

Ensure the ram's pressure release valve is closed (turn fully clockwise).

The force exerted by the hydraulic ram (up to a maximum of 1,500kg) creates a potentially dangerous situation, so make sure that any seal has been broken before lifting.

If great force is used, the assembly and manhole cover will spring up.

NEVER place yourself in a position where you could be hit by the equipment or cover as the cover lifts.

Using the pump handle, gradually pump the ram until the manhole cover lifts.

Take your time and don't overdo it. You are more likely to have an accident if you are tired or rushing.

Once raised, manoeuvre the unit away from the manhole and lower the ram, by turning the pressure release valve 1 turn anti-clockwise.

When replacing the cover, simply reverse the removal procedure.

## 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 Lift & Shift Depot 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.

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

## FINISHING OFF

Replace the manhole cover and disconnect all keys and clamp frames.

Dismantle the unit and give everything a thorough clean ready for return to your local HSS Lift and Shift.



## ...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

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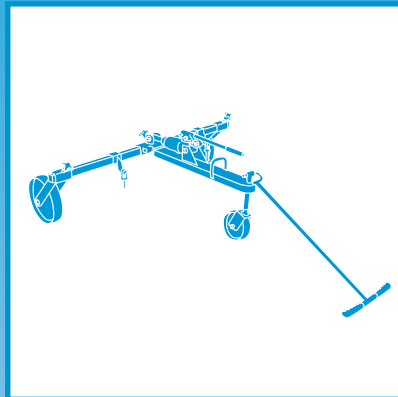
Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

Web Site: <http://www.hss.com/liftandshift>

# Operating & Safety Guide LS178

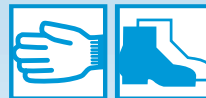
LS178/01

## HSS Lift & Shift



# Hydraulic Manhole Cover Lifter

A hydraulically operated lifter with a breakout of 1500kg



Code 69313

## 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.**


**Confined Spaces Can Be Dangerous**

**Do not enter until you have checked that it is safe to do so.**

**Gas detection equipment, fall arrest systems, escape breathing packs and safety lighting** are available for hire from your local HSS Safe and Sure Depot.

   **Wear practical, protective clothing, gloves and footwear.** Avoid loose garments and jewellery that could catch in moving parts, 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 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.**

**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.

## GETTING STARTED

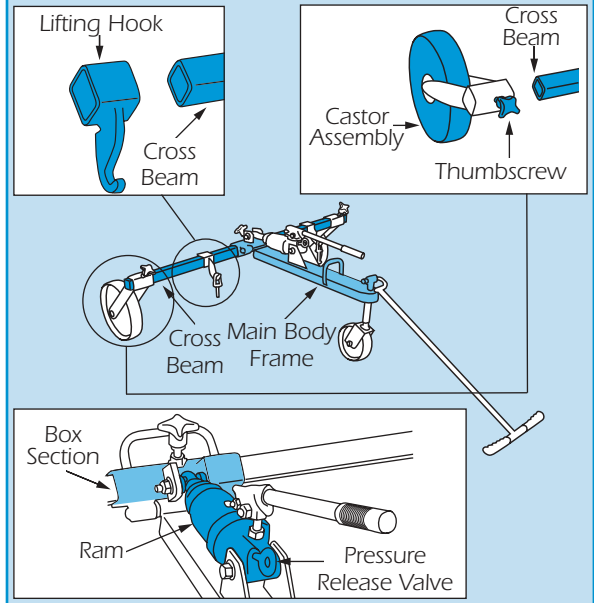
**Take the main body frame and slide the crossbeam through the end mounting box section.**

**Open the ram's pressure release valve** by turning anticlockwise **and once the ram is fully retracted, close the valve.**

**Slide one lifting hook onto each end of the crossbeam** so that the hook is facing down with its opening toward the ram.

Next, **slide a castor assembly onto each end of the crossbeam** with the castors fork pointing horizontally away from the ram. Secure the castor assembly to the crossbeam by turning the thumbscrews clockwise, do not overtighten.

## Hydraulic Manhole Lifter



## BASIC TECHNIQUES

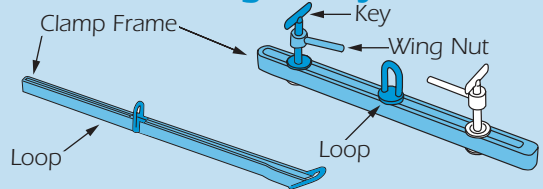
**Wheel the unit to the manhole cover and select the correct key.**

**If using 2 keys...**

**Insert both keys into the keyways** of the cover then **place their loop over each of the lifting hooks.** Adjust the distance between each hook as necessary but keep them an equal distance from the centre of the cross bar.

**If using 4 keys...**

### Using 4 Keys



**Select the most suitable clamp frames and attach each to one side of the cover** using 2 keys on each. Insert each key through the slots in the clamp frame and into the lifting holes, turn the key 90 degrees then wind down the wing nuts until under pressure.

**Place the loop of each clamp frame over each of the lifting hooks.** Adjust the distance between each hook as necessary but keep them an equal distance from the center of the cross bar.

**Whichever you are using...**

**DO NO attempt to lift a cover using a single key.**

**Make sure that the lift pressure is balanced between each lifting hole to ensure a vertical lift.** Uneven pressure will cause the cover to twist and could damage the equipment.