

Lothian Operational Standard

LB-HS-108 Lifting Operations and Lifting Equipment

This Standard details the minimum requirements for ensuring compliance with health and safety legislation and implementation of the Lothian buses' H&S Policy Statement.

1. INTRODUCTION

The main risk associated with operation of lifting equipment is crushing and impact type injuries which can be fatal and are most likely to occur typically when:

- Lifting equipment unexpectedly fails, is defective, or is not operated correctly, or is incorrectly rated for the weight of the load,
- Props or axle stands which are required for the purposes of providing secondary support to raised vehicles are:
 - not used, or,
 - incorrectly rated for the vehicle's weight, or,
 - incorrectly positioned causing the vehicle to roll off

2. POLICY STATEMENT

Lothian Buses is committed to reducing the risks of injury or loss associated with the use of lifting equipment or undertaking of lifting operations. In order to control the risks lifting equipment will be purchased, inspected, maintained, thoroughly examined and any defective equipment properly managed.

3. SUMMARY OF REQUIREMENTS

The Lifting Operations and Lifting Equipment Regulations require that lifting equipment and accessories are:

- Strong and stable enough for the particular use and marked with information on its safe use e.g. safe working load
- Marked to indicate safe working loads;
- Positioned and installed to prevent risk of injury from the load falling or striking persons;
- Used safely, i.e. the work must be planned, organised, supervised and performed by competent persons; and
- Subject to on-going thorough examination and, where appropriate, inspection by competent persons

The scope of this standard includes the following lifting equipment and accessories owned, leased, or hired by Lothian Buses operating companies:

- a) Lifting machinery: vehicle lifting tables, column lifts, fork lift trucks, passenger lifts, hoists, cranes, jacks, scissor lifts etc.,
- b) Lifting Tackle: chains, shackles, rings, hooks, slings etc.

It also covers lifting operations undertaken by contractors on Lothian Buses' behalf, and contractors using their own lifting equipment and accessories whilst on Lothian Buses' premises.

4. WHAT NEEDS TO BE DONE

Planning of Lifting Operations

- 4.1 The risks associated with lifting operations and the use of lifting equipment should be identified and documented in the relevant risk assessment and reasonable precautions taken to reduce the risks as low as reasonably practicable.
- 4.2 The Engineering Manager must ensure that employees planning lifting operations are competent to do so i.e. they have adequate practical and theoretical knowledge and experience of the lifting operation and equipment being used.
- 4.3 Lifting equipment must only be used for the purpose and range of lifting operations for which it was designed.

Inventories and Marking of Equipment

- 4.4 All lifting equipment and lifting accessories must be marked clearly with a unique reference and the maximum load that can be lifted safely i.e. a Safe Working Load (SWL). If the SWL is likely to vary with operating radius or the way the equipment is configured and this cannot be indicated on the equipment, adequate information should be given to the operators of the equipment.
- 4.5 An inventory of lifting equipment must be compiled and kept up to date for each location and this should include:
 - a) Equipment type
 - b) Make
 - c) Date of Manufacture/Purchase
 - d) Serial Number or Identification Mark
 - e) Safe working Load (SWL)
 - f) Thorough Examination Frequencies

A suggested proforma for the Inventory Record is provided in Appendix 2

- 4.6 The Engineering Manager must make arrangements to ensure that the inventory is kept up to date and that includes a record of:
- equipment which has been removed from use or destroyed because it is no longer safe to use,
 - equipment which has been transferred to another location,
 - newly purchased or replacement equipment

Use of Lifting Equipment

- 4.7 Safe operating instructions should be clearly displayed in a prominent position on the lifting equipment or made readily available to the operator.
- 4.8 The lifting equipment must be suitable for the task, with regards to stability, capacity and integrity (see inspection, and maintenance records) and vehicle lifts must be fitted with chocks, toe trap protection, and have effective dead man controls.
- 4.9 All lifting equipment must be correctly located on level, solid ground with sufficient overhead space for the lift. In the case of mobile column lifts there should be sufficient clearance adjacent to the columns to enable them to be positioned and repositioned without risk of injury.
- 4.10 The user must carry out a visual pre-use inspection to ensure that the equipment is in good condition, is safe to use and any safety devices that are fitted are working correctly. Any defects found must be reported to the Engineering Manager and the equipment must be taken out of use immediately.
- 4.11 When a vehicle is raised, an adequate and well positioned means of secondary support appropriate to the method of lifting must be used (consideration must be given to the vehicle body):

Mobile column lifts – As a minimum, four axle stands, suitable for the working load and marked to that effect, must be positioned on a load bearing structure, as close as is practicable to each column lift and as wide apart as possible.

The power supply to the lift must always be isolated once vehicle has been raised / lowered to the required working height. If pairs of lifts are to be operated subsequently to allow work to be carried out, the power should only be connected when required.

Lifting Jacks - A suitable axle stand should be positioned as close as possible to the immediate work area. To minimise the risk of personal injury when locating stands a push stick or similar safety device should be used to locate the equipment.

- 4.12 Access to the underside of vehicles is undertaken only when satisfied that the vehicle is correctly positioned, a means of secondary support is in place, the power supply is isolated i.e. power switched off and plug removed, and there are no unauthorised persons in the lifting area.

- 4.13 The Safe Working Load or rated capacity of the equipment or accessory must not be exceeded under any circumstances.
- 4.14 All lifting accessories must be stored in a suitable manner to prevent damage and prolong its working life.
- 4.15 All defects or signs of damage observed at any time must be reported immediately to the line manager and the lifting equipment or lifting accessory must be taken out of service immediately and marked as defective to prevent its use.
- 4.16 The manager must ensure that employees only use lifting equipment and accessories purchased, inspected and maintained specifically by Lothian Buses.

Servicing, Maintenance and Statutory Examinations

- 4.17 All lifting equipment must be regularly serviced and maintained by a competent person. In addition to the servicing and maintenance requirements, lifting equipment **MUST** also be thoroughly examined by an independent and impartial competent third party.
- A contract has been set up to ensure statutory thorough examinations are carried out by an independent competent body however, Engineering Managers are responsible for ensuring lifting equipment and accessories are presented for thorough examination at the required frequency and that necessary documentation is retained on site.
- 4.18 The Engineering Manager must ensure that, in accordance with the risk assessment, a suitable programme is in place which ensures that lifting equipment and accessories are periodically maintained and a record of any repair or maintenance is retained on site. (This is a requirement of PUWER).
- 4.19 A Thorough Examination must be undertaken for all lifting equipment which has been 'installed' or 'assembled' on site and then following every subsequent reinstallation.
- 4.20 Further 'in service' thorough examinations of lifting equipment and lifting accessories must then be undertaken in accordance with the frequencies indicated in the Schedule of Examination in Appendix 3 and following:
- Substantial or significant modification or repair which may have altered or affected the integrity of the lifting equipment/accessory
 - An accident or injury involving the equipment or accessory, and
 - A long period out of use
- A Certificate of Thorough Examination for each item of lifting equipment can be accessed upon request from the H&S department.
- 4.21 Lifting equipment which is not inspected or not presented for inspection at the required frequency must be taken out of service immediately and marked as 'out of service' to prevent its use.

4.22 As soon as the Engineering Manager receives a serious defect report for an item of lifting equipment immediate action must be taken to repair or replace the item and documentation must be retained indicating any repair, destruction, replacement or re-examination.

Records and Documentation

In order to provide an auditable trail of the remedial action taken, it is essential that documentation relating to the management of the lifting equipment is retained on site and available for inspection at all times.

4.23 A separate LOLER file should be created for each item into which all records and documentation relating to that item of equipment can be retained. A history of servicing, repairs, thorough examination and defects should be summarised on a LOLER Log Card and retained with the file.

A suggested proforma for the LOLER Log Card can be found in Appendix 4

4.24 The Engineering Manager must ensure that all lifting equipment and lifting accessories brought into use for the first time has an EC Declaration of Conformity. The Declaration must be retained for the life of the equipment.

4.25 A satisfactory report of 'in service' Thorough Examination Records must be obtained until the item of equipment ceases to be used. Reports of Thorough Examination must be retained for at least 3 years.

4.26 If lifting equipment is transferred to another site the LOLER file must be relocated at the same time as the equipment or accessory and the insurance engineer must be informed to ensure the continuity of examinations. The site inventory must be updated to reflect the changes.

4.27 Where the equipment is found to have a serious defect the insurance engineer will immediately forward a copy of the Report of Thorough Examination to the HSE. Immediate action must be taken to repair or replace the item and any documentation of any repair, destruction, replacement or re-examination must be retained in the LOLER file.

4.28 In addition to the above, a historical record of regular servicing and maintenance and any remedial action taken must also be retained in accordance with the requirements of the Provision and Use of Work Equipment Regulations.

4.29 All documentation relating to the lifting equipment must be made available when requested by internal and external auditors and enforcing authorities.

Defective equipment

4.30 Equipment which is found to have a serious defect i.e. the equipment poses an existing or imminent risk of serious personal injury, must be removed immediately from use and clearly identified as defective until the recommended repair or corrective action is completed or until the item is destroyed and disposed of.

- 4.31 Where notice of a serious defect has been sent to the HSE by the insurance engineer, H&S Dep't require written confirmation that action has been taken to either repair or replace the equipment. HSE may request evidence that the equipment has been repaired or replaced as part of their follow up action.
- 4.32 The site inventory must be updated to indicate that the item has been repaired or destroyed and replaced.
- 4.33 Actions to address fault conditions and defects must be prioritised as follows:
- Serious (A) defects:** Take immediate action
 - Serious (B) defects:** Take action within the timescale identified in the report or within 1 month if time scale not otherwise stated
 - Other defects:** Take action as soon as 'reasonably practicable' e.g. aim to address within 3 months depending on risk
 - Observations/Recommendations:** Take action at the next service/maintenance activity (but in any event within 6 months or prior to next examination whichever sooner)

Contractors Equipment

- 4.34 Before any lifting equipment owned or leased by a contractor may be used either on Lothian Buses behalf, the contractor must demonstrate that the equipment has undergone a statutory examination and is therefore safe to use.
- 4.35 Before work commences a report of Thorough Examination must be obtained by the person commissioning the work and retained for the duration of the work.
- 4.36 The contractor must be monitored to ensure that risks from lifting operations are properly managed and that lifting equipment is used in a safe manner.

Incidents and Near Misses

- 4.37 The collapse, overturning or failure of a load bearing part of any piece of lifting equipment is a notifiable dangerous occurrence and must therefore be reported to the Health and Safety Executive, in accordance with The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) on Form 2508.
- 4.38 Near Misses are potential injury or damage incidents and should also be reported internally through the Lothian Injury, Incident and Near Miss Reporting process. These incidents should be investigated to establish root cause and identify possible failings which might prevent future actual injury or damage.

Information, Instruction and Training

- 4.39 Employees and, where appropriate, contractors involved in using lifting equipment must be provided with adequate information, instruction and/or training as on:
- The risks associated specifically with the lifting equipment being used
 - Pre-use inspections

- c) Use of equipment
- d) Safe storage of lifting accessories

4.40 A safe system of work for 'working under vehicles' and 'the use of column lifts' has been developed. They inform and instruct on the safest method of working and communicate Lothian Buses policy and the outcome of the risk assessments and should be brought to the attention of relevant employees.

4.41 Engineering Managers must ensure they obtain a record of any training or information given to either employees or contractors and that the records are readily accessible if requested.

4.42 To ensure continued competence in the safe use of lifting equipment and accessories the Engineering Manager must ensure that employees receive refresher training. Typically training should be repeated at intervals of 3 - 5 years depending on the outcome of the site-specific risk assessment.

5. WHO SHOULD DO IT

5.1 Managing Director, having overall accountability for safety must:

- Ensure that the requirements of this standard are fulfilled,
- Ensure responsibility is appropriately allocated for the management of lifting equipment and necessary resources are made available to enable duties under the Lifting Operations and Lifting Equipment Regulations to be fully discharged and any remedial actions addressed.

5.2 Directors and Senior Managers must:

- Ensure arrangements for assessing and controlling risks associated with lifting equipment and lifting operations are in place at each location and managers allocated with duties have sufficient resource and competency to fulfil their duties.
- Regularly monitor and review the arrangements and in the light of changes to legislation, working practice or in the event of an incident or ill health.
- Ensure those supervising or managing lifting operations are competent and have received an appropriate level of training, instruction and information.

5.3 Engineering Managers or equivalent must ensure:

- An inventory of all lifting equipment and accessories is established and maintained
- Robust arrangements are in place for the safe use and storage of equipment
- All equipment and accessories are serviced and maintained and statutory inspections are carried out at the correct frequencies

- Competency of employees is assessed and an appropriate level of training, instruction and information is provided and refreshed at regular intervals to those planning and executing lifting operations
- All records and documents relevant to lifting equipment or accessories are maintained and kept on the site in a separate LOLER file* and examinations, service, repair and defects are summarised in a LOLER Log* (* or other similar system)

5.4 Employees must:

- Familiarise themselves with the risks associated with the use of lifting equipment and accessories and take the necessary precautions to protect themselves and others in the vicinity
- Adhere to control measures, safe systems of work, training and instructions observing all verbal or written instructions and make proper and full use of any systems and equipment provided for their safety
- Stop, Think and 'Check' for potential hazards immediately before starting a task and to take into account changing circumstances throughout the task by carrying out a dynamic risk assessment¹
- Cooperate with management, and others who have responsibility for ensuring control measures are implemented and maintained
- Not misuse or damage equipment which has been provided to reduce risks,
- Report defects in control measures and work equipment and unsafe conditions immediately to the line manager
- Raise any other concerns they may have about their health and safety with their manager in the first instance

6. MEASURE

6.1 The requirements of this standard will be monitored by Lothian Buses H&S Dept to ensure effective implementation. Evidence of effective management will include:

- Current up to date inventory of lifting equipment
- A LOLER Log Card (similar to that illustrated in App4) for each item of lifting equipment which demonstrates regular servicing and thorough examinations is being undertaken at the correct frequencies and remedial actions addressed
- Appropriate management of actions using records
- Number of serious defects recorded

¹ Dynamic Risk Assessment – An ongoing mental assessment by the employee which takes into account changing hazards, circumstances and capabilities immediately before and throughout the task/activity/shift.

7. AUDIT

- 7.1 Compliance with the requirements of this H&S Standard will be audited periodically in accordance with the Lothian Buses H&S Audit Programme.

8. REVIEW

- 8.1 This H&S Standard will be reviewed every 2 years or in accordance with Lothian Buses Policy following significant changes in the matter to which it relates.

9. REFERENCES AND RESOURCES

- L113 Safe Use of Lifting Equipment: LOLER Approved Code of Practice and Guidance
- Lothian Buses Safe System of Work 63: Working under vehicles
- Lothian Buses Safe System of Work 66: Mobile Column Lifts
- LB-HS-109: Work Equipment
- Lothian Buses: General Risk Assessments