

## KEELSON Safety Summary

# FORKLIFT SAFETY

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Knowledge, skill and confidence are the essential tools of a professional forklift operator. Most forklift accidents result from operator error, so even the most experienced forklift drivers need to review and follow basic forklift safety rules and guidelines.

The Occupational Safety and Health Administration (OSHA 1910.178) require that "only trained and authorized operators shall be permitted to operate a powered industrial truck (forklift)."

### **Operator Qualification and Training**

Although driving a forklift may appear to be easy, it is actually much more difficult to drive than an automobile or truck. Therefore, not every person is capable of operating a forklift. Consequently, certain guidelines must be met in order to guarantee operator safety and the safety of fellow employees. It is recommended that a forklift operator have a valid driver license for the state in which he/she resides, and have a violation-free driving record. It is also recommended that the prospective operator complete a physical examination that includes at least the following:

- Drug/Alcohol Screening
- Vision Examination
- Hearing Test
- Back Strength Exam (in cases where operator is required to manually handle material)

OSHA requires that a forklift operator complete a documented training session. Most forklift dealers and service companies offer programs that include classroom and behind-the-wheel training, and provide the means to document the training and identify the candidate as an authorized forklift operator through the use of stickers, patches or badges.

### **Pre-Use Inspection**

The physical operating condition of a forklift can change throughout each day and between each shift. A pre-use inspection identifies potential hazards that may be encountered from a damaged forklift.

The inspection should encompass both a visual pre-check and an operational pre-check, both of which should be documented.

## Visual Pre-Check

The operator should walk around the forklift checking for any obstructions, and inspect the general condition of the equipment. The following items should be addressed:

- Nameplate, markings, rated capacity
- Fire extinguisher (present and charged)
- Fuel, engine oil, radiator water levels
- Missing or loose bolts, nuts, guards, chains, hydraulic hose reel
- Wheels/tires (tread, cuts, gouges uneven wear, imbedded objects)
- Forks (positioning latches, condition)
- Anchor pins on chains (worn, loose, bent)
- Fluid leaks
- Battery
- Hoses

## Operational Pre-Check

Once the visual pre-check is complete and the forklift has passed, the operator should perform an operational pre-check by testing all moving parts. If the operator finds a defect with any component of the forklift, he/she should report the findings to the maintenance department via the pre-check report.

The operator should check at least the following items in an operational pre-check:

- Horn
- Backup alarm, flashers
- Head and tail lights
- Foot brake (pedal holds, forklift stops smoothly)
- Parking brake (holds against slight acceleration)
- "Deadman" seat brake (holds when operator rises out of seat)

- Clutch/gear shift (smooth shifting, no jerking movements, no jumping)
- Lift and tilt mechanisms (moves smoothly, holds)
- Slide shifter (moves smoothly, holds)
- Steering
- Safety belt

## **Maintenance**

Any forklift not in safe operating condition should be removed from service. Authorized personnel utilizing lockout-tagout should make all repairs.

Parts and components should be replaced only with types equivalent to those used in the original design according to the manufacturer's specification. Under no circumstances should forklift parts or components be altered to positions different from what they were when originally received from the manufacturer/dealer.

All forklift preventative maintenance and repair should be documented.

## Battery Charging

Battery-powered forklifts require constant charging in locations specifically designed for that purpose. The area should include posted instructions, adequate fire protection, ample and readily available water supply, emergency eye wash facilities, and access to personal protective equipment. Smoking should be prohibited and stringently enforced.

## Refueling

Propane (LPG) and gasoline-powered forklifts should be refueled only in designated areas following posted safety instructions. Smoking should be prohibited and stringently enforced. The refueling area should be free from excessive heat, open flames and sparks.

If a gasoline fuel leak is detected, the forklift should **NOT** be started, but should be pulled away from the area and the leak washed away.

Before removing an LPG tank, the tank's shut-off valve should be closed and the forklift engine should be run until it stalls. Follow the same procedure when storing an LPG-powered forklift after use.

## Safe Operating Procedures

The forklift operator is not only responsible for his/her own safety, but the safety of the employees working nearby.

For this reason, the following basic safe driving tips should be observed:

- Avoid sharp turns and fast speeds. Forklifts are not designed for stunt driving, hitchhiking or horseplay.
- Keep loads low. Too-tall or top-heavy loads can obstruct vision and cause tip-overs. Always raise and lower the load smoothly.
- Drive backward when moving a high load, and face the direction of travel for a clear view. Drive backward down slopes with more than a 10% incline.
- When parking on a slope, always chock wheels, lower forks, and set the parking brake.
- Keep loads within the rated capacity of the forklift.
- Report any collisions, damages or near-incidents immediately.
- Observe aisle and lane markings, and stay to the right. Watch for pedestrians. Use the horn, lights and flashers when approaching corners.
- Be sure that all loads are securely stacked and placed prior to lifting or lowering.
- Never leave the forklift running while unattended. Remove the keys from the ignition.
- Always maintain a safe distance from the edge of ramps and platforms.
- Make safety a priority at **all times**.

## For more Information

For more information on “Forklift Safety” or other safety and health issues, contact:

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