

Forklifts | OPERATOR PRE-CHECKS

Information Sheet

December, 2013

Forklifts can be dangerous machines. If not maintained properly, there is a risk of injury or death. This information sheet outlines what must be done to keep forklifts safe and fit for purpose.

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. So, vehicles must be kept safe and fit for purpose and the driver must be able to get in and out of the vehicle safely. 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 operate the forklift in the correct and safe manner.

Employers must undertake routine preventative maintenance to keep forklifts in safe working condition 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 in a timely manner. Drivers should never be required to drive under conditions that are unsafe or that do not comply with the law.

Forklifts are subject to statutory examination by a competent person once in every period of twelve months in accordance with S.I. 299 of 2007 (Safety, Health and Welfare at Work [General Application] Regulations 2007). If the forklift is used to lift persons, a six-monthly check is required.

A system should be established for reporting defects and ensuring that remedial work is carried out. A planned routine maintenance system should include:

- **Daily pre-checks** of tyres, brakes, reversing alarm, flashing beacon etc. by the driver at the beginning of each shift



- In-depth weekly checks by the supervisor/ manager; these reports should be written and records kept
- Maintenance as per the manufacturer's instructions
- Checks by a qualified and competent engineer following any major repair, modification or accident

Daily pre-checks

The majority of faults can be found and fixed if the operator carries out a forklift pre-check before use. The pre-check only takes a few minutes. It makes sure that obvious defects that could affect forklift safety and the safety of others are identified.

Business benefits

The price of correcting unexpected vehicle failure is always higher than the cost of preventing that failure in the first place. Well maintained forklifts have both business and safety benefits. Forklifts that are well maintained and regularly checked:

- Are more reliable
- Are cheaper to run
- Have higher residual value

The direct business benefits are:

- Less downtime
- More reliable customer service
- Longer forklift lifespan and reliability

Safety benefits include:

- Improved operator safety
- Safer operator working environment (workplace)
- Reduced likelihood of injuries to the operator and pedestrians in the vicinity of the forklift

Preventative maintenance

All employers and owner-operators should put in place a forklift preventative maintenance system. The aim of the system is to identify any forklift defects, damage or problems at an early stage before they become a safety issue or a major cost. As well as causing serious accidents, neglecting to maintain a forklift can result in the breakdown of the machine and unscheduled stoppages to the work process.

Forklift pre-checks are a crucial part of the preventative maintenance system. The operator is often the first person to notice if there is a problem. Therefore operator pre-checks should be incorporated into daily work routines before commencing work with the forklift. It is recommended that employers prepare their own forklift checklist to take account of the type and level of use. Where forklifts are shared by more than one driver responsibility for conducting checks should be clearly assigned.

As a forklift operator, by law, you must make sure that the forklift you drive is maintained and used so that it is unlikely to cause a danger to anyone. If specific items are checked daily, it will help to identify obvious vehicle defects. When conducting pre-checks, it is important for the operator to follow a routine so that nothing is overlooked. When conducting the checks, a high visibility vest or jacket should be worn and caution should be taken to look out for other vehicles. People being hit or run over by forklifts is one of the main causes of workplace death. Injuries caused by forklifts are generally very serious because of the size and weight of the machines.

Each operator must be satisfied that their forklift is safe to operate and free from defects. Any defects should be recorded and reported to the employer or responsible person so that appropriate action can be taken. Any safety critical defects must be rectified before the forklift is used.

Operator pre-check

A reliable and documented system of daily or pre-shift checks is the cornerstone of good preventative maintenance. This ensures that essential fluids are kept topped up and potential defects are identified before they become a problem. Maintenance and checks should be carried out in accordance with the manufacturer's instructions. A checklist as per the sample attached can be used to make sure that the daily/takeover checks are carried out and defects reported and repaired. It is recommended that the forklift is checked in a clockwise/ anti-clockwise direction covering the following main visual & operational items:

- Forks, carriage plate, mast, lift chain
 - Lights, windscreen and mirrors (if fitted)
 - Wheels, tyres
 - Energy source (gas, diesel, electric battery)
 - Hydraulics
 - Instruments
 - Operator's compartment; including Seat Belts (Driver Restraint)
- ✓ Carry out pre-checks in a safe area away from passing vehicles and pedestrians.
 - ✓ Check that the forklift is sitting square and not leaning to one side. Switch on the hazard lights to show that there is someone working and that the lights are working. Check that the driver's mirrors are clean, secure and not damaged.
 - ✓ Check that the wheels are in good condition with no cracks or damage and that they are secure.
 - ✓ The tyres are the only parts of a forklift that are always in contact with the ground. They provide grip for movement, friction for braking and suspension for safety and comfort. The correct tyres in good condition are an essential aid to safe and efficient operations. The wrong tyres for the application or tyres that are in poor condition or excessively worn,

are a potentially dangerous and expensive hazard. Is there any damage to the tyres, such as bulges, cracks, cuts or tears? Are they correctly inflated with appropriate thread depth? Tyres should have sufficient thread and should not be worn to the extent that the thread indicator contacts the road surface. Check thread depth with a simple gauge. Refer to the manufacturer's handbook for specific information about required thread depth for your forklift tyres.

- ✓ Check the vehicle bodywork for damage. Make sure that body panels are secure and not liable to fall off.
- ✓ Make sure that the number plates (if required) are fitted in the correct position, are clean and that the registration is clearly visible and appropriately lit.
- ✓ Make sure that all forklift access is in good condition and is clean and secure, including steps. Check that there is nothing present that could cause someone to slip or trip when getting into or out of the forklift. Good housekeeping is essential.
- ✓ If used on a public road, check that the tax and insurance discs are in place and in date.
- ✓ Make sure that the seat and steering wheel are set for comfort, posture and safety and that all controls can be easily reached.
- ✓ Check your driving lights.



- ✓ Forklifts have chains, hydraulic cylinders, valves and seals, all of which are vulnerable to the ingress of dirt of any description. This dirt may cause such components to deteriorate and fail prematurely. Premature failure leads to disruptive unscheduled maintenance and extra cost. In addition, forklifts that operate with or around chemicals and corrosive materials will be exposed to possible damage to these components as well as the chassis, bodywork, cab etc.
- ✓ Check that there is good all round visibility. For example, is vision obstructed by any stickers or pendants? Check that the cab interior is clean and that there are no loose items which could cause injury if to the need brake in an emergency arose. Do the lights, horn and warning systems all operate correctly?
- ✓ Check that all instruments, gauges and warning devices are operating correctly and following their correct sequence. If any warning lights remain on after start-up, report them; don't ignore them.
- ✓ Before driving the vehicle, check that the steering and brakes are working correctly.

Recording of defects

Record and report any defects in accordance with the employer's defect reporting systems. Remember: any safety-critical items must be repaired or the forklift must be taken out of service. Records of all checks, repairs and services should be kept for the forklift. Analysis of the records may highlight a pattern or history of recurring defects or poor maintenance repair standards.

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'.

Examples of the forklift checks poster and checklist are attached on following pages.



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).

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.

Working Environment

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

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

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

Operational Checks

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

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.