

FORKLIFT SAFETY TIPS

Information Sheet

December, 2013

Forklifts are extremely useful workplace vehicles, as long as they are used safely and appropriately by operators who are appropriately trained and competent to use them.

Forklifts can be dangerous: they account for 25% of injuries at work. Many workplace accidents involve people being hit or run over by forklift trucks (typically when the forklift is reversing) because the driver did not see them. Owing to their size and weight, injuries resulting from forklifts are generally very serious. Accidents involving them are often caused by poor supervision and a lack of training.

The following forklift safety tips will help you and those you work with stay safe around forklifts.

What is a forklift?

A forklift is a powered truck used to carry, lift, stack or tier materials. They include pallet trucks, rider operated forklifts, fork trucks, or lift trucks.

They can be powered by electric battery or combustion engines.

Forklifts are subject to statutory examination by a competent person once every 12 months in accordance with S.I. 299 of 2007 (Safety, Health and Welfare at Work (General Application) Regulations 2007). This period becomes 6 months if the forklift is used to lift persons.

What the law requires

If you own, lease, hire or borrow a vehicle for work purposes, you must make sure that it is safe for use and fit for the purpose for which it is intended.

Under health and safety legislation, a vehicle is a place of work. The law requires that workplaces are maintained in a condition that is safe and without risk to safety and health. Vehicles must be kept safe and fit for purpose and the driver must be able to get in and out of the vehicle safely.

Forklifts also are classed as work equipment. Employers must make sure that drivers are familiar with the vehicle they are driving and that they have been given appropriate instruction, information and training to carry out required pre-checks and to use the vehicle in the correct and safe manner, as per the manufacturer's instructions.



Employers must also make sure that they have a defect reporting system in place so that when defects are found that they are rectified. Employees should never be required to operate under conditions that are unsafe or that do not comply with the law.

Employers must make sure that forklifts are provided in a safe condition for use at work. This can be achieved by having a preventative maintenance system which includes scheduled checks as per the manufacturer's instructions.

Employees have legal duties to use work equipment in a safe manner in line with procedures developed by their employer.

Safe Operation

Always:

- ✓ Wear appropriate personal protective clothing as provided by employer. Hard hat, protective footwear and high visibility clothing are recommended as a minimum when working around forklifts. Other equipment may be needed depending on the working environment
- ✓ Carry out a pre-shift check of the forklift
- ✓ Report defects immediately to supervisor
- ✓ Make sure work path is free of obstructions
- ✓ Wear operator restraints, where fitted
- ✓ Look all around before moving off
- ✓ Look in the direction of travel
- ✓ Travel at a speed suitable for the location and the load carried
- ✓ Travel with the forks lowered, but clear of the ground
- ✓ Watch out for pedestrians
- ✓ Avoid sudden stops and violent braking
- ✓ Take care when driving on wet, icy, slippery or loose surfaces
- ✓ Slow down at corners, doorways, and at danger spots
- ✓ Sound the horn several times when approaching blind corners, exits and entrances
- ✓ Switch off and remove the key before leaving the forklift. Place the key in a safe location when driving task is completed
- ✓ Apply the parking brake before leaving the forklift
- ✓ Face the forklift and use the steps and handholds when getting in or out of the vehicle. Use three points of contact
- ✓ Report any accidents or near misses to a supervisor

Never:

- ✗ Operate a forklift unless you are trained, competent and authorised to do so
- ✗ Use a forklift or equipment you know is not working properly
- ✗ Operate controls from outside the cab, unless it is designed so you can do this
- ✗ Stand on or near the controls to reach the load or anything outside the cab
- ✗ Start or stop suddenly
- ✗ Make abrupt or quick turns
- ✗ travel on uneven ground unless the forklift is suitable for this
- ✗ Run over unprotected cables or flexible pipes
- ✗ Try to carry out repairs – leave this to a qualified maintenance engineer
- ✗ Operate a forklift when under the influence of alcohol or drugs [prescribed or illegal]
- ✗ Use mobile phones or other hand-held devices while operating the forklift
- ✗ Use uncertified attachments
- ✗ Use an attachment unless a competent person, an authorised dealer, or manufacturer has derated the forklift [reduced actual capacity]

Carrying Loads

Always:

- ✓ Assess the load before lifting. Check weight, size, load centre and security
- ✓ Make sure that pallets are in good condition
- ✓ Observe floor loading limits
- ✓ Find out the weight of the laden forklift
- ✓ Check safe working load (SWL) of racking before placing loads onto it
- ✓ Make sure load does not obstruct view. If it does, drive in reverse, looking in direction of travel
- ✓ Make sure there is adequate clearance for the forklift and load, including overhead
- ✓ Make sure the load does not exceed capacity of forklift
- ✓ Make sure the load is stable and can be safely lifted
- ✓ Carry the load as close to ground as possible
- ✓ Use controls smoothly
- ✓ Position forks properly and as widely as possible
- ✓ Make sure the fork arms are fully inserted when travelling with a load
- ✓ Make sure the forklift is stopped before raising the load
- ✓ Use suitable attachments for lifting unusual or wide loads
- ✓ Lower loads at a safe speed
- ✓ Make sure you are properly trained, certified and authorised to operate the forklift with an attachment

Never:

- ✗ Lift loads greater than the capacity of the forklift
- ✗ Move a load that appears unsuitable or unstable (including on a damaged pallet)
- ✗ Lift load with attachments, unless trained, certified and authorised to do so



- ✗ Travel with a bulky load that blocks your view
- ✗ Travel with a raised load, unless the forklift is designed specifically for this
- ✗ Leave the vehicle with the load raised.

Operating on Slopes

Always:

- ✓ Travel slowly when going down slopes
- ✓ Ensure the forks face uphill when travelling up or down slopes with a load
- ✓ Ensure the forks face downhill when travelling up or down slopes without a load
- ✓ Adjust the tilt (where fitted) to suit the gradient and raise the forks to clear the ground

Never:

- ✗ Turn the vehicle around on or travel across a ramp or a slope
- ✗ Leave a forklift on a slope, except in an emergency. In case of emergency always chock the wheels

Carrying People**Always:**

- ✓ Use a safe work method when using working platforms, i.e integrated platform. Use of non-integrated platforms should only be permissible in exceptional circumstances under documented controls
- ✓ Remain in control of the forklift while workers are on the platform
- ✓ Watch out for pedestrians
- ✓ Use spotters when operating in congested areas

Never:

- ✗ Lift a person on the forks or on a pallet, or similar, balanced on the forks
- ✗ Move travel or turn with a person lifted at height
- ✗ Carry passengers, unless the forklift is designed for this and has a designated seat and seat belt
- ✗ Allow people to walk under raised forks or loads
- ✗ Leave a truck unattended when people are using a non-integrated platform
- ✗ Pick up a load if someone is standing close to it

When you have finished working**Always:**

- ✓ Park the forklift in a safe place, on level ground; never on a slope
- ✓ Leave the forklift with the mast tilted forwards and the forks fully lowered, with the tips on the floor
- ✓ Apply the parking brake, select neutral, switch off the engine and remove the key
- ✓ Return keys or other activating devices to their place of safe-keeping
- ✓ Report any malfunctions or defects immediately to a supervisor

Where can I find further information?

Further information and guidance on forklifts can be found in the HSA's 'Code of Practice for Rider-Operated Forklifts: Operator Training and Supplementary Guidance'.

Forklift operator pre-use checks sheets are available at **www.vehiclesatwork.ie** or by contacting **LoCall: 1890 289 389** (between 9am and 5pm, Monday to Friday) - Additional resources: HSE Guidance Working Platforms (Non-integrated) on Forklifts - Guidance Note PM28



Forklift Truck Operator Pre-Use Checks



Visual Checks

- General Condition.
- Forks.
- Carriage Plate.
- Mast.
- Back Rest Extension / Load Guard.
- Lift Chains.
- Tyres.
- Wheels.
- Overhead Guard / Roll Over Protection Frame.
- Energy Source.
- Hydraulics.
- Identification / Rating Plate.
- Operator's Compartment.
- Access.
- Lights, Windscreen and Mirrors (if fitted).
- Fire Extinguisher (if fitted).

Working Environment

- No evidence of leaks.
- No obstructions (overhead or in working area).
- Correct forklift type for working environment.

Practical / Operational Checks

- Seat.
- Safety Belt.
- Ignition and Electrical Systems.
- Reversing Alarm and Horn.
- Warning Lights and Lights (if fitted).
- Hydraulic Controls.
- Brakes (Foot & Parking).
- Clutch and Gearshift.
- Steering.
- Exhaust.
- Noise.

If used on the Public Road

- Forklift truck registered and number plate (front and rear) displayed, clean and legible.
- Valid tax and insurance disc displayed.
- Road lights (side, head, rear, stop and number plate lights) in place, clean, correct colour and working correctly.

Note: Head, stop and direction indicator lights are not required if the truck cannot exceed 12 miles per hour (19 Kilometres per hour) provided that the driver is clearly visible on all sides, can give hand signals to other traffic and the vehicle is not used during lighting-up hours except in an adequately lit public place.

Thorough Examination

- Thorough examination carried out every 12 months (every 6 months if used to lift persons) by a competent person and test certificate available.

Forklift Truck Operator Pre-Use Checks

Vehicle Serial / Identification Number _____

Check Items

✓ OK ✗ DEFECT

Visual Checks

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|----|--|--------------------------|
| 1 | General: Good condition with no damage, excessive dirt or rust. Any defects previously noted repaired. | ☐ |
| 2 | Forks: Correctly positioned, not damaged, cracked, bent or worn. Anchor pins secure and not worn, loose or bent. | ☐ |
| 3 | Carriage Plate: No damage or distortion, sitting square to the mast and lubricated. End stop bolts engaged and secure. | ☐ |
| 4 | Mast: No damage, distortion or cracks. No undue wear, scoring, dirt or foreign bodies in channels. End stops secure. Rollers, no uneven wear or incorrect tracking. Slides intact and secure. | ☐ |
| 5 | Back Rest Extension / Load Guard: In good condition, secure with no distortion or cracks. | ☐ |
| 6 | Lift Chains: Not damaged worn or stretched, no broken links or rust. All pins in place. | ☐ |
| 7 | Tyres: No damage, excessive dirt or wear, rust, cracks, splits or separation of tyres and rims. Pneumatic tyres correct air pressure. | ☐ |
| 8 | Wheels: Undamaged and free from obstruction and debris. All nuts secure and in place. | ☐ |
| 9 | Overhead Guard / Roll Over Protection Frame: Secure, undamaged with no loose items. | ☐ |
| 10 | Energy Source: | ☐ |
| | • Gas or Diesel: Engine oil, fuel and radiator water level correct. Gas bottle secured, no rust, corrosion or damaged pipes, hoses or seals. | ☐ |
| | • Electric: Electrolyte level, battery plug and connections correct. Power cable intact, connected and secure. No exposed wires, battery brackets secure and battery adequately charged. | ☐ |
| 11 | Hydraulics: No damage or fluid leaks, no splits in hoses, no leaks around fittings. | ☐ |
| 12 | Identification / Rating Plate: Intact, clean and legible. | ☐ |
| 13 | Operator's Compartment: Clean with no loose items. | ☐ |
| 14 | Access: Steps and grab handles in good condition and clean. | ☐ |
| 15 | Lights, Windscreen and Mirrors (if fitted): Clean and undamaged. | ☐ |
| 16 | Fire Extinguisher (if fitted): Secure and charged. | ☐ |

Operational Checks

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|----|---|--------------------------|
| 17 | Seat: Good condition, secure and adjusted correctly. | ☐ |
| 18 | Safety Belt: Accessible, in good condition and working correctly. | ☐ |
| 19 | Ignition & Electrical System: Working correctly. All gauges and instruments visible and working. | ☐ |
| 20 | Reversing Alarm and Horn: Working correctly and audible. | ☐ |
| 21 | Warning Lights & Lights (if fitted): Working correctly. | ☐ |
| 22 | Hydraulic Controls: Working smoothly and correctly. | ☐ |
| 23 | Brakes (Foot & Parking): Working correctly. | ☐ |
| 24 | Clutch & Gearshift: Working smoothly and correctly. | ☐ |
| 25 | Steering: Working correctly with no excessive play. | ☐ |
| 26 | Exhaust: No excessive smoke, sparks or flames. | ☐ |

Defect Details

Operator's Signature _____

Date _____

Manager's / Supervisor's Signature _____

Date _____

Note: This is a sample operator pre-use forklift truck checklist. It is recommended that employers prepare their own operator pre-use checklists, taking account of the manufacturer's recommendations, the type and use of their own forklift trucks.