.**

# Know Your Symbols

HSS have created clear Icons to inform the hirer of their responsibilities towards the safe use of hire equipment.

These are designed to reduce the amount of different safety information labels required for each product for hire.

## General use PPE / Warning

Clearly marked minimum PPE will be visible on all equipment,



**Correct PPE must be worn**



**HAV Hand Arm Vibration**



**Danger Rotating blade**



**Danger Hot exhaust**



**Danger Electric shock**



**Caution Abrasive Wheel**



**Caution Finger trap**

## Fuel and Supply Types



**Pe**  
Petrol



**Di**  
Diesel



**2t**  
2 - Stroke Petrol



**EI**  
Electric

## Safe Procedures

All hirers must understand and respect the safe procedures of all equipment.

It is the responsibility of the hirer to maintain and return the equipment in a clean condition and good working order.



**Ro**  
Read OPS Guide



**Ou**  
Outdoor Use only



**Hi**  
Heavy Lifting



**Cd**  
Check Oil daily



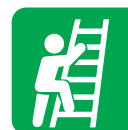
**Cf**  
Check Fuel daily



**Cw**  
Check Water daily



**Bc**  
Battery Care



**Sh**  
Safe Height Working



**Swl**  
Refer to Data Plate



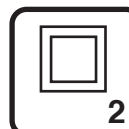
**V**  
Check Power Voltage Data Plate

## Electrical Safety

Safe wiring procedures.



**Ea**  
Must be Earthed Class 1



**Doi**  
Double Insulated Class 2



**Enl**  
Earth Live Neutral Wire Coding

## Return Responsibility

Charges apply to equipment returned dirty and damaged.



**Cc**  
Cleaning Charge



**Rc**  
Repair Charge