

Overview

This standard identifies the competences you need to carry out routine inspection and servicing of lift installations, in accordance with approved procedures. You will be required to carry out routine inspection, adjustment, and lubrication of lift installations, including minor repair work, the routine replacement of components, and servicing of lift equipment for traction and hydraulic lifts. This servicing will be carried out to ensure that the lift performs at optimal level and functions to specification, and that down time is minimised.

Your responsibilities will require you to comply with organisational policy and procedures for the inspection and servicing activities undertaken, and to report any problems with the servicing activities, or the tools and equipment used that you cannot personally resolve, or that are outside your permitted authority, to the relevant people. You must ensure that all tools, equipment, and materials used in the servicing activities are removed from the work area on completion of the activities, and that all necessary job/task documentation is completed accurately and legibly. You will be expected to work with minimal supervision, taking personal responsibility for your own actions, and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work, and will provide an informed approach to applying planned servicing procedures on lift equipment. You will understand the process of developing planned servicing, and its application, and will know about the servicing criteria, in adequate depth to provide a sound basis for carrying out the activities safely and effectively, and for ensuring that the system is maintained to the required specification and remains compliant with all standards and regulations. You will also be expected to report where the outcome of the servicing identifies the need for further investigation or maintenance work.

You will understand the safety precautions required when carrying out the inspection and servicing activities, especially those for isolating the equipment. You will be required to demonstrate safe working practices throughout, and will understand your responsibility for taking the necessary safeguards to protect yourself and others in the workplace.

Performance criteria

You must be able to:

1. work safely at all times, complying with health and safety legislation and other relevant regulations, directives and guidelines
2. follow the relevant servicing schedules to carry out the required work
3. carry out the inspection and servicing activities within the limits of your personal authority
4. carry out the inspection and servicing activities in the specified sequence and in an agreed timescale
5. report any instances where the inspection and servicing activities cannot be fully met or where there are identified defects outside the planned schedule
6. complete and store all relevant documentation of the servicing activities in accordance with organisational requirements
7. dispose of waste materials in accordance with safe working practices and approved procedures and leave the work area in a safe condition

Knowledge and understanding

You need to know and understand:

1. the health and safety requirements of the area in which the inspection and servicing activity is to take place
2. the safe working practices for lifts (as described in BS7255)
3. the isolation procedures or permit-to-work procedure that applies to the equipment being serviced
4. the specific health and safety precautions to be applied during the planned servicing procedure, and their effects on others
5. the importance of wearing protective clothing and other appropriate safety equipment (PPE) during the servicing process
6. hazards associated with carrying out planned servicing activities on lifts and lift equipment (handling oils/greases, stored pressure/force, misuse of tools, working at height, moving parts of machinery), and how to minimise them and reduce any risks
7. what constitutes a hazardous voltage and how to recognise victims of electric shock
8. how to reduce the risks of a phase to earth shock (such as insulated tools, rubber matting and isolating transformers)
9. where to obtain, and how to interpret, drawings, specifications, manufacturers' manuals, servicing schedules and other relevant documents for the servicing activity
10. the various planned servicing schedules that are generally used (such as condition based servicing, scheduled servicing, calendar based servicing, and total preventative maintenance (TPM))
11. the procedure for obtaining consumables to be used during planned servicing activity
12. the appropriate test procedures to be adopted during servicing
13. the appropriate inspection techniques and procedures to be adopted during servicing
14. how to identify excessive wear and damage of components
15. how to make adjustments to components/assemblies to ensure they function to specification
16. the principles and functions of all lift components

17. how to complete servicing records/logs/reports in compliance with organisational policy and procedures

18. the problems associated with carrying out planned servicing, and how to resolve them

19.

the correct and safe procedure to be adopted for the disposal of waste of all types of material

20.

the extent of your own responsibility and to whom you should report if you have problems that you cannot resolve

Scope/range

1.

Carry out all of the following during the servicing activities:

- 1.1 plan and communicate the inspection and servicing activities to cause minimal disruption to normal working
- 1.2 obtain and use the correct issue of organisational and/or manufacturers' drawings and servicing documentation
- 1.3 adhere to procedures or systems in place for risk assessment, COSHH, personal protective equipment and other relevant safety regulations and procedures to realise a safe system of work
- 1.4 ensure the safe isolation of equipment (such as mechanical, electricity or fluids)
- 1.5 provide and maintain safe access and working arrangements for the inspection and servicing area
- 1.6 follow the approved maintenance schedule for inspecting and servicing the lift equipment
- 1.7 carry out the inspection and servicing activities using appropriate techniques and procedures
- 1.8 reinstate and return the lift to service on completion of the activities
- 1.9 ensure that any potential future defects are identified and reported for future action
- 1.10 dispose of waste materials in accordance with safe working practices and approved procedures and leave the work area in a safe condition

2.

Carry out planned servicing activities on five of the following:

- 2.1 gearboxes
- 2.2 counterweight
- 2.3 safety and emergency facilities
- 2.4 motors
- 2.5 buffers
- 2.6 mechanical structures
- 2.7 lift car
- 2.8 hydraulic equipment
- 2.9 customer-specific equipment
- 2.10 lift well equipment
- 2.11 lighting

3.

Follow planned servicing activities, using one of the following types of servicing schedules:

- 3.1 condition based servicing
- 3.2 calendar based servicing
- 3.3 scheduled servicing

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3.4 total preventative maintenance (TPM)

3.5 preventative planned maintenance

4.

Carry out all of the following planned servicing activities:

4.1 visual examination and use of test equipment against the servicing schedule

4.2 checking operation of the lift (such as quality of ride, landing doors/gates, levelling)

4.3 monitoring component condition/deterioration (such as traction sheave)

4.4 making other sensory checks (such as sound, touch, smell)

4.5 removing excessive dirt and grime

4.6 checking condition of belts, bearings, oil seals, guards, brushes, commutator, brakes, electrical equipment, ropes/chains, pulleys, locks, anti-creep

4.7 check clearances and alignment of running/sliding components

4.8 replenish/replace consumables (such as fluids, filters, grease, belts, lights, gaskets and seals)

4.9 making routine adjustments

4.10 carry out leak checks on all connections

4.11 test and review lift operation, including safety and alarm systems

4.12 record the results of the servicing and report any defects found

5.

Carry out inspections and servicing in compliance with all of the following:

5.1 contractual drawing

5.2 British and/or European standards

5.3 equipment manufacturer's operating range

5.4 customer standards

5.5 organisational procedures and schedules

5.6 legal requirements

6.

Ensure that the maintained equipment meets all of the following:

6.1 all components and subassemblies are fit for purpose

6.2 all connections are mechanically and electrically safe and sound

6.3 equipment operates within acceptable limits for safe operation

6.4 equipment remains compliant with all standards and regulations

7.

Complete and store all relevant documentation of the servicing activities in accordance with organisational requirements, using one of the following:

7.1 job cards

7.2 servicing log or report

7.3 permit to work/formal risk assessment and/or sign-on/off procedures

7.4 organisational-specific documentation

7.5 electronic reports

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Inspecting and servicing lift equipment



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