

Forklift Operation

By

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Lesson 1:

Prepare to Carryout Forklift Operation

UK1.1:Types of forklifts and their load capacities




UK1.2: Parts of forklift and their functions

UK1.3:Workplace safety and health code of practice relating to forklift practice

UK1.4:Protecting loads from damage during transportation



UK1.5:Reporting procedures if work preparation is not completed

Types of Forklift

	Type	Usage	Power Source
	Counterbalance	Lifting, stacking, moving in warehouses, docks.	Electric, diesel, gas (LPG/CNG)
	Side Loader	Moving long items like timber in narrow aisles.	Electric, diesel.
	Telehandler	Lifting loads to high places on uneven surfaces.	Diesel.






Types of Forklift

	Type	Usage	Power Source
	Heavy Duty Forklift	Moving very heavy loads in ports, factories.	Diesel, gas (LPG/CNG).
	Rough Terrain	Outdoor lifting on rough or uneven surfaces.	Diesel.
	Pallet Jacks	Moving pallets in tight warehouse spaces.	Manual, electric.



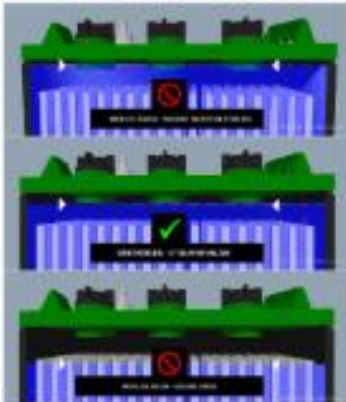
Types of Forklift

	Type	Usage	Power Source
	Walkie Stacker	Stacking light loads in small warehouses.	Electric
	Order Picker	Picking items from high shelves in warehouses.	Electric
	Reach Fork Truck	Accessing high racks in narrow aisles.	Electric



Main Part of Forklift

Fluid Level



Battery water level



Engine oil level



Radiator water level



Transmission oil level



Hydraulic fluid level



Brake fluid level

Main Part of Forklift



Headlights (high beam)



Brake indicator



Reverse indicator



Hazard lights

Main Part of Forklift



Driver Seat



Rear View mirror



Main Part of Forklift

Brake



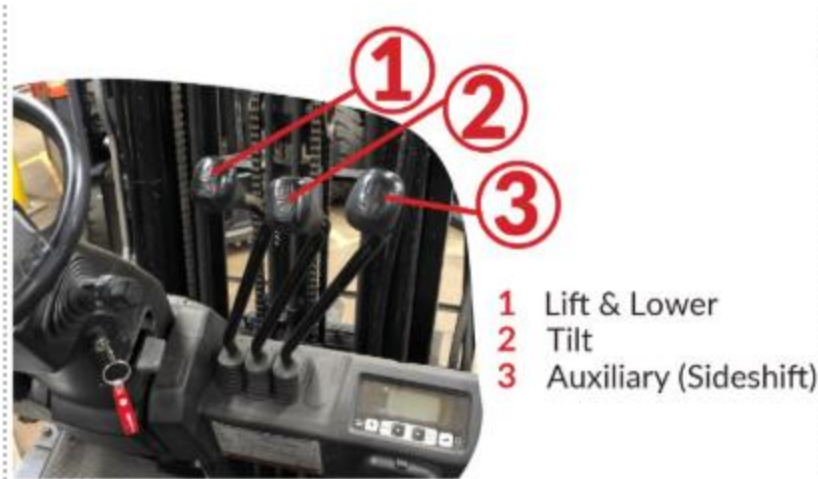
Main Part of Forklift

Tyres



Main Part of Forklift

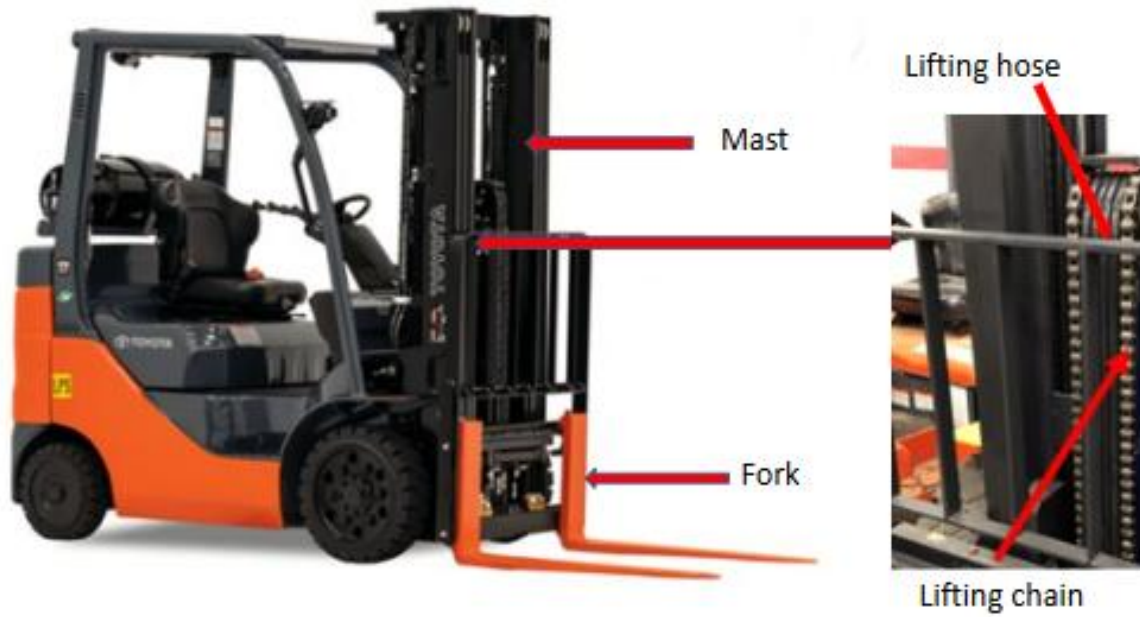
Lift or lower system



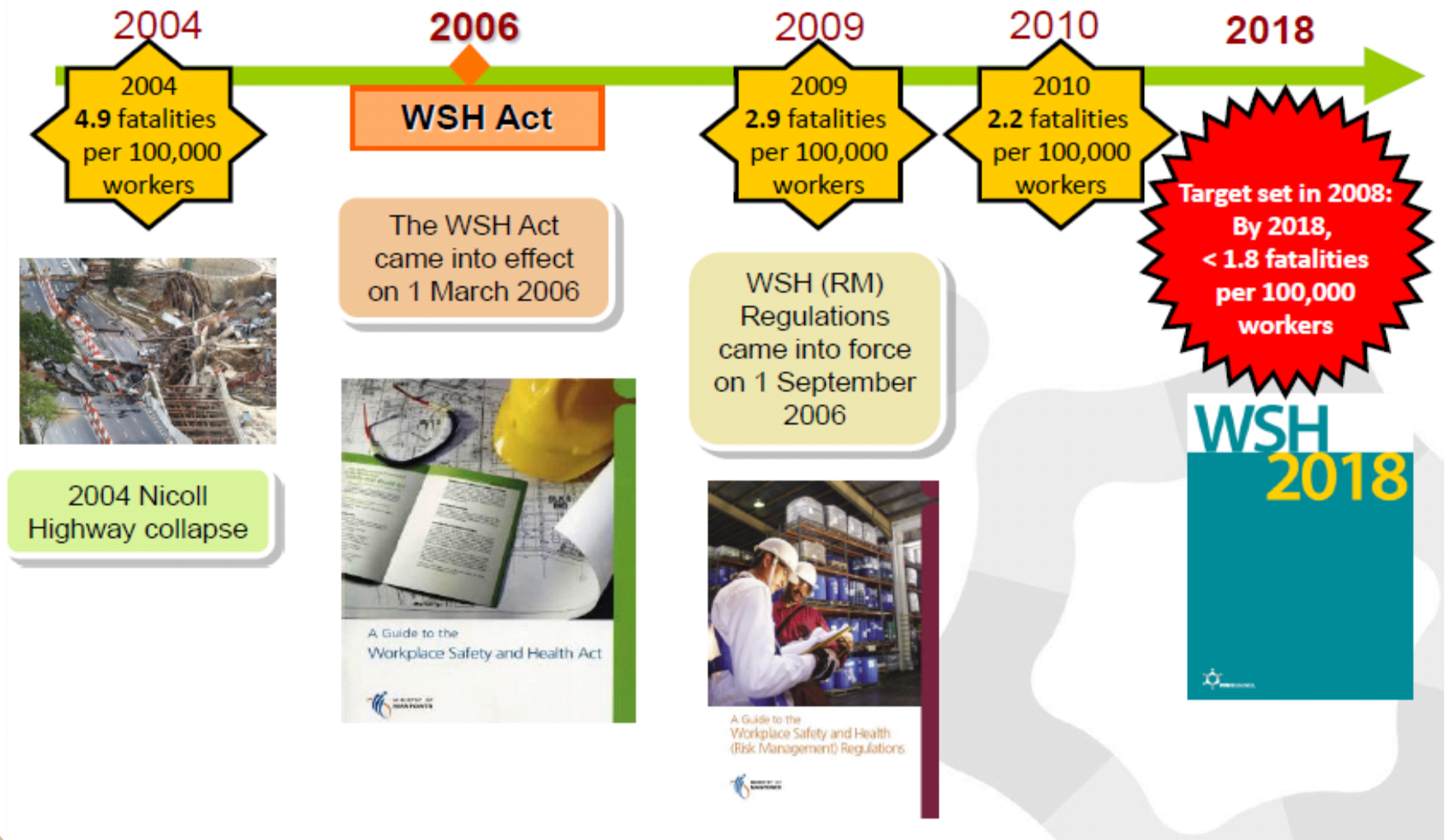
1. The lift and lower lever is used to raise or lower the forks/attachment.
2. The tilt lever moves the mast forward or backward.
3. The auxiliary function controls the attachment, which is commonly a side shifter.

Main Part of Forklift

Other Parts



Workplace Safety and Health (WSH) Act



WSH ACT came into effect in 1st Mar 2006



Workplace Safety and Health (WSH) Act

The Workplace Safety and Health Act is a part of a new framework to –

- Cultivate **good safety habits** in all individuals.
- Produce a **strong safety culture** at workplace.
- **Stakeholders** to take **reasonably practicable measures** to ensure the safety and health of workers



Workplace Safety and Health (WSH) Act

Safety and health training courses(S31)

Factories(Safety Training Courses) Order

Description of Persons	Safety Training Course
Construction Workers	Construction Safety Orientation Course
Manhole Workers	Safety Orientation Course(Manhole)
Manhole Supervisors	Safety Instruction Course(Manhole)
Formwork Supervisors	Formwork Safety Course for Supervisors
Project Manager	Construction Safety Course for PM



Workplace Safety and Health (WSH) Act

Safety and health training courses(S31)

Factories(Safety Training Courses) Order

Description of Persons	Safety Training Course
Oil & Petrochemical Industry Worker	Oil & Petrochemical Safety Orientation Course for Workers
Oil & Petrochemical Industry Supervisors	Oil & Petrochemical Industry Supervisors Safety Course
Forklift Operator	Forklift Driver Training Course
Metalworking Industry Workers	Safety Orientation Course for Workers (Metalworking)
Metalworking Industry Supervisors	Basic Industry Safety & Health Course for Supervisors



Offences, Penalties & Proceedings

General Penalties For Offences For Which No Penalty Is Prescribed Under The Act

Category of offender	Maximum fine	Maximum imprisonment	Conditions
Individual persons	\$200,000	2 years	Either or both
Corporate body	\$500,000		
Workers For failure to use personal protective equipment or misuse of any safety appliance.	a) 1 st conviction - \$1,000 b) 2 nd or subsequent conviction - \$2,000		
Repeat offenders For a 2 nd or subsequent conviction for the same offences that causes the death of another person. a. Individual b. Corporate body	\$400,000 \$1 million	2 years	Either or both



Workplace safety and health code of practice relating to forklift practice

Forklift refresher training mandatory with effect from early 2027

Enhanced forklift operator refresher training course and new refresher training requirement

5 November 2024 Workplace safety and health

As part of our ongoing efforts to build a culture of workplace safety and health (WSH) excellence, the Ministry of Manpower (MOM) will introduce an enhanced Forklift Operator Refresher Training course in 2025 and make the completion of refresher training mandatory with effect from early 2027.

2 From 2022 to 2023, vehicular incidents were the leading cause of fatal injuries in the workplace. 1 in 4 of these vehicular fatalities involved forklifts. During the same period, MOM's inspections found that close to 8 in 10 forklift-related contraventions involved forklift operators who had not undergone forklift refresher training within three years. Under the WSH Guidelines on Safe Operation of Forklift Trucks, all forklift operators should attend a refresher training course once every three years after the completion of their first training course.

New Training Requirement under Workplace Safety and Health Act

3 As part of the new training requirement under the WSH Act Section 31(4), MOM will require all forklift operators to attend a refresher course at least once every three years. This will take effect from 2027 to allow forklift operators to have sufficient time to attend the refresher training. A WSH circular with more details will be issued to the industry at a later date.

New Training Requirement under Workplace Safety and Health Act

3 As part of the new training requirement under the WSH Act Section 31(4), MOM will require all forklift operators to attend a refresher course at least once every three years. This will take effect from 2027 to allow forklift operators to have sufficient time to attend the refresher training.

5 Forklift operators are advised to complete the training promptly to stay current with safe operating practices. ****Employers and principals are responsible for ensuring their operators complete the refresher course** within the specified timeframe before allowing them to operate forklifts.

Protecting load from damage during transportation

- Secure Loose Loads on Pallets: Ensure all loose loads are consistently secured on pallets to maintain safety and stability during transportation.
- Stack and Tie Loads: Properly stack and tie uneven or loose loads to prevent shifting or falling during driving.



Protecting load from damage during transportation



Protecting load from damage during transportation

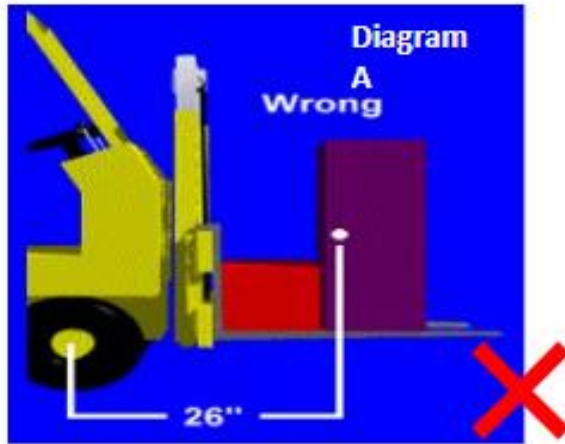


Diagram A — Wrong (26"):
When handling an unbalanced load, position the heavier end closer to the backrest of the forks to shorten the load center, improving stability and preventing the load from slipping during movement or stopping, as shown in Diagram A.

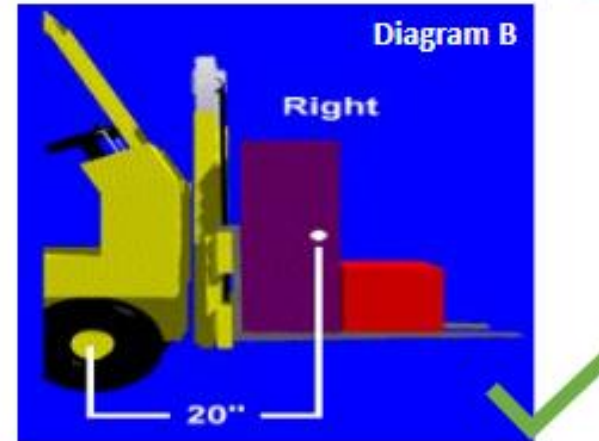


Diagram B — Right (20"):
Be sure to rearrange your load as in Diagram B before moving off; shrink wrap the loads to prevent falling thus damaging the load. Always place the heaviest load against the back rest of the fork.

Protecting load from damage during transportation

- Drive forward with the load pointed up the slope when going up a slope on a forklift



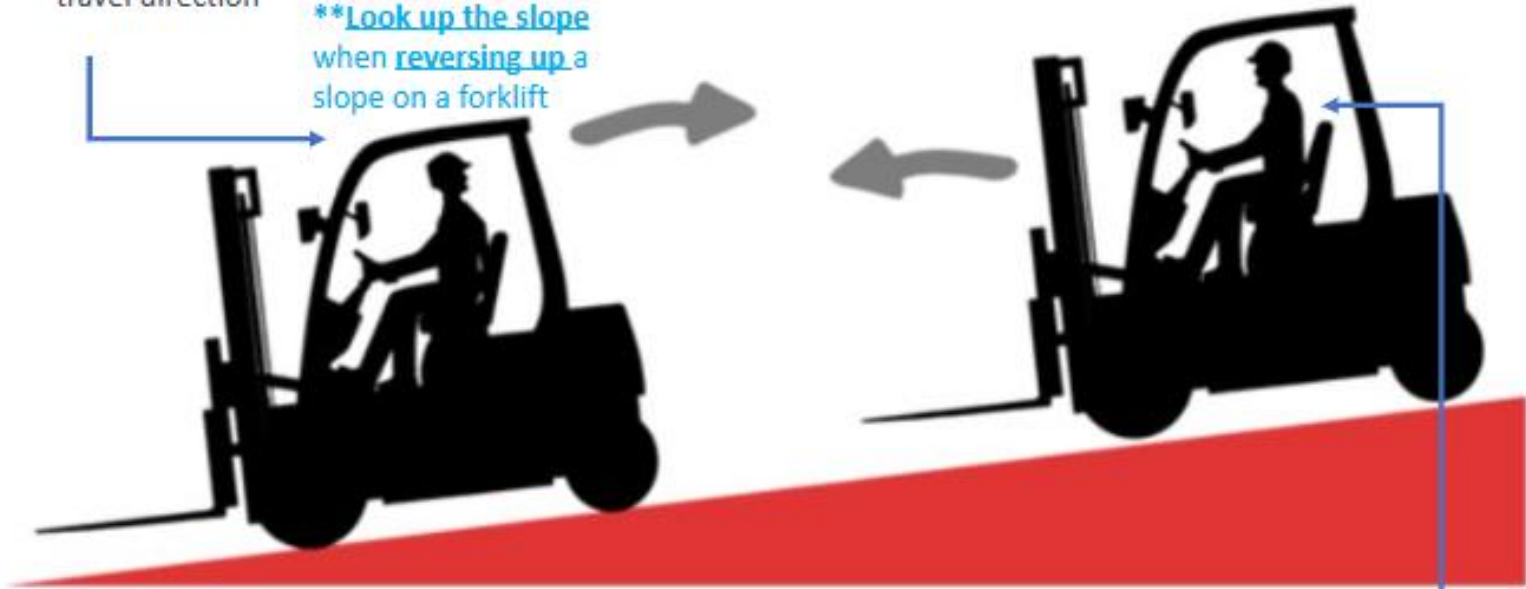
- Drive backward with the load pointed up the slope when travelling down a ramp or incline on a forklift



Protecting load from damage during transportation

- Traveling up a ramp without a load: Drive backward with the forks pointed down the slope and look in the travel direction

**Look up the slope
when reversing up a
slope on a forklift



- Going down a slope without a load: Drive forward with the forks pointed down the slope

Reporting procedures if work preparation is not completed

- 🛑 Stop work immediately; do not operate the forklift.
- 🅑 Park safely; lower forks; neutral controls; apply brake; switch off; remove key.
- 🔔 Inform supervisor/management/safety personnel immediately.
- 📄 Record what was not completed and why (checklist/log).
- 🏷️ Tag-out/isolate the forklift or area until safe. 🛠️ Arrange rectification by authorised/competent personnel.
- ✅ Resume work only after supervisor clearance/endorsement.













Safety Precaution in inspecting Forklift

- Only trained, qualified staff may inspect forklifts.
- Lock out controls and secure the forklift before inspection.
- Know the risks and wear the right PPE.
- No smoking or open flames near forklifts.
- If working underneath, support the forklift with safety blocks.
- Work within your limits—don't overstrain.
- For diesel forklifts, ensure good ventilation to prevent carbon monoxide exposure.
- Always do a pre-op check, even when in a hurry.
- Do not use a faulty forklift until repaired.
- Loose or missing wheel nuts: send to workshop to tighten or replace.

FORKLIFT SAFETY INSPECTION

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- 

Safety Precaution in inspecting Forklift

General Safety Practices	Inspection & Operational Safety
 Qualified Professionals: Only trained individuals should inspect forklifts.	 Elevated Forklifts: Support securely with blocks when working underneath.
 Lockout/Tagout: Secure control devices before inspection.	 Ventilation: Ensure sufficient airflow for diesel forklifts.
 Wear PPE: Be aware of hazards and wear proper safety gear.	 Pre-Operational Checks: <u>Always inspect, even during urgent tasks.</u>
 No Smoking: Avoid fire hazards near forklifts.	 Repairs: <u>Do not operate forklifts in poor condition. Ensure mechanic identifies defects and repairs them before use</u>
 Physical Limits: Avoid overexertion during inspection.	 Loose/Missing Nuts: <u>Send forklifts to the workshop for tightening or replacement.</u>
 Report Defects: <u>If abnormalities or defects are noticed, inform supervisor and arrange immediate repairs.</u>	 Safety Features: Ensure the horn, lights, and brakes are functioning properly before use.

Lesson 2

Inspect Forklift

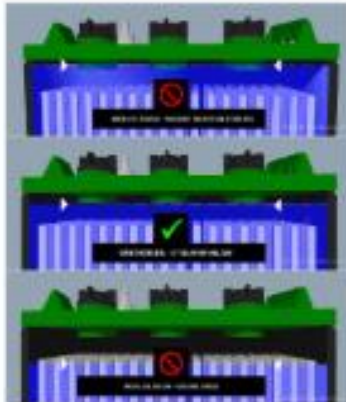
UK 2.1: Main parts of forklifts to be inspected

UK 2.2: Constituents of each main part of forklift to be inspected

UK 2.3: Safety precautions in inspecting forklift

Main Part of Forklift to be Inspected

Fluid Level



Battery water level



Engine oil level



Radiator water level



Transmission oil level



Hydraulic fluid level



Brake fluid level

Main Part of Forklift to be Inspected



Headlights (high beam)



Brake indicator



Reverse indicator



Hazard lights

Main Part of Forklift to be Inspected



Driver Seat



Rear View mirror



Main Part of Forklift to be Inspected

Brake



Main Part of Forklift to be Inspected

Tyres



Main Part of Forklift to be Inspected

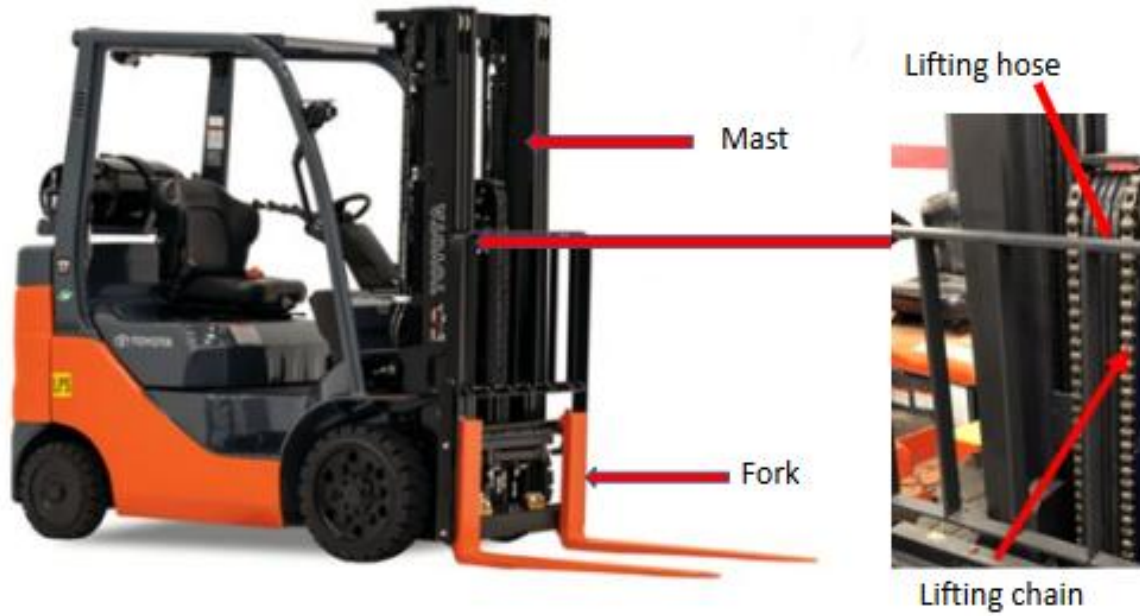
Lift or lower system



1. The lift and lower lever is used to raise or lower the forks/attachment.
2. The tilt lever moves the mast forward or backward.
3. The auxiliary function controls the attachment, which is commonly a side shifter.

Main Part of Forklift to be Inspected

Other Parts



Constituents of each main parts to be inspected



Dashboard Checks on a Forklift

1. Inspect the Gauges:

- 1) Engine Oil Pressure: Ensure the gauge is within the normal range.
- 2) Battery Charge Warning Signal: Confirm the battery is charging properly.
- 3) Fuel Level: Check that the gauge indicates sufficient fuel for operation.
- 4) Engine Temperature: Verify the gauge stays within safe limits.
- 5) Transmission Temperature: Ensure the transmission temperature does not exceed the recommended level.



Check Warning Lights:

- 1) Look for warning signals on the dashboard.
- 2) Ensure there are no more than two red lights indicating issues; if there are more, the forklift may need immediate inspection.

Respond to Specific Warnings:

- 1) If the engine oil warning light comes on during operation: Action: Switch off the forklift immediately and check the engine oil level.
- 2) Sign that the engine is not working normally: Abnormal smoke emission and usual sound. (Note: this appears to be intended as “unusual sound,” but the slide text reads “usual sound.”)

Constituents of each main parts to be inspected



Battery Charge and Discharge indicator

**FORKLIFT
BACKUP
ALARM**



Limit switch & sensor



Horns



Hydraulic control lever



Reverse Warning Buzzer

Lesson 3

Carry out forklift operations

UK3.1: Cargo handling symbols

UK3.2: Forklift stability

UK3.3: Operating procedures for different types of loads

UK3.4: Safety precautions in lifting potentially hazardous loads

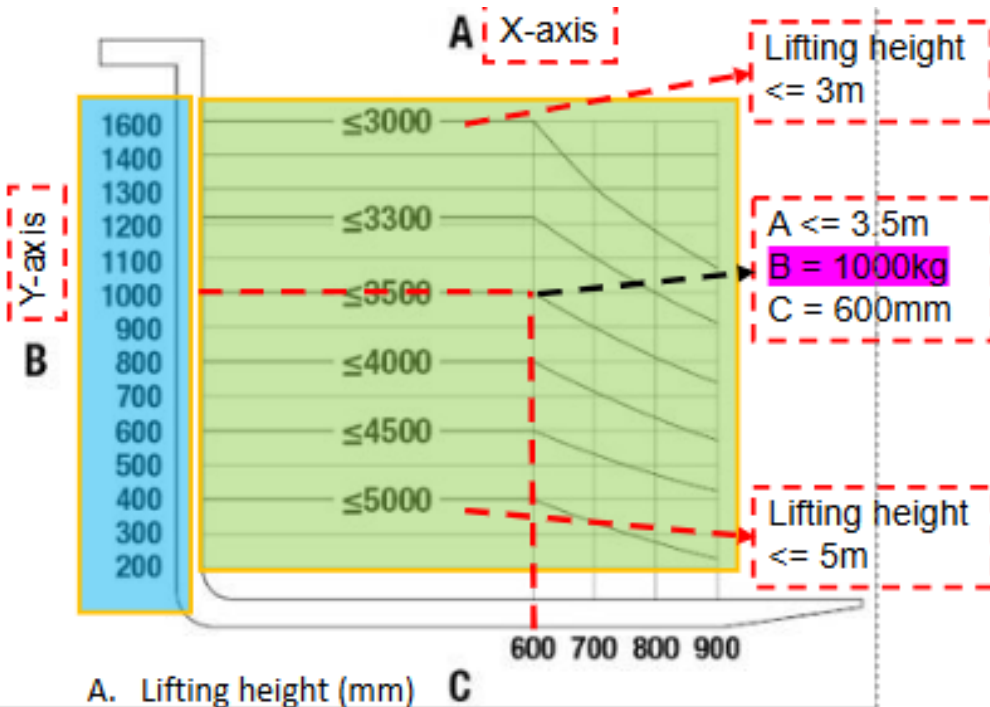
UK3.5: Operating procedures for different types of terrains and confined spaces

UK3.6: Workplace safety and health code of practice relating to forklift operations

UK3.7: Procedures of reporting unsafe / unauthorized forklift practices

Forklift Stability

Interpretation of load chart



The load capacity:

The load capacity chart shows how much weight the truck can safely lift at different lift heights and load center distances.

The X-axis and Y-axis:

The x-axis shows the lift height, i.e. the height up to which a forklift can lift the load.

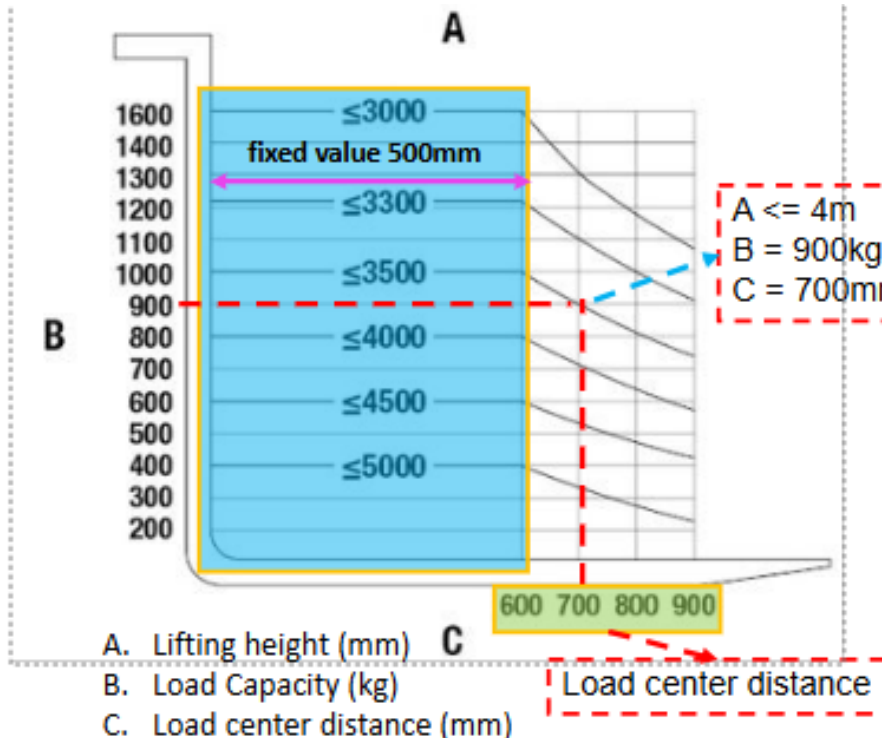
The y-axis shows the load capacity, i.e. the weight that a forklift truck can lift at the respective lifting height.

- A. Lifting height (mm)
- B. Load Capacity (kg)
- C. Load center distance (mm)



Forklift Stability

Interpretation of load chart



The limit curves:

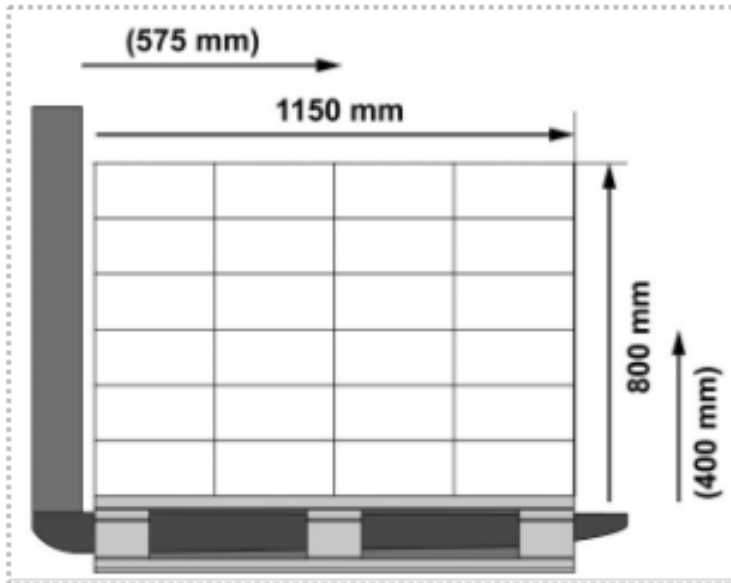
The curves in the diagram represent the maximum loads at different lifting heights. The safe operating range of the forklift truck is located within the curve. Outside the curve there is a risk of tipping or other stability problems.

The load center distance:

The diagram also takes into account the load center of gravity distance, which is usually assumed to be a fixed value (e.g. 500 mm) and evenly distributed, i.e. centered on the fork. The further away the load center of gravity is from the fork carriage / fork carriage, the lower the load capacity.

Forklift Stability

Load capacity diagram for forklift



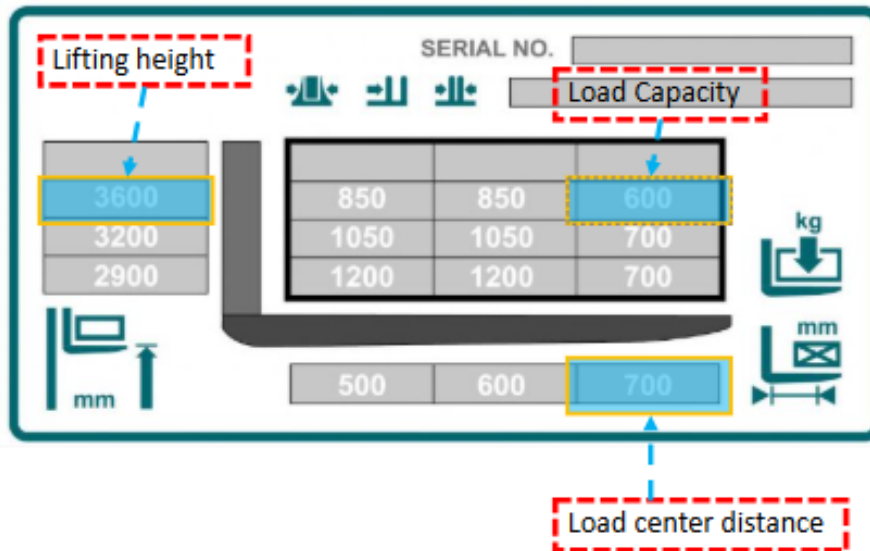
The following example will show you how to use the load diagram in practice.

For this purpose, palletized cartons of the same size and weight are assumed as an example load:

- Height of the load: 800 mm
- Length of the load: 1150 mm
- Distances between load centre and load handling attachment:
 - 400 mm vertical
 - 575 mm horizontally

Forklift Stability

Load capacity diagram for forklift



The following example will show you how to use the load chart in practice.

For this purpose, palletized cartons of the same size and weight are assumed as an example load:

- A. Lifting height: 3600mm
- B. Load Capacity: 600kg
- C. Load center distance: 700mm

Forklift Stability



<https://youtu.be/jLoupEtof58?si=Q-J9N1RfFTxdIBWU>



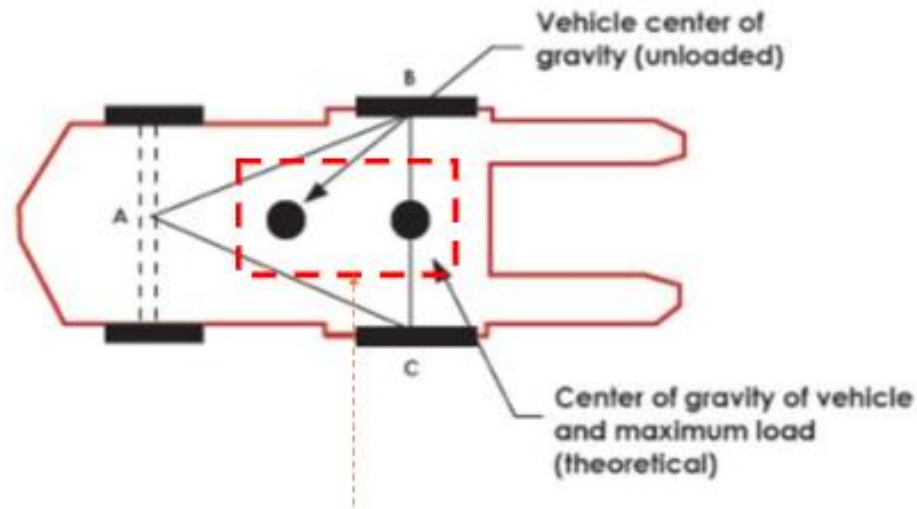
Forklift Stability

Forklift Stability — Load Balance and Attachment Effects on Stability

- Check Load Weight and Balance: Ensure the load weight is within the forklift's capacity and properly balanced.
- Understand the Center of Gravity: Always consider the forklift's center of gravity and load placement.
- Refer to the Load Chart: Use the forklift's load chart (see Figure 1, 2, and 3) to confirm safe lifting capacities.
- Account for Attachments: Forklifts with attachments act as partially loaded forklifts even without a load, reducing stability.



Forklift Stability



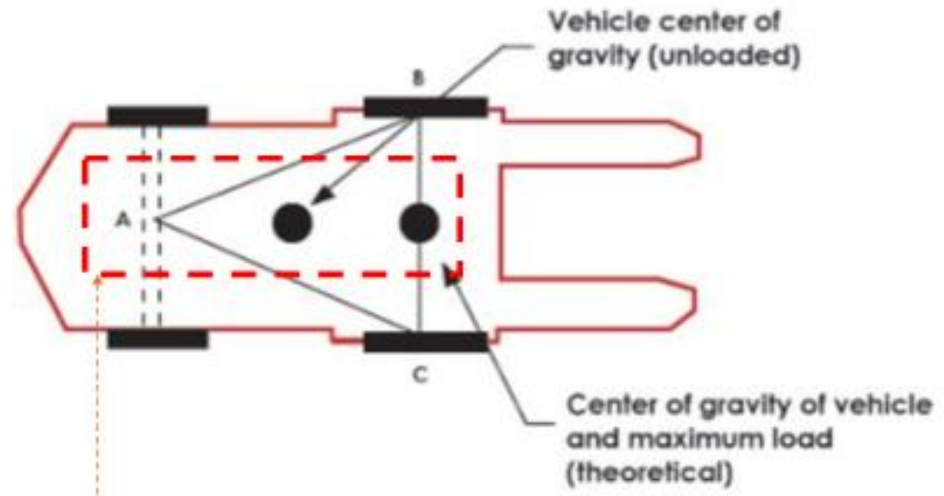
Key points:

- Forklift's combined center of gravity (CG) shifts towards B–C when loaded.
- Maximum load can result in CG at the line B–C.
- In practice, combined CG should not be at line B–C to maintain stability.



Forklift Stability

A counterweight is a counterbalancing weight that stabilizes the forklift when lifting loads, making the process more efficient.

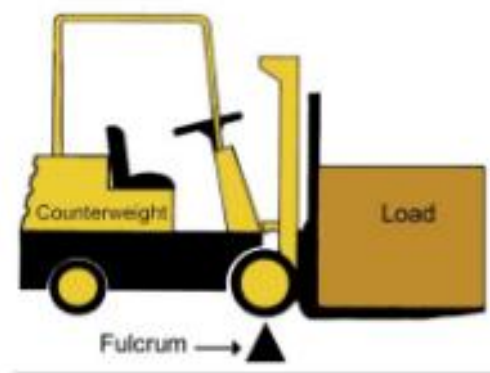


Key points:

- Adding counterweight to forklift causes CG to shift towards point A.
- More counterweight leads to a forklift that is less stable laterally.
- Careful consideration of counterweight and proper distribution is important to maintain stability



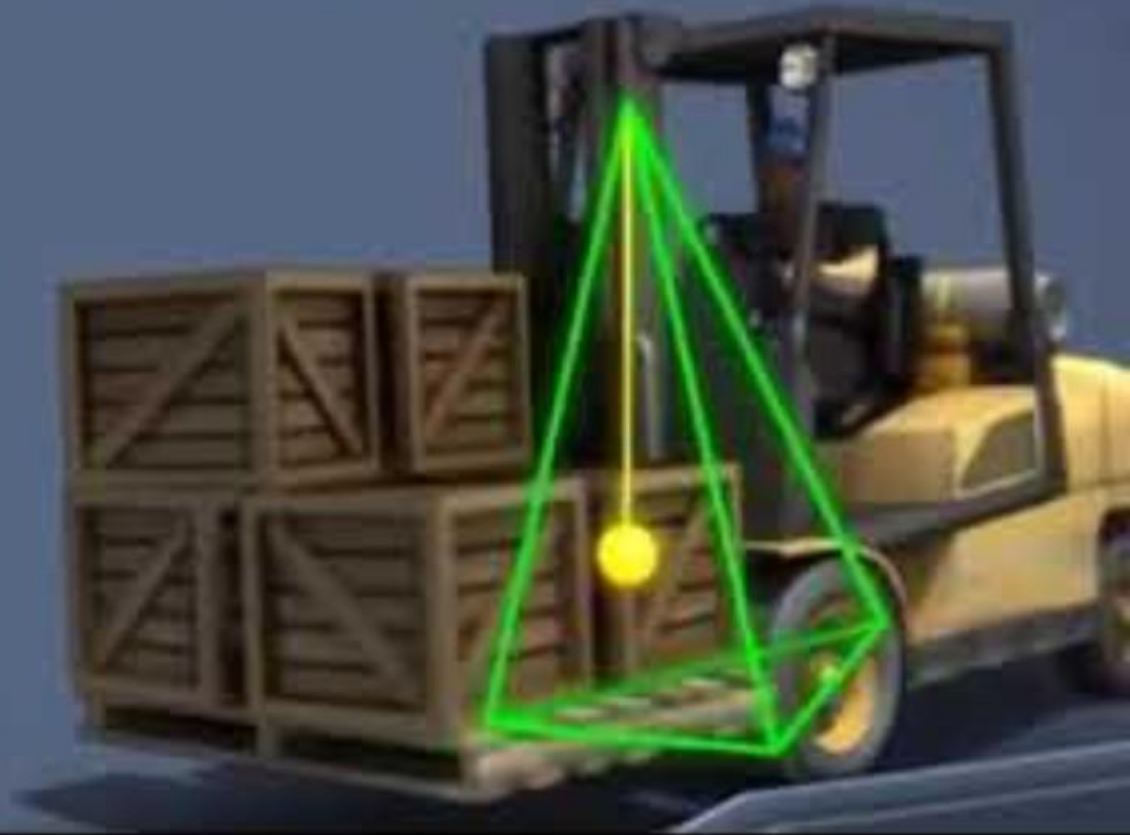
Forklift Stability



- A forklift operates based on the principle of a cantilever.
- The forks of the forklift form a beam that supports the load, while the front wheels act as the fulcrum.
- The weight of the forklift body and counterweight balances the load on the forks.
- Whether a forklift can safely carry a load or not can be determined by comparing the moment of each.
- The moment is calculated by multiplying the weight by the distance between the fulcrum and the center of gravity.
- If the moment of the load on the forks is greater than the moment of the forklift body and counterweight, the forklift will tip forward.

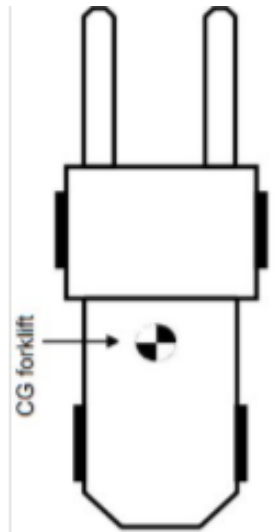
Forklift stability triangle and CG video

- Load weight
- Load balance
-

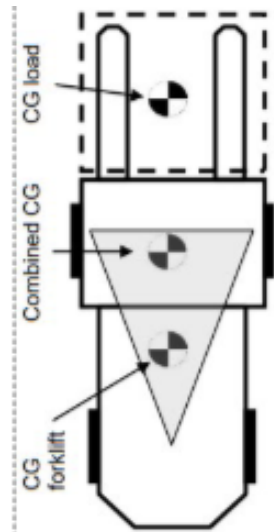


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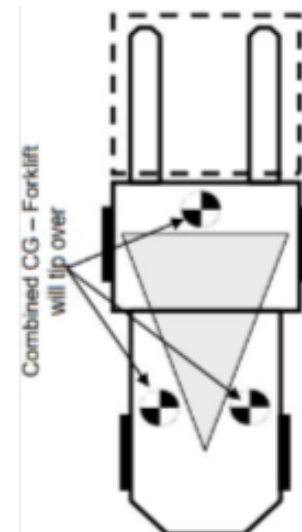
Forklift stability Triangle & CG



Position of the CG of the forklift when it is unloaded



Combined CG within the area of the stability triangle, formed by the drive wheels and steer axle pivot, prevents the forklift from tipping over.



Combined CG shifts outside the boundaries of the stability triangle – forklift will tip over

Forklift stability

Action	Center of gravity moves
Tilting the load forward	Toward the front axle
Raising the load while tilted forward	
Driving on an incline with the load downhill	
Stopping forward travel or accelerating backward	
Tilting the load back	Toward the rear axle
Raising the load while tilted back	
Driving on an incline with the load uphill	
Accelerating forward or stopping backward travel	
Driving across an inclined surface	Toward the downhill side of the triangle
Driving across a rough or uneven surface	Toward the rut or low side of the triangle
Turning	Toward the side now facing the original direction of travel



Forklift stability

Points to prevent forklift tipping over, falling sideways, or dropping its load:

- Ensure the load is stable and arranged securely on the forks.
- Only tilt the forks forward when picking up or depositing a load.
- Tilt the load backward only enough to stabilize it.
- Keep the load low and tilted back when traveling.
- Cross railroad tracks diagonally if possible.
- Enter elevators squarely.
- Keep the load uphill when going up or down an incline.
- Drive at a safe speed to stop within the stability triangle.
- Slow down on wet or slippery surfaces.
- Slow down to make turns.
- Avoid driving over loose objects, ruts, and hole



Operating Procedure for different types of Load

Techniques and requirements for safe operations Load handling

Forklift Capacity and Safe Handling

- Use forklifts within rated capacity: Ensure the forklift is used according to its designated weight limit.
- Combined weight of load and attachment: The weight of both the load and any attachments should not exceed the forklift's lifting capacity.
- Do not use additional counterweights: Avoid using personnel or material to increase the forklift's lifting capacity.
- Unauthorised forklift usage should be reported: Reporting unauthorized use helps prevent accidents and ensures safe operations.

Load Stability and Handling Procedures

- Ensure load stability: Handle loads that are stable and secure, particularly when dealing with long or high loads.
- Use suitable methods for long/high loads: Consider specialized techniques or equipment to move long or high loads safely.
- Avoid off-center loads: Do not attempt to handle loads that can't be centered on the forks.



Operating Procedure for different types of Load

Techniques and requirements for safe operations Load handling

Forklift Operation Techniques

- Fork spread suitability: Ensure the spread of the forks is appropriate for the load width.
- Insert forks under the load: Place the forks under the load as far as possible but avoid pushing the load beyond the fork tips.
- Raise forks to engage the load: Lift the forks to fully secure the load.
- Tilt back to stabilize the load: Tilt the forks back slightly to ensure the load is stable, especially for high or segmented loads.
- Carefully lower the load: When depositing the load, lower cautiously to prevent accidents.

Fork Positioning for Placement

- Use slight forward tilt when available: A slight forward tilt helps with the placement and with withdrawal of the forks when the load is deposited.

Hazard Reporting

- During forklift operations, report promptly to the immediate supervisor if hazards are noticed: Ensure any hazards are reported to the immediate supervisor for quick action and safety management.



Operating Procedure for different types of Load

Forklift Safety Training




https://youtu.be/Kfk5cMTe-vg?si=8_g08-GpOkFVXNwe



Operating Procedure for different types of Load


1. Approach the Stack Slowly

 **Approach slowly:** Tilt the mast slightly backward to keep the load stable (Figure a).





(a) Approach stack squarely with load low and tilted backwards

2. Adjust the Mast

 **Set mast upright:** Make sure the mast is nearly vertical when you're close to the stack.

3. Lift and Move the Load


 **Raise the load:** Lift the load slightly above the stacking height.

 **Move forward:** Slowly move the forklift forward to place the load (Figures b and c).




(b) Slow down, stop at the face of stack. Raise the load to the desired stacking!

4. Brake Smoothly

 **Use the brakes gently:** Slow down or stop the forklift smoothly when carrying a load.


5. Stack the Load Securely

 **Ensure the load is stable:** Check that the load is safely stacked.



(c) When the load is over the stack, level the load and lower the load onto the

6. Withdraw Forks and Move Away

 **Withdraw the forks:** Lower the forks and move the forklift away while checking the way is clear.

Operating Procedure for different types of Load

Techniques and requirements for safe operations Remove from stack

1. Approach and Prepare for Loading

- Approach the stack slowly: Stop the forklift with the fork tips about 0.3 m away from the stack.
- Adjust fork spread and check load weight: Set the fork spread according to the load width and ensure the load weight is within the forklift's capacity.

2. Smooth Braking and Inserting Forks

- Brake smoothly: When operating with the load handling means elevated, use the brakes gently to slow down or stop.
- Insert forks under the load: Push the forks under the load far apart without disturbing other items.

3. Lift and Stabilize the Load

- Raise the forks: Lift the forks until the load is engaged and clear of the stack.
- Tilt forks backward: Tilt the forks to stabilize the load.

4. Withdraw and Move the Load

- Withdraw the load: After ensuring the area is clear, carefully pull the load back from the stack.
- Lower the load: Lower the load to the travelling position with the forks tilted fully backward.
- Move the forklift safely: Ensure the surrounding area is clear and move the forklift away steadily.



Safety precautions in lifting potentially hazardous loads

Techniques and requirements for safe operations Handling of Hazardous Materials

- **Wear PPE & Follow Safety Procedures:** Always wear required PPE and follow established safety policies.
- **Label & Use Materials Properly:** Properly label materials, place them in the correct container, and store them appropriately; use materials only for their intended purpose.
- **Review & Understand Risks:** Check Safety Data Sheets (SDS) to understand risks before using any material; read labels to determine how to properly handle, store, and clean up materials.
- **Know Emergency Procedures:** Learn emergency protocols in case of spills, leaks, and accidents; ensure eyewash stations are functional and accessible.
- **Handle Hazardous Loads with Care:**
 - **Secure Loads:** Ensure hazardous materials are properly secured and declared safe for transportation by the forklift.
 - **Use Appropriate Attachments:** Utilize additional forklift attachments for safe handling of hazardous materials.
 - **Barricade Work Areas:** Ensure the work area is properly barricaded with clear warning signs.



Operating procedures for different types of terrains and confined spaces

- Drive forward with the load pointed up the slope when going up a slope on a forklift

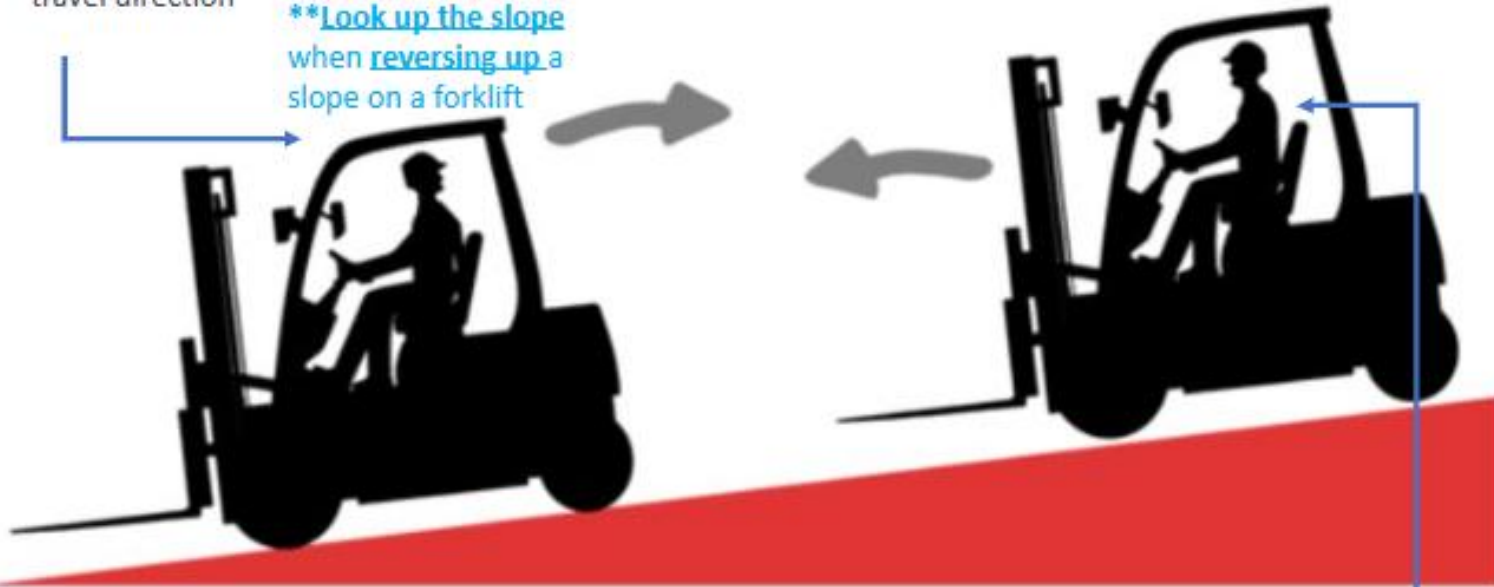


Drive backward with the load pointed up the slope when travelling down a ramp or incline on a forklift

Operating procedures for different types of terrains and confined spaces








- Traveling up a ramp without a load: Drive backward with the forks pointed down the slope and look in the travel direction

****Look up the slope
when reversing up a
slope on a forklift**



- Going down a slope without a load: Drive forward with the forks pointed down the slope

Operating procedures for different types of terrains and confined spaces

-  Check ground/route is firm, level, and clear before moving
-  Slow down on wet, slippery, uneven, or rough surfaces
-  Use extra caution on ramps/slopes/loading docks; avoid sudden turns
-  Carry loads low and stable; secure loads that may tip or fall
-  In confined areas, maintain clear visibility; use a guide/spotter if view is blocked
-  Sound horn and slow down at blind corners, junctions, entrances/exits
-  Follow designated routes; keep pedestrians separated and restrict access to operating zones

Forklift Checklist

SAMPLE CHECKLIST FOR PRE-OPERATION OF FORKLIFTS

This checklist provides the basic requirements for pre-operation of forklifts. Should a "No" be recorded for any of the below checklist items, state the condition(s) and its respective corrective actions in the "Remarks" column. This checklist is non-exhaustive and users are recommended to make the necessary customisation to suit your work processes and conditions at the workplace.

S/N	Items		Remarks
A. Fluid Level			
1	The following fluid level is within manufacturers' specifications:	Yes No	
	(a) Battery water level;	Yes No	
	(b) Fuel level;	Yes No	
	(c) Engine oil level;	Yes No	
	(d) Radiator water level;	Yes No	
	(e) Transmission oil level;	Yes No	
	(f) Hydraulic fluid level; and	Yes No	
	(g) Brake fluid level.	Yes No	

Refueling of Diesel Forklift

Turn Off and Park

- Turn off the engine and park the forklift before refueling.

Qualified Personnel Only

- Only trained personnel should refuel the forklift.

Handle Fuel Spills Safely

- Avoid spilling fuel on the exhaust or engine system, and clean up any spills before restarting.

Ensure Ventilation

- Refuel in a well-ventilated area to avoid fume buildup.

Fire Safety

- Keep the area free of flames or sparks.
- Ensure a fire extinguisher is nearby, and train operators to use it.

Workplace safety and health code of practice relating to forklift operations

Charging Electrical Forklift

Provide Adequate Training

- Ensure all personnel handling or charging batteries receive proper training.

Charge in Well-Ventilated Areas & Avoid Overcharging

- Charge batteries in well-ventilated areas to prevent explosive gas buildup. Avoid overcharging, as it can cause overheating and damage.

Check Battery Water Levels

- Before charging, check the battery water levels and top up as needed.

Inspect and Properly Dispose of Damaged Batteries

- Do not use damaged or leaking batteries. Dispose of old batteries according to local regulations.

Conduct Inspections & Follow Manufacturer Guidelines

- Inspect batteries and charging equipment. Follow manufacturer's instructions for handling batteries.

Know Emergency Procedures

- Be aware of the nearest fire extinguisher location and how to use it in case of an emergency.

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Stacking load on pallets during movement

- Secure Loose Loads on Pallets: Ensure all loose loads are consistently secured on pallets to maintain safety and stability during transportation.
- Stack and Tie Loads: Properly stack and tie uneven or loose loads to prevent shifting or falling during driving.



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Operators Responsibilities

Do's 	Don'ts 
 Always fasten the seat belt.	 Overload the forklift.
 Drive within the speed limit.	 Carry or transport people.
 Keep loads close to the ground when the forklift is moving.	 Allow unauthorized or untrained personnel to operate the forklift.
 Always give way to pedestrians.	
 Slow down at corners and blind spots.	
 Check before reversing.	



Workplace safety and health code of practice relating to forklift operations

6 Basic Safety Rules [WSHC]



Workplace safety and health code of practice relating to forklift operations

Safety Rules (Do's and Don'ts)

Safety Rules (Do's and Don'ts) Responsibilities of Forklift Operators

1. Securing and handling goods safely (i.e., no overloading).
2. Using only approved and appropriate PPE.
3. Driving safely (adhere strictly to the in-house speed limit).
4. Always wearing a seatbelt when operating a forklift.
5. Parking only at allocated locations.
6. Inspecting the forklift prior to use for damage and wear, and ensuring that safety devices on the machine are not tampered with.
7. Starting and stopping the forklift slowly to keep the load stable and under control.
8. Ensuring that the forklift's travel path and its surrounding area is firm, level, and free from obstructions during its operation, and strictly adhering to all safe working and operating procedures established at the workplace.



Workplace safety and health code of practice relating to forklift operations


Safety Rules (Do's and Don'ts)

Responsibilities of Forklift Operators

9. Report defects immediately to the supervisor and record them in maintenance log records. (icon: clipboard)
10. Stop operations immediately if unsafe conditions or operations occur (e.g., cargo exceeds the forklift's lifting capacity) and report to the supervisor immediately. (icon: prohibited sign)
11. Sound the horn to alert pedestrians when approaching corners or bends, or when reversing. (icon: horn)
12. Do not allow passengers on the forklift. (icon: no passengers)
13. Do not transport or lift anyone with the forklift. (icon: people)
14. Do not engage in dangerous operations; ensure forklift operations do not endanger others working nearby. (icon: warning triangle)
15. Do not operate the forklift if feeling unwell. (icon: sick face)
16. Handle loads only within the stipulated capacity of the forklift. (icon: scales)
17. The driver is responsible for watching for pedestrians in the travel path. (icon: pedestrian)





Procedures of reporting unsafe / unauthorized forklift practices


 **Stop the unsafe act immediately** (if safe to do so) and keep people clear of the operating zone.

 **Prevent further unauthorised use:** remove/secure keys, isolate the forklift, and apply tag-out/lock-out where applicable.

 **Inform the responsible person at once** (supervisor / safety officer / control room) with location and what was observed.

 **Record key details:** time, place, forklift ID, operator (if known), description of unsafe/unauthorised practice, and any witnesses.

 **Collect evidence safely** (photos/video only if it does not create additional risk) and preserve CCTV reference time if available.

 **Submit an official report** via company channel (hazard/near-miss form, e-reporting app, logbook) and classify as "unsafe act/unauthorised operation"

 **Escalate and close-out:** supervisor/safety team investigates, implements corrective actions (training/discipline/traffic controls), verifies effectiveness, and communicates lessons learned.

Lesson 4

Reinstate and hand over forklift

UK4.1:Procedures relating to parking of forklift
UK4.2:Handover procedures of forklift

Parking of Forklift Instruction

Park in Designated Areas

- Always park in areas marked for forklifts, suitable for their size and weight.

Avoid Busy Routes

- Choose parking spots away from busy paths to prevent accidents.

Shutdown Procedures

- Before leaving, stop the forklift, switch off the engine, and set the parking brakes.

Remove and Secure the Key

- Take the key with you to avoid unauthorized use.

Stay Away from Hazards

- Do not park near open flames, chemicals, or ignition sources.

On Inclines or Slopes

- Stop and switch off the engine, Set parking brakes, Chock wheels to prevent movement.



Handover

Secure the Keys

- Hand over the forklift keys to authorized personnel or store them in a secure location.

Maintain a Logbook

- Keep a logbook for recording the keys used by authorized forklift drivers.

Record Sign-In & Sign-Out

- Record the sign-in and sign-out of keys in the logbook for accountability.

Supervisor Review

- The supervisor should review and sign the logbook to verify compliance.

Report Defects or Faults

- Any defects or faults observed during handover must be reported to the appropriate person to ensure the forklift is repaired.

Inform Supervisor if Task is Incomplete

- If the assigned job task is not completed, inform your immediate supervisor.



Lesson 5

Total WSH [Workplace Safety and Health]

Lesson 6

Practical Performance

PC 1.1-1.9: Prepare to carryout forklift operation

PC 2.1-2.9 Inspect forklift

PC 3.1-3.9 Carryout forklift operation

PC 4.1-4.6 Reinststate and handover forklift