The Delivery Hub health, safety and environment
Raising the bar 25

Loading and unloading vehicles

Version I - July 2014
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**Objective**

To help reduce the number of loading and unloading of vehicles related injuries and incidents, recognising the benefit of common user controls (minimum standards) and by promoting learning, understanding and good practices for operations where loading and unloading vehicles is undertaken.

**Background**

Three million people in Great Britain work on or near vehicles as part of their regular job. Access to vehicles to carry out loading/unloading operations and working at height from vehicles and the beds of vehicle trailers and above are often viewed as incidental to the main job. Because of this, the risks involved may not be properly considered by both workers and their managers. In addition the loading and unloading of vehicles needs to be carefully planned as access to the bed of a vehicle is only one of the risks associated with loads and vehicle use.

Careful assessment of the tasks involved and implementation of simple and cost-effective safety controls can reduce the risk associated with delivery vehicles significantly and avoid potential losses for your company.
Planning

Traffic management plans

Minimum requirements
A project specific traffic management plan to be in place to cover the main areas of control including:

- Introduction
- Site description
- Safe workplaces
- Pedestrians and vehicle separation
- Loading / off loading and storage areas
- Public protection
- Vehicle selection
- Vehicle inspection and maintenance
- Safe driving and working practices
- Reversing
- Loads
- Drivers / operator
- Signallers
- Safe working practices for specific vehicle
- Site layout plan
- Managing construction transport – duty holders
- Driver / operator rules
- Rules for the safe use of vehicles
- Hazard identification and control measures
- Specific detailed drawings / sketch (marked up site traffic management layouts)

Direction to transport /delivery companies

Minimum requirements
Minimum standards document to be produced and sent to all delivery organisations and drivers to inform them of the minimum standards required for the vehicles, including:

- Types of vehicle
- Drivers responsibilities
- Local routes ie restrictions, planning constraints etc
- Destination points ie specific gates etc
- Security of the loads
- Driver qualifications
- Specific client rules
- Specific project rules
- Slinger / signaller training should be key in providing trained personal
- Safe stowing of equipment prior to travelling

Desirable
- Compliance with fleet operators recognition scheme, (FORS)
Plan operations in line with the WH

Minimum requirements
Hierarchy of controls:
• Avoid work at height

• Work equipment to prevent falls;
  - Vehicle based systems
  - Loading bays and platforms
  - Fall restraint systems

• Work equipment to arrest the fall to ground
  - Harnesses and lanyards
  - Soft landing bags

• Ref should be made to Raising the bar 15, task lighting

Desirable
• Platforms and guardrails could be provided around flatbed delivery vehicles where the off-loading is able to be carried out at fixed locations

Training

Minimum requirements
• Standard check list to be produced which should be used to inform vehicle marshals, storeman etc of measures to be considered

• Awareness training should be given to drivers operating on site on:
  - Loading and unloading
  - Weight capabilities of vehicles being used

Desirable
• Delivery partners to organise and provide awareness training to known delivery drivers on the rules associated with the delivery, loading and unloading of vehicles

• Where a vehicle marshall is identified by risk assessment as a requirement they should be trained to CPCS or equivalent standards

• Loading and unloading of mobile plant should only be carried out by appropriately trained persons only

Vehicle access platform
Soft landing bags

Email: DeliveryHub@highways.gsi.gov.uk
Typical traffic management layout plan

![Traffic Management Diagram](image-url)
Information

Vehicle load security / restraint

Minimum requirements
- Loads should be spread as evenly as possible, during both loading and unloading. Uneven loads can make the vehicle or trailer unstable.
- Loads should be secured, or arranged so that they do not slide around.
- Specific checks should be developed to make sure loads have not shifted during transit, and are not likely to move or fall when restraints are removed. These should be briefed to anyone involved in loading or unloading operations.

Enviroment

Environment

Minimum requirements
- Minimum lighting levels should be provided in vehicle depots and on the vehicle. Min lux levels should be aligned to raising the bar15 task lighting (pf to link)

Yard conditions

Minimum requirements
- Yards and compounds should be even and free from potholes and obstacles, to enable safe access to and egress from the vehicle.
- Defined traffic routes should be in place with appropriate signage etc.

Desirable
- Yard and compounds should be surfaced with basecoat material to provide the surface similar to fixed locations.
- One way systems to be established to avoid the need for unnecessary reversing or turning.
Demountable containers

Minimum requirements
- The conditions of the site should allow for any specific requirements of hook-lift or chain-lift demountables, especially the quality of the ground and the overhead space needed

Housekeeping

Minimum requirements
- Set up safe systems for cleaning the vehicle, prior to use on the site and after off-loading. To prevent material from contaminating the compound and access areas

Contamination

Minimum requirements
- Provide vehicle washing facilities to remove reduce or control contaminants, such as diesel and mud, which will increase the likelihood of slip or pollution incidents
- Provide convenient disposal facilities for waste packaging, broken pallets etc

Controls

Loading and unloading areas

Minimum requirements
Loading and unloading areas should be;
- Segregated from other plant and people, not involved in loading or unloading
- Clearly marked as loading / unloading areas
- Clear of overhead cables, structures and other obstructions
- Have level and even ground
- Trailers should be parked on firm level ground with the wheels chocked.
- Suitable signage and barriers to be erected and maintained to provide information and segregation of traffic routes
- Exclusion zone to be put place around tipping wagons

Desirable
- Automatic bucket weighing equipment to be considered for loading shovels / excavators for muck shift operations
- Automatic closing tailgates to be considered on tipping delivery wagons.
- Exclusion zone to be put place around tipping wagons
Vehicle movement control

**Minimum requirements**
- A risk assessment must be in place to identify the segregation and separation methods of people and vehicles/plant
- Measure should be developed to prevent unauthorised or mistaken movement of vehicles
- A system should be in place for the control of vehicle keys

**Desirable**
- Traffic lights systems should be considered to provide automated control of traffic movements
- The use of vehicle or trailer restraints

**Overloading of vehicles**

**Minimum requirements**
- Vehicle load weights should be determined prior to the materials being loaded, these should be communicated to drivers of loading machines and banksmen

**Desirable**
- Weighbridges to be considered to check vehicle weights

Prevention of overhead equipment/structure strikes

**Minimum requirements**
- All vehicles to have their cab/trailer heights/widths displayed
- Physical check to be made and recorded of loads/plant heights if they exceed the cab height
- Projects to display maximum vehicle/load heights within the compound and work areas of the project
- Logistics/vehicle plan to be produced to ensure all existing and proposed overhead structures are identified and maximum heights identified and recorded.
- Audible and visual warning to be fitted in the cab to remind driver/operator if fixed items, including the hydraulic arm fitted to plant equipment, is not safety stowed prior to travelling

**Desirable**
- Ref Raising the bar 7, overhead structure and services protection
Guidance

Planning loading and unloading

Load Weight and security

Vehicle operators / drivers are bound by law to pay attention to the weight, size and security of any load carried on their vehicle or trailer attached to it. The law requires a load to be arranged and secured so that there is no likelihood of danger, injury or nuisance to any person.

- Any conviction arising from overloading or insecurity can lead to a maximum fine of £5000, obligatory endorsement and discretionary disqualification and it can also lead to disciplinary action against the company’s operator's licence
- Driver and vehicle standards agency (DVSA) and the police have powers to issue fines (graduated fixed penalty scheme) to any driver in charge of a vehicle that is overloaded or if the load is insecure see link to DVSA web site https://www.gov.uk/annual-test-for-lorries-buses-and-trailers

To comply with the legislation drivers are responsible to ensure the following points are observed:

- Any load carried is evenly distributed and secured avoiding axle overload
- The load carried should be loaded against the bulkhead or block packed to prevent forward movement
- The maximum axle, gross vehicle weight and train weight are not exceeded (including towed plant) maximum permissible weights for the vehicle are shown on the ministry plate (VTG6) located inside the cab, trailer weights are stamped on a plate usually fixed to the A frame (any doubts must be brought to the attention of the drivers supervisor and the appointed Transport manager or coordinator
- No loose items (boxes, cans etc) are present on vehicle floor
- No broken pallets or cages are used on the load
- All plant and machinery is securely positioned correctly for weight distribution and all load locking devices and lashings are in good condition, secure and attached to the correct anchor points
- All load lashing equipment utilised must be in good condition, sufficient to restrain the load carried and specifically designed for the task of load securing
- All doors (including internal bulkhead doors) are secured
- Crane and fittings are properly stowed and secured with correct fixings
- All steps, ladders, cables or pipes are safely stowed and secured in position with the correct fixings
- Cab items (tools, jacks etc) are safely stowed and secured
- All stowage systems, racking and load restraint anchorage points must be specifically designed and tested for the purpose intended and meet all the requirements of construction and use and vehicle type approval legislation
Access to vehicle

There are some basic principles for working at height, and they apply equally to working at height on a vehicle. In law, work at height means 'work in any place where a person could fall a distance likely to cause personal injury if no precautions are taken'. It includes getting on and off a vehicle trailer or climbing into or out of a lorry cab.

Although some people might not regard work below average head height as 'work at height', the law requires people to consider falls from any height where someone could be injured, including falls from trailers or the tops of vans. In fact, most of the injuries reported to health and safety executive resulting from falls from vehicles are from a fall from below head height.

The most common area of the vehicle for people to fall from is the load area, followed by the cab access steps and fifth wheel catwalk – you do not have to fall far to land hard.

You need to think about how and why people access the vehicle. Access will be needed to the cab, to the load area and to the fifth wheel during normal operations such as loading and unloading and for maintenance or cleaning. Do not forget access is also needed to specialist equipment such as the upper platform of double-decker trailers and lorry-mounted cranes. Look at how people get on and off the bed of the vehicle, especially during loading and unloading.

Think in terms of a hierarchy of controls:

- Plan to avoid work at height where you can
- Where you cannot, make sure you use work equipment to prevent falls;
  - First choice – vehicle based systems
  - Second choice – on site systems
- Where the risk of a fall cannot be eliminated, use work equipment to minimise the distance and consequences of a fall
- Always consider measures that protect everyone at risk (e.g. platforms and guardrails) before measures that only protect the individual (e.g. safety harness)

Avoid working at height unless it is essential: position plant controls at ground level to avoid the need to climb up use should be made of:

- Ground-based or fully automatic sheeting systems instead of manual sheeting
- A sliding connector block (or Mavis rail) allowing Suzie (coil air brake) connections from ground level on articulated vehicles, avoiding the need to access the catwalk
- Under-slung refrigeration units where possible
- Ground-based controls for ancillary equipment

Request help from the workers who use each respective vehicle – they know how the job is really done and normally have good ideas about how to make it safer and more efficient.
Yard conditions

Ensure that ground surfaces to be used for loading and unloading are even and free from potholes and obstacles, to enable safe access to and egress from the vehicle.

Housekeeping

Set up safe systems for cleaning the vehicle, for example for sweeping the load area after deliveries. Inform drivers and other workers of these systems. Have a system for checking that housekeeping standards are being met and that access equipment is clean and in good repair.

The drivers of many vehicles have reported slipping or falling, after getting diesel, oil or grease from the fifth wheel on the soles of their footwear or on the areas where they have to walk. Rainwater, snow and ice are also common problems.

Ways of reducing the risk of falls due to contamination include:

- Provide vehicle washing facilities to remove contaminants, such as diesel and mud, which will increase the likelihood of slip incidents

- Provide convenient disposal facilities for waste packaging, broken pallets etc

- Carry out periodic checks to ensure vehicles are kept in a good and clean condition. This should be a default check carried out by the driver of each vehicle, at least on a daily basis when vehicles are in use

- Provide drivers with safety footwear which is slip resistant on the surfaces they will be walking on

- Provide drivers with cleaning equipment to remove contamination from areas of the vehicle where they have to walk and to clean footwear if necessary.

See Raising the bar 14, slips trips & falls
Lighting

Lighting should be provided in vehicle depots and on the vehicle. Poor lighting makes it difficult to identify slip and trip hazards. Winter working can involve significant time spent working in the dark, as drivers often start work very early in the morning. Truck loading areas tend to be poorly lit, and uneven ground around the vehicle will present a more significant risk in the dark, for example in accessing the fifth wheel area.

Further information relating to the types of artificial task lighting available is contained in the Highways Agency raising the bar document produced for “task lighting”, number 15

Weather conditions

Weather conditions can make the driver’s job more difficult and hazardous when loading and unloading. An important part of the planning process is to make sure that the effects of poor weather conditions are considered. For example, very high winds may cause people to fall, and rain, ice and snow will make surfaces more slippery.

Footwear

Selecting the right sole for the surface and contamination type can prevent many slips. However, the wrong footwear can increase the risk of slips and trips.

When choosing footwear:

• Take advice from specialist suppliers

• Test different footwear to arrive at a good solution in terms of comfort, fit, durability and slip resistance

• It is important to involve the workforce in choosing footwear, as they are the ones who will have to wear it

Maintenance activity

Organise safe systems for maintenance work. Consider whether access to height on the vehicle is required for cleaning or maintenance, for example to the engine, plant, load area or gantry. Work at height may be avoidable, for example by asking for under-slung refrigeration units on articulated trailers which can be worked at ground level.

If access to height is unavoidable and on-vehicle access is not provided, then you should provide other safe access solutions, such as tower scaffolds, gantries, platforms etc. An example would be for repair or service of under-slung refrigeration units on articulated trailers which can be worked at ground level.

If vehicle maintenance works is carried out at site, it should be in accordance with a safe system of work, accepted by the project / principal contractor.

Keeping vehicles in good order

Make sure your maintenance checklists include items that are there to keep the driver safe, as well as those that affect the vehicle running. Checklists should be signed at the beginning of each day to say that, for example, steps are in good condition and can be used.
Reminders to managers

Careful assessment of the tasks involved and planning loading and unloading to minimise work at height can reduce the risk of falls from vehicles significantly and avoid potential losses for your company. Get help from the workers who use the vehicle – they know how the job is really done and normally have good ideas about how to make it safer and more efficient. Make sure people working on vehicles have slip-resistant footwear.

Consider giving the following health and safety executive publications, or equivalent documents if available in a principal contractor’s safety management system, as “toolbox talks” to relevant workers:

- **Preventing falls from vehicles pocket card**, HSE Series code: INDG 413, copies of which are available in English, Polish (Polski) and Welsh (Cymraeg)
- **Managers’ checklist**
- **Managers’ poster**, help raise awareness of ways to prevent falls from vehicles
- **Workers’ poster**, help raise awareness of ways to prevent falls from vehicles copies of the pocket card may also be handed out to relevant workers, with checklist and posters displayed on notice boards

The effectiveness of all the solutions described here depends on them being used. You will need to have procedures in place to check that systems of work are being followed.

**Managers’ checklist**

10 steps you can take as a manager to help prevent falls from vehicles on your site;

1. Agree safe ways of loading and unloading to minimise the amount of time workers have to spend on the vehicle loading area.
2. Carry out regular checks on the condition of equipment such as steps and catwalks. Falls occur when the steps or catwalk have failed.
3. Provide drivers with a system for reporting faults related to access equipment
4. Provide adequate lighting in depots and on the vehicles where work is carried out. Poor lighting will hide trip and slip hazards.
5. Keep vehicle beds and catwalks tidy to help prevent trips and slips.
6. Provide safe vehicle washing facilities and make sure they are used. Diesel, grease or mud increases the likelihood of slipping on the catwalk, steps or load area.
7. Provide steps, gantries and platforms where work at height is unavoidable for loading and unloading or maintenance and cleaning.
8. Provide suitable slip-resistant footwear for drivers.
9. Give drivers a ‘toolbox talk’ on how to avoid falls and provide refresher sessions at regular intervals.
10. Check to ensure that fall precautions are actually taken.

**Reminders to workers**

Take a few seconds to climb down facing the vehicle using three point of contact – “Do not jump”. Jumping is bad for your knees in the long term and you are much more likely to fall and sustain injury

Report missing or damaged access equipment
Report slip, trip and fall hazards and discuss with managers/supervisors how these risks could be minimised

Look at what other companies do - if you see a good idea, suggest it to your health and safety or site management teams

Wear slip-resistant footwear
Vehicles at work checklist – Loading / unloading activities

Suggested use of the health and safety Executive example checklist below, or equivalent documents if available in a Principal Contractor’s safety management system.

Are loading / unloading operations carried out in an area away from passing traffic, pedestrians and others not involved in the loading / unloading operation?

Loading and unloading areas should be:

- Clear of other traffic, pedestrians and people not involved in loading or unloading.
- Clear of overhead electric cables so there is no chance touching them, or of electricity jumping to ‘earth’ through machinery, loads or people.
- Level. To maintain stability, trailers should be parked on firm level ground.
- Loads should be spread as evenly as possible, during both loading and unloading. Uneven loads can make the vehicle or trailer unstable.
- Loads should be secured, or arranged so that they do not slide around. Racking may help stability.
- The use of safety equipment must be considered. Moving heavy loads are dangerous.
  - Guards or skirting plates may be necessary if there is a risk of anything being caught in machinery (for example dock levellers or vehicle tail lifts). There may be other mechanical dangers and safety procedures to be considered.
- Ensure the vehicle or trailer has its brakes applied and all stabilisers are used. The vehicle should be as stable as possible.
- In some workplaces it may be possible to install a harness system to protect people working at height. Provide a safe place where drivers can wait if they are not involved. Drivers should not remain in their cabs if this can be avoided. No-one should be in the loading/unloading area if they are not needed.
- Vehicles must never be overloaded. Overloaded vehicles can become unstable, difficult to steer or be less able to brake.

Always check the floor or deck of the loading area before loading to make sure it is safe. Look out for debris, broken boarding, etc.

Loading should allow for safe unloading.

Loads must be suitably packaged. When pallets are used, the driver needs to check that:
  - They are in good condition
  - Loads are properly secured to them.
  - Loads are safe on the vehicle.

They may need to be securely attached to make sure they cannot fall off.

Tailgates and sideboards must be closed when possible. If over-hang cannot be avoided, it must be kept to a minimum. The over-hanging part of the load must be clearly marked.

If more than one company is involved, they should agree in advance how loading and unloading will happen.
  - For example, if visiting drivers unload their vehicles themselves, they must receive the necessary instructions, equipment and co-operation for safe unloading. Arrangements will need to be agreed in advance between the haulier and the recipient.

Some goods are difficult to secure during transport. Hauliers and recipients will need to exchange information about loads in advance so that they can agree safe unloading procedures.

Checks must be made before unloading to make sure loads have not shifted during transit, and are not likely to move or fall when restraints are removed.

Traffic lights
- The use of vehicle or trailer restraints
- The person in charge of loading or unloading could keep hold of the vehicle keys.
- These safeguards would be especially effective where there could be communication problems, for example where foreign drivers are involved.
Are the load(s), the delivery vehicle(s) and the handling vehicle(s) compatible with each other? Matching load with vehicles

- By law, every employer must make sure that work equipment (which includes vehicles) is suitable for its purpose
- Vehicles should be suitable for any loads carried, and it is especially important that the vehicle has adequate anchor points to make sure that loads can be carried securely
- It shall be ensured by the employers that all lifting equipment connectors or parts of a load which will be load-bearing have adequate strength and stability to accept the stresses induced by the lift

Are parking brakes always used on trailers and tractive units to prevent unwanted movement, e.g. when coupling vehicles?

It is important to make sure that vehicles do not move when they are parked (and during loading, unloading and other operations) so that people who might be working on or around the vehicle are protected.

- Systems to prevent vehicles from moving can be built into the design of the vehicle or be site based
- Vehicles should have suitable and effective brakes, both for general service and for parking
- Drivers sometimes use the emergency brakes as parking brakes when they uncouple the tractive and semi-trailer units, because they have to disconnect the Suzie anyway. This should never be allowed to happen. Air brakes should never be applied solely by disconnecting the Suzie (coil air brake) hose. The emergency brakes should not be relied on to secure a semi-trailer
- Although the actual brakes on this sort of system are the same for parking and emergency brakes, the control mechanism is very different, and emergency brakes should never be relied on to secure a semi-trailer
- Reconnecting the hose will free the brakes immediately, leaving the vehicle free to move with the driver away from the cab
- These accidents are called ‘vehicle runaways’ and can mostly be prevented.
- Making sure that both the tractive unit and semi-trailer parking brake controls are used is the most effective way of making vehicle runaways less likely
- People in control of workplaces where trailers are parked need to make sure drivers are aware that both tractive unit and semi-trailer parking brakes should be used when parking. Drivers’ behaviour should be supervised and monitored
- Trailer parking brakes are there because they need to be, and must be used every time a vehicle and trailer are parked. You should consider signs, instruction and any other measures to make sure this happens

Are the vehicles braked and/or stabilised, as appropriate, to prevent unsafe movements during loading and unloading operations?

- Vehicles should have suitable and effective brakes, both for general service and for parking
- It may be appropriate for you to make sure that people know about the way different types of vehicle move before they are allowed into an area where vehicles operate
- It is important to make sure that vehicles do not move when they are parked so that people who might be working on or around the vehicle are protected
- Systems to prevent vehicles from moving can either be built into the design of the vehicle or be site based
- The vehicle should be as level, stable and stationary as possible. All of the vehicle and trailer brakes should be applied and any stabilisers should always be use
Are systems in place to prevent trucks driving away while they are still being (un)loaded?

Preventing vehicles from moving during loading and unloading operations can be important to make sure that people who might be working on or around the vehicle are protected.

People involved in loading or unloading often work close to moving lift trucks, which pose a high risk of hitting them or otherwise injuring them:

- Ensure the vehicle or trailer has its brakes applied and all stabilisers are used. The vehicle should be as stable as possible
- Vehicles must never be overloaded. Overloaded vehicles can become unstable, difficult to steer or be less able to brake.
- To maintain stability, vehicles and their trailers should be on firm ground, free from potholes or debris, which could make the vehicle unstable

Simple control measures, such as directional signage, stop boards placed in front of delivery vehicles and most importantly the handing over of vehicle keys to yard marshals (have been introduced to ensure that vehicles cannot move around the yard without proper supervision.

Are lorry drivers and others kept in a safe place away from the vehicle while (un)loading is carried out?

Traffic routes

By law, every workplace must be organised so that pedestrians and vehicles can circulate safely.

Pedestrians and other people who are not involved in loading or unloading should be kept clear of passing traffic.

Pedestrian traffic routes should represent the paths people would naturally follow (often known as ‘desire lines’), to encourage people to stay on them.

Three of the ten tips for a safer site;
- Keep pedestrians apart from vehicles;
- Send information about your site to drivers before they arrive
- Drivers - check you have site information before you leave your depot

Generally, parking and loading or unloading should be off the road and pavement, well away from members of the public. Loading or unloading over the pavement should be avoided, but where this is not possible a specific risk assessment should be carried out for the task.

Appropriate signs and road markings showing safety equipment, showing the areas pedestrians are not allowed in, and alerting people to loading and unloading operations should be in place and visible, wherever appropriate.

Segregating pedestrians from vehicle activity, preferably by making routes entirely separate, is the most effective way of protecting them.
Is there a safe area marked where drivers can observe loading (if necessary)?

- Where drivers need to observe the loading, they will need to be in a safe place to do this. This should be away from danger (for example away from moving vehicles, or places where loads could fall) and should be clearly marked.

- Some sites do not allow drivers to stay in the vehicle during loading and unloading.

- If drivers are not allowed in their vehicles, it is important that you provide them with a safe area to wait that allows them to rest effectively between driving shifts, especially where they may be waiting for several hours.

- You should provide a safe place where drivers can wait if they are not involved.

- No one should be around during loading or unloading if they are not needed.

- It is often unrealistic and sometimes unsafe to expect drivers to stay in their cab while their vehicle is being loaded or unloaded. A designated safe area for visiting drivers with easy, safe access to toilet and refreshment facilities reduces risks considerably. A safe area may be needed for drivers to watch the loading or unloading.

- Workers who do need to be in the same area as loading or unloading (for example people who are involved in the work) should be segregated from vehicle movement wherever this can reasonably be achieved, and specific systems of work should be applied to make sure the driver does not move the vehicle unless everyone involved is known to be in a safe place.

- Loading / unloading areas should be clear of passing traffic, pedestrians and other people who are not involved in loading or unloading.

Has the need for people to go on to the load area of the vehicle been eliminated where possible and if not is safe access provided and used?

An assessment of risks, as outlined in this raising the bar document should include:

- Planning loading and unloading
- Access to vehicle
- Surfaces
- Footwear and clothing
- Lighting
- Weather conditions
- Yard conditions
- Housekeeping
- Ground level controls
- Maintenance

Is appropriate lifting equipment available for (un)loading vehicles?

- Loading and unloading will often involve mechanical lifting. By law, you must make sure that all lifting operations are properly planned by a competent person, appropriately supervised and carried out safely.

- Lifting equipment needs to be suitable for its use, marked with its safe working load, properly maintained, inspected appropriately and thoroughly examined regularly.
Is appropriate lifting equipment available for (un)loading vehicles?

Manual Handling Operations Regulations 1992 -

**Regulation 4: Duties of employers**
Avoidance of Manual Handling

**Regulation 4 (1) (a)**
Each employer shall - so far as is reasonably practicable avoid the need for employees to undertake manual handling operations, which involve a risk of their being injured.

**Regulation 4 (1) (b)**
Each employer must - where manual handling cannot be avoided make a suitable and sufficient assessment of all normal handling operations.

Schedule 1 to the Regulations specifies factors, which must be considered when conducting an assessment. These are:

A. The tasks
B. The loads
C. The working environment
D. Individual capacity
E. Other factors
F. Is loading/unloading carried out so that, as far as possible, the load is spread evenly to avoid the vehicle or trailer becoming unstable?
G. Department of Transport code of practice – safety of loads on vehicles

Are checks made to ensure the load is adequately secured in line with the Department for Transport Code of practice and not loaded beyond their capacity before the vehicle leaves the site?

- The most suitable securing method should be used for different types of load
- Operators should make sure they have the correct securing equipment for the types of load carried. Where general cargoes are carried, various types should be available
- Clamps, special bolts, steel-wire ropes, chains, webbing harnesses, sheets, nets, ropes and shoring bars are all suitable to secure loads, but it is essential to make sure that they are strong enough for the weight of the loads carried
- Sheeting rope hooks should never be used to secure loads. They are not designed to bear heavy loads and may be in the wrong position to secure a load safely

Is loading/unloading carried out so that, as far as possible, the load is spread evenly to avoid the vehicle or trailer becoming unstable?

**Department of Transport code of practice – safety of loads on vehicles**

Wherever possible during loading, follow these principles:

- Loads should be spread as evenly as possible during loading, moving and unloading. Unbalanced loads can make the vehicle or trailer unstable, or overload individual axles;
- Balancing the load is important to make sure the trailer moves predictably and safely;
- Generally, loads should rest as close as possible to the bulkhead;
- Code of practice safety of loads on vehicles (third edition) 123 pages
Legislation/guidance:

http://www.hse.gov.uk/
Management of Health and Safety at Work Regulations 1999 (MHSWR)
Manual Handling Operations Regulations 1992 (MHOR)
Lifting Equipment and Lifting Operations Regulations 1998 (LOLER)
Provision of Work Equipment Regulations 1998 (PUWER)
Work at height regulations 2005 (amended) (WAHR)
HSE publication: Vehicle ‘Spec’ check
HSE publication: Managers’ checklist
HSE publication: Managers’ poster
HSE publication: Workers’ poster
HSE series code HSG150: Health and safety in construction (Health and Safety Executive books)
HSE series code INDG199 (rev 2): Workplace transport safety, a brief guide
HSE series code INDG290 (rev 1): A brief guide to the legal requirements of the Lifting Operations and Lifting Equipment at Work Regulations 1998 (LOLER)
HSE series code INDG367: Inspecting fall arrest equipment made from webbing or rope (leaflet)
HSE series code INDG401: The Work at height regulations 2005 (as amended) a brief guide
HSE series code INDG413: Preventing falls from vehicles

Highways Agency - Raising the bar standard No.1, Plant and equipment
Highways Agency - Raising the bar standard No.2, Traffic management entry and exit
Highways Agency - Raising the bar standard No.3, Man/Machine interface
Highways Agency - Raising the bar standard No.15, Task lighting
Highways Agency - Raising the bar standard No.16, Working at height
HSE Case Study 2, Reducing falls from vehicles - MultiServ reduce the risk of slips and trips
HSE Case Study 7, reducing falls from vehicles - Balfour Beatty saves time and increases safety
Construction safety manual (CIP)
https://www.gov.uk/government/organisations/department-for-transport

DIT Code of Practice: Safety of loads on vehicles (Third edition)
LVG Check poster

Large Goods Vehicle (LGV) - Vehicle checks

Pre use walk round checks must be completed prior to use of any vehicle. Any trailer used must be checked in combination with the vehicle. Drivers must monitor the condition of the vehicle & trailer throughout the working day. Defects affecting the roadworthiness of the vehicle or any trailer used must be rectified before further use of the vehicle.

Load Weight and Security Checks
- Gross and axle Weight checks
- Onboard weighing must be used when fitted
- Weight must be evenly distributed
- Equipment and tools including trolley must be secured

Towing facility checks - Security, condition and function
- Tow bar
- Pin and Eye connection including safety clip
- Electrical and brake if fitted/connections
- Safety or breakaway cable fitted
- Trailer pre-use check must be completed

Body and Chassis - Check security, condition, function and free from damage or leaks
- Doors, hinges catches and windows
- Wings and Mud flaps/ Spray suspension
- Bumpers, number plates and Light brackets
- Body sides, headboard, tailboard, hinges, catches and fittings
- Side guards and rear under run bar
- Tool boxes
- Rear marker plates, outline marking and Chapter 8
- Rear and side reflectors
- Exhaust system
- Battery and charger
- Fuel and hydraulic tanks

Cab checks - Security, Condition and function
- Cab panels and fixings
- Windscreen and glass
- Cab floor
- Cab access steps and grab handles

Wheels and tyres - Security, Condition and function
- Wheels condition and security, wheel nuts, studs (none missing or loose) and flags aligned, wheel rims are free from damage or wear
- Hub security and condition, hub cap present and condition
- Tyres condition, inflation, tread depth (2mm min) free from cuts and abrasions and damage (Wiring) no exposed cords or bulges
- Brakes
- Service brake operates effectively with no pulling, grinding or vibration. Pedal has no excessive travel or side
- Handbrake operates efficiently and locks in position
- No Air leaks – check with footbrake depressed
- Any visible air pipes are secure

Pre use levels check
- Water
- Oil
- Fuel
- Axle (Where fitted)
- Washer bottle
- Clutch fluid (Visual)
- Hydraulic oil
- Fuel/oil/water leaks
- Check under vehicle for fuel, oil or water leaks
- Fuel filler cap is properly fitted and seal is effective

Ancillary equipment checks all items – Condition, security, leaks, operation
- Crane access ladder working platform and grab handles
- Crane mounting
- Crane and bucket
- Crane safety systems
- Body tipping system
- Snatching system
- Washer carrier

Cab checks all items - security, condition and function
- Horn
- Wipers and washers
- All Driving controls and heating/demisting systems
- Brake and clutch pedal rubbers
- Steering, power steering and excessive play
- Driver’s and passenger seats
- Seat belts
- Mirrors (All) – Number and alignment
- Windscreen and glass – swept area is clear and free from chips and cracks and the driver view of the road or through mirrors is not impaired
- Reverse camera
- Dashboard instruments and warning lights
- Engine noise and exhaust does not emit excessive smoke
- PTO, Tipper and Crane controls
- Onboard weighing facility
- Current Tax and operator licence disc displayed

Lights - Security, Condition & function
- All lenses and clean and free from damage
- Front and rear side lights, top and side marker lights
- Headlights Main and dipped
- Indicators front and rear, side repeaters and warning
- Brake lights
- Fog lights
- Reverse lights, warning and camera
- Warning beacons and strobe lights
- Work lamp

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