



one stop



TLILIC0003

Licence to Operate a
Forklift Truck

Learner Guide

IMPORTANT NOTICE

Informal Learning - Home Study

The Forklift Learner Guide is a compressive manual covering all elements of the forklift training course. This manual has been issued to you prior to your course commencement to assist you in retaining the necessary knowledge to be successful in obtaining a competent result in this course. It is expected that you will meet the 'Minimum Study Requirement' across all review elements prior to you attending your course.

STUDY ELEMENTS	Minimum Study Requirement
Legislation and application	1hr
Planning work, hazards, risks and emergencies	3hrs
Forklift types, terminology and attachments	1hr
Conducting pre operational, post start and post operational checks	2hrs
Shift load and general operations	3hrs
Shut down, secure the forklift and conducting post operational inspections	2hrs

Contents

Informal Learning - Home Study	3
High Risk Licencing and the Law	6
Responsibilities and Penalties.....	6
Applying for a High Risk Work (HRW) Licence.....	7
Examples.....	7
Renewing your licence.....	8
Health and Safety within the Workplace	9
Duty of Care.....	9
Hazard and risk assessment.....	10
What is a hazard?.....	11
Hazard Control Measures	12
Implementing Control Measures.....	13
Power Line Safety	14
Queensland Power Line Safe Working Distances.....	14
Power line emergency procedures.....	15
Tiger Tails.....	16
Workplace control measures	17
Operating at night	17
Driving Indoors and other Enclosed Locations	18
Refuelling and Charging	19
Battery operated Forklifts.....	20
Liquid Petroleum Gas (LPG) forklifts.....	21
Gasoline or Diesel Forklifts.....	21
Surface conditions	22
Rear End Swing	23
Workplace Communication	23
Emergency Situations & Procedures	24
Important Emergency Communications.....	24
What is a Forklift?	25
Counterbalanced forklift.....	25
Non-Counterbalanced Forklift.....	26
Pre Start Checks	27
Pre operational checks:.....	27
Tyre checks	28
Start-Up Checks	29
Load Data Plate (Load Plate)	30
Forklift safety guards	31
Forklift Components Diagram	32
Fault Reporting	33

Repairs	34
Assessing the Load	35
Operating the Forklift	36
Traveling on A Ramp	37
General operations	37
Travelling with a load	38
Stability Triangle	38
Stable Travel	39
Lateral instability can be caused by;	39
Longitudinal Instability can be caused by;.....	39
Forklift roll-over procedure	40
Point of Balance (Fulcrum)	41
Counter Balance	41
Carrying a load	42
Attachments and ancillary equipment.....	42
Stacking loads	43
Damaged pallets.....	43
Loading Docks	44
Workplace emergencies	45
Forklift Load Centre Distance	46
Load Centre Distance (LCD).....	46
Parking and Shutting Down	47
Post operational Checks	48

High Risk Licencing and the Law

High Risk Work licences are renewable, photographic and recognised nationally.

A person wishing to obtain an HRW licence must receive:

- Formal Training – classroom-based training provided by a Registered Training Organisation (RTO) with approval to deliver the particular course.
- Informal Training – workplace training on a logbook supervised by someone holding the relevant HRW licence.

You can only undertake high risk work without a licence when you are:

- Enrolled with an RTO in a high-risk licence course for the relevant HRW licence
- Being supervised in the workplace by a person that holds the relevant HRW licence

Responsibilities and Penalties

You must be trained and competent to engage in any high risk work. Under no circumstances must you conduct high risk work unless you hold the necessary HRW licence. Large penalties and even incarceration can be a result if you are found liable for a workplace accident.

If you are found to be operating unsafely and hold the necessary HRW licence:

- You may not be able to renew your licence
- You may have your licence suspended
- Your licence may be cancelled

As an operator you have an obligation under the Workplace Health and Safety act to ensure you conduct work in a safe manner and you do not put yourself and others at risk.

Applying for a High Risk Work (HRW) Licence

After successfully completing your assessment you will be issued with a Notice of Assessment (AS1). With your Notice of Assessment (AS1), you must make application online through Queensland Workplace Health and Safety for the HRW licence. The cost for the licence processing fee and 5 years registration with Work Place Health and Safety Queensland is currently \$91.50 however is subject to change.

Applicants must provide 100 points of identification when undertaking the HRW assessment.

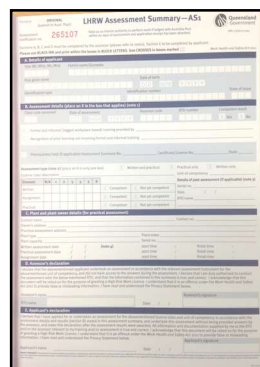
You have 60 days from the date of assessment to make your application. If you fail to lodge this documentation within the 60 day time frame you are required to resit your assessment.

The RTO will also issue you a Statement of Attainment (SOA) for the qualification.

- Applicant completes formal and informal training.
- Applicant is assessed competent in all three assessment categories and is issued a AS1 by the HRW Assessor.
- Applicant applies for a HRW licence online and makes payment. Please note, the new application portal links with Transport and Main Roads (TMR) and will gather information from your current driver's licence.
- If the applicants' details do not validate using the online application portal, WHSQ will contact you with instructions on how to apply
- Applicant complies with WHSQ instruction to makes application
- Applicants do not need to attend a Transport and Main Roads counter unless advised by WHSQ to do so

Once you have processed your licence, the Notice of Assessment (AS1) will serve as an interim licence until you receive your licence in the mail.

Examples



Renewing your licence

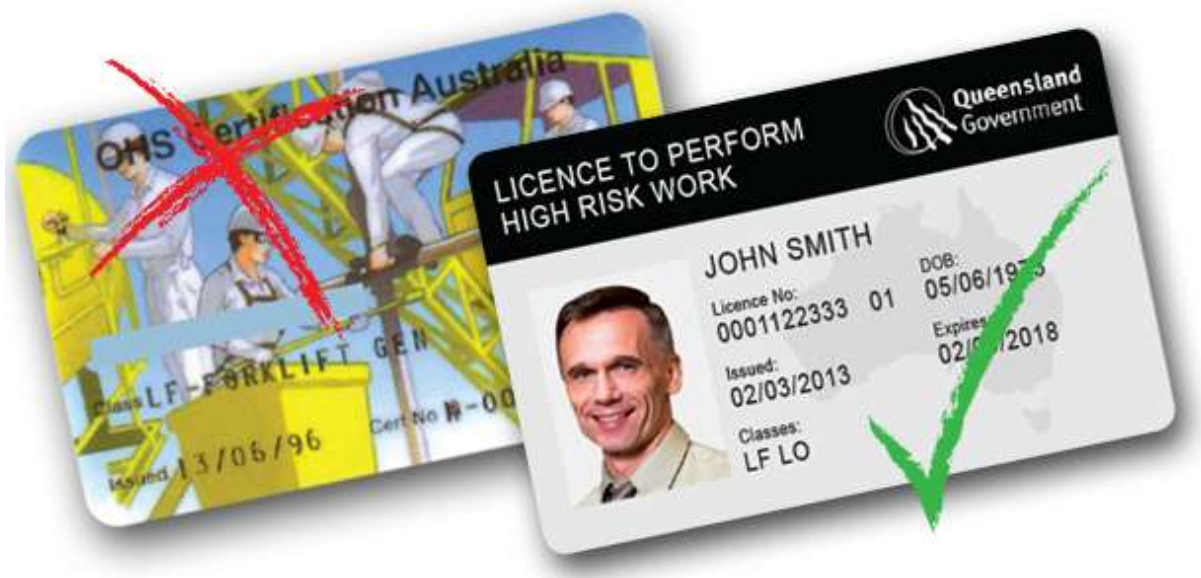
After applying for a HRW (high risk work) licence you are required to renew the licence every 5 years.

If your licence is not renewed within 12 months of its expiry:

- The licence can no longer be renewed.
- The person would be required to enrol in new high risk licence course with a registered training organization to be able to apply for the licence again.

You must maintain competency for the licence you hold by undergoing refresher training or a verification of competency process.

Employers may require you to provide written evidence prior to undertaking high risk work, this written evidence is in the form of sighting the relevant HRW licence or proof of undertaking a RTO course of high risk work.



Health and Safety within the Workplace

Before commencing any task, you must ensure you have identified all task requirements from work orders or equivalent documents. All task should be discussed and confirmed with the relevant people on-site to ensure coverage for the work area are in line with any workplace procedures. Any site inspections according to workplace procedures should also be completed before starting work.

Duty of Care

- ▶ Employers:
 - Must provide a workplace that is safe
 - Instruct, train and supervise employees to work safely
 - Train workers in a way that is easy to understand
- ▶ Workers:
 - By law, as a worker you must take care of your own health and safety, and the health and safety of other people in your workplace.



Before starting work, you should discuss any potential hazards with your employer, colleagues, supervisor or a Workplace Health and Safety officer.

This is important so that all workplace policies and site-specific procedures are implemented, understood and obeyed.

Hazard and risk assessment

Health and safety risk management; is a process where we do what we can to minimise the risks associated with health and safety hazards at our workplace. The aim is to ensure that no one is injured or hurt by a hazard at work. Hazards in the workplace should be discussed with everyone on site including site supervisors, safety officers, other workers, Managers and any other personnel on site. This is important to ensure any workplace policies and site specific procedures are followed.

Risk management is a systematic process that involves the following four steps:

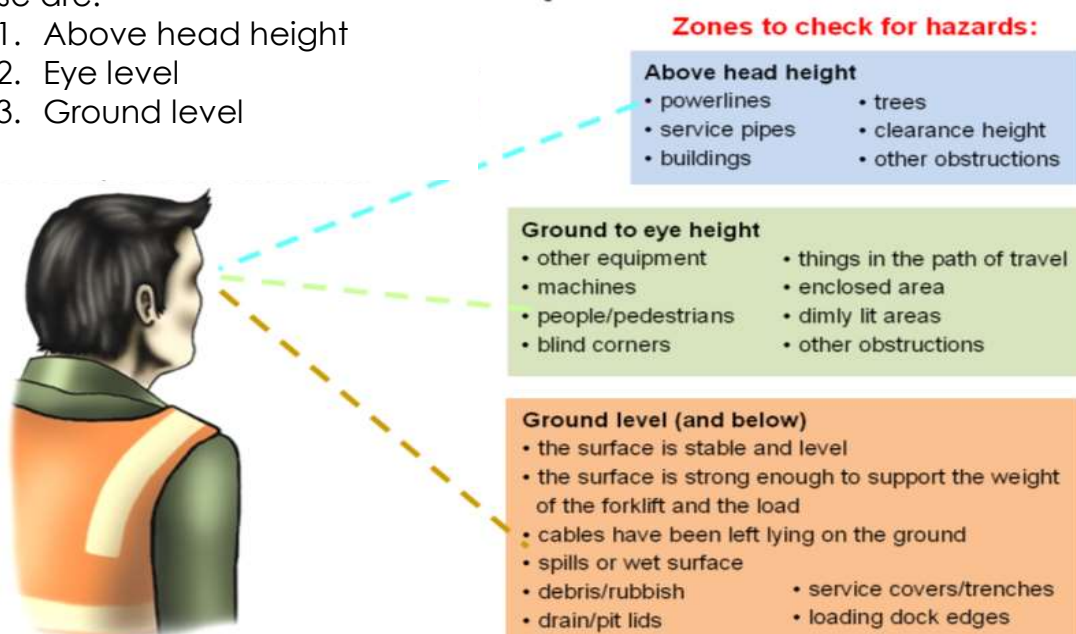
- Identify the hazards
- Assess the risk
- Control the risks
- Monitor and review the safety measures.

There are many instances when a risk assessment should be done. For example, whenever:

- A new hazard has been introduced (e.g. commissioning new equipment item)
- An incident (including a near miss) has occurred
- When a new activity involving significant risk is planned.

Typically, there are 3 zones you must check when conducting a risk assessment, these are:

1. Above head height
2. Eye level
3. Ground level



If you are unable to control the hazard it must be reported. You may be required to complete a Hazard Report Form.

What is a hazard?

A hazard is something, act or condition that has the potential to cause harm.

Common Hazards associated with forklift operation:

- Electrical power lines
- Underground services
- Pedestrians and personnel
- Ground bearing pressure
- Other plant and equipment
- Obstructions
- Weather
- Surrounding Buildings
- Overhead service lines
- Dangerous goods
- Poor lighting
- Enclosed/confined spaces
- Uneven ground
- Vehicle traffic

Along with hazards there may also be other things to consider when operating a forklift.

Considerations when operating a forklift (NOT HAZARDS):

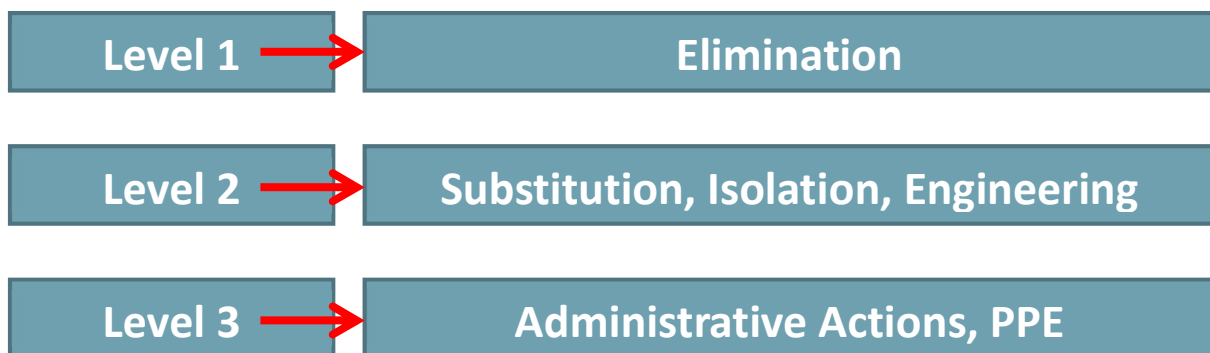
- Characteristics of a load
- Task specifics
- Work permits
- Doorways
- Exits
- Equipment required
- Communication
- Access
- Location of fire fighting equipment
- Location of first aid stations
- Emergency exits
- Safe walkways
- Blind corners
- Equipment availability

Hazard Control Measures

Hazard control has many levels, from elimination to management.

The hierarchy of Hazard Control is a list of control measures that can be used to eliminate or minimise exposure to a hazard in the workplace.

Shown here is a diagram listing the 3 levels in the hierarchy, from the most effective control to the least effective control.



Check with your manager or supervisor to find out what hazard control measures are in place and, if needed, put in those that are required.

EVERY, SUNDAY, I EAT, APPLE, PIE



Implementing Control Measures

Utilising the 'hierarchy of hazard control' you must determine the most appropriate method/s of controlling the hazard.

You must implement any control measures prior to commencing the task and as soon as the hazard has been identified.

Any safety equipment including PPE must be selected at the planning stage. Remember, you must inspect all PPE and safety equipment prior to commencing the task.



Power Line Safety

There are particular exclusion zones that you must maintain at all times from power lines. Power line exclusion zones differ from state to state. You must contact the local state/territory authority for the specific exclusion zones.

In some states when work is going to be conducted near power lines a trained, competent and authorised person can be assigned the role of observer to signal and warn the operator when the machine comes closer than the specified distance, these people are commonly known as a 'Spotter'.

Queensland Power Line Safe Working Distances

Summary of exclusion zones from the Queensland Electrical Safety Code of Practice 2010.

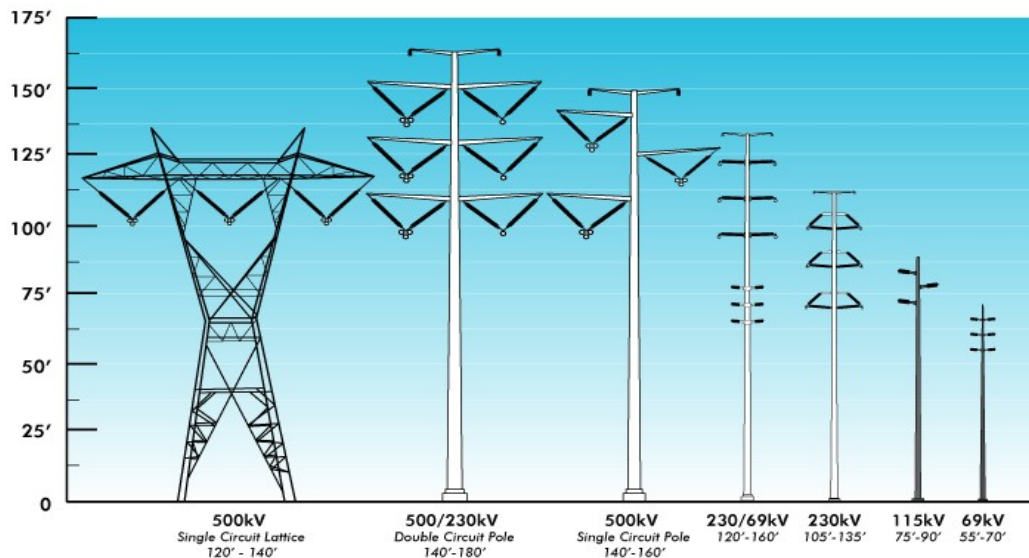
(Untrained Persons)

Power line voltage (1kv = 1000 volts)	Examples	Exclusion zone
Voltage Up to 132kV	Powerlines – usually on poles	3 metres
Voltage over 132kV to 330kV	Powerlines usually on poles and towers	6 metres
Voltage 330Kv and up	Powerlines usually on towers	8 metres

If you are required to operate closer than the regulations specify you must do the following:

- Seek exemptions from the local power authority
- Where possible, have the electrical power isolated. If this is not possible you can have the power lines insulated by an authorised person

Identifying the voltage of overhead power lines is crucial to safe operation. You must contact your local power authority for to find out powerline voltage.



Power line emergency procedures

If you come into contact with power lines these are the things you must do:

1. Stay calm and warn others.
2. If possible, ask someone to isolate the power.
3. If safe, break contact with the line by either lowering the mast or by reversing off the lines.
4. If unsafe and you need to dismount, you must put your hands together and feet together and jump as far away from the forklift as possible without making contact with the forklift and the ground at the same time. Land on both feet and hop at least 8 metres away from the machine. **DO NOT RUN OR WALK AWAY FROM THE MACHINE.**
5. Report the incident to management and the relative power company and get the machine checked before using again.

Tiger Tails

When working and operating machinery near power lines it is recommended that you contact your local power authority to install tiger tails on the closest low voltage power lines. Please remember that tiger tails are only visual indicators and do not insulate the power. They cannot be used on high voltage lines.

When using tiger tails on power lines, you must still maintain the legal clearance distances at all times.

REMEMBER they are only a warning device!

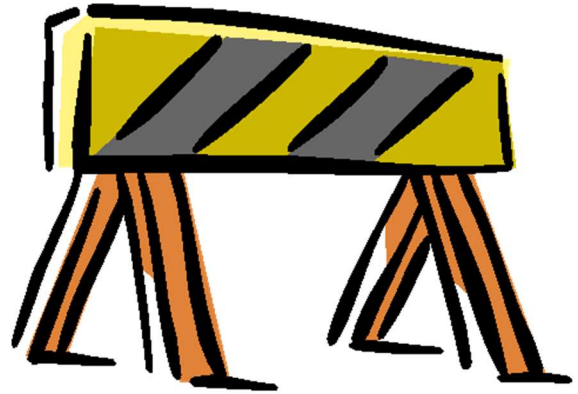


Workplace control measures

When working in a public area you must ensure the health and safety of pedestrians and other site personnel. You may also be required to divert traffic and implement a traffic management plan.

Common workplace control measures are:

- Safe Walkways
- Signage
- Safety and exclusion zones
- Speed limits
- Barricades
- Flag person areas and operating at night



Operating at night

If you operate a forklift in a dimly lit area or at night you must ensure that there is adequate or sufficient lighting across the work area. You may need to arrange installation of additional lighting if it has been deemed a hazard. Remember when operating at night ensure that your head lamps and rear lamp (if fitted) are turned on.



Driving Indoors and other Enclosed Locations

Dangerous gases are produced that can cause harm to people. Forklifts with internal combustion engines produce carbon monoxide. This gas can rapidly build up in an indoor area. People can be overcome without even realising that they are being exposed. Confusion, headaches, dizziness, fatigue and weakness may set in too quickly for victims to save themselves.

Carbon Monoxide poisoning can cause permanent brain damage, including changes in personality and memory. Once inhaled, carbon monoxide decreases the ability of the blood to carry oxygen to the brain and other vital organs. Even low levels of carbon monoxide can set off chest pains and heart attacks in people with coronary artery disease.

The most suitable type of forklift to use whilst operating in an indoor area or enclosed location is an electric forklift.



Refuelling and Charging

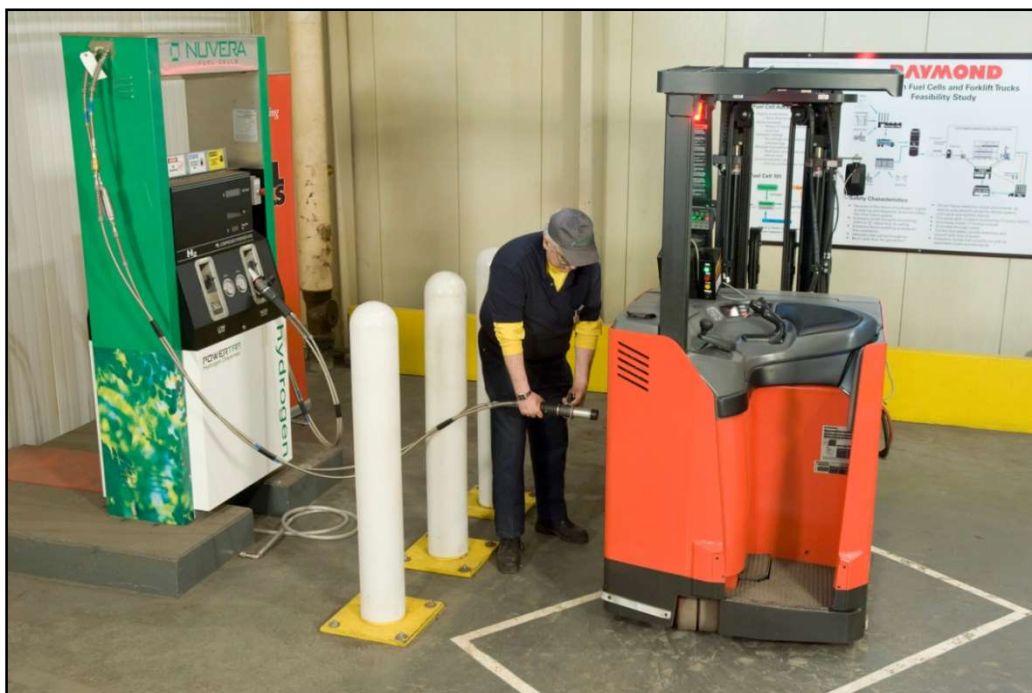
When refuelling and charging batteries, observe the following precautions:

- Do not smoke or allow any open flames or spark/arc generating equipment in the refuelling/charging area.
- Make sure there is adequate ventilation to disperse fumes to avoid an explosion
- Make sure there is a fire extinguisher nearby.
- Make sure there is a barrier that protects the pump or charger unit against vehicle damage.



Battery operated Forklifts

- Keep the battery compartment open to dissipate heat and prevent hydrogen from building up. Hydrogen in a confined space can be combustible. These gases must be ventilated to avoid an explosion.
- When charging batteries, keep the battery vent caps in place to prevent electrolyte spray.
- Keep tools and other metal objects away from the top of the battery to prevent an arc or explosion due to short-circuited terminals
- When adding fluid to the battery, wear safety glasses and a face shield for protection against electrolyte splash or spray.
- Battery charging areas must have a way to flush and neutralize spilled electrolyte.
- Do not attempt to remove a battery from the forklift unless you have been trained and the charging station is equipped with a hoist designed for this purpose
- If you are required to service the battery your employer must supply an eyewash station that can be reached within 10 seconds from the charging area.



Liquid Petroleum Gas (LPG) forklifts

LPG gas is very cold. Make sure you wear gloves when charging LPG gas cylinders. Always check for leaks before operating.

Gasoline or Diesel Forklifts

Turn the engine 'OFF' and park the forklift before refuelling. The fuel may ignite if you attempt to refuel with the engine running. Clean up any spilled fuel before restarting the engine.



Surface conditions

Before operating you should ensure the operating surface is assessed to determine the suitability of the forklift being used is in accordance with workplace procedures i.e. Flat level surface/uneven surface

When operating on slippery or wet surface remember you must slow down and proceed with caution.

Your forklift will not operate the same as it would on a dry surface. Operating without taking caution could result in a tip over or losing your load. You should also avoid using ramps or driving on incline surfaces.



Rear End Swing

Rear end swing creates a risk to any person or object close by due to the fast-sideways movement, it can cause serious injury or kill someone if you are not careful.

Damage to property and equipment in the warehouse can also be a result.

Forklifts steer with the back wheels; the rear of the forklift can turn up to three and a half times faster than the speed of travel.

Operators need to keep to the inside of every turn to allow enough room for the rear of the forklift to swing around.



Workplace Communication

Your employer must make arrangements for effective communication between people in the workplace.

Examples of communication within the workplace are;

- Safety bulletins
- Site safety meetings
- Radio communication
- Hand signaling
- Emails
- Verbal discussions



Emergency Situations & Procedures

In the event of an emergency you should do everything you can to minimise damage and/or injury.

Important Emergency Communications

You must alert all persons:

- What the nature of the emergency is. What has happened.
- Where the emergency is and any unsafe areas. The location
- Who is involved in the emergency (any injuries, if people have or need to be evacuated and who to contact i.e. police, fire or ambulance)

Who do we communicate with in an emergency?

- Other Workers
- Workplace safety officers
- Management or Supervisors
- Emergency Services



What is a Forklift?

The 2 different types for forklift trucks are Counterbalanced and Non-counterbalanced.

Counterbalanced forklift

A counterbalanced forklift truck is a forklift where the load is positioned at one end of the forklift and is counterbalanced by the weight of the machine on the other end. This is the most common type of forklift.

There are three types of counterbalanced forklifts. These are Conventional, All Terrain and Container forklifts.

Counterbalanced forklifts can be powered in a various number of ways. These are Internal Combustion (Gas, Petrol and Diesel) and Electric. Most conventional counterbalanced forklifts utilise an automatic transmission however there are still forklifts fitted with manual transmissions.



Non-Counterbalanced Forklift

A Non-counterbalanced forklift truck is a forklift that does not use a counter balance to stabilise the load.

Non-counterbalanced forklifts are commonly known as 'Reach Trucks' or 'High Reach' forklifts. This type of forklift is used for specific load stacking functions within a warehouse.

The weight of the load is transferred directly down the mast to the stabiliser wheels at the front of the truck.



Pre Start Checks

Before you even begin operating a forklift you must ensure you have completed a **Pre-start operational check**.

Pre-start operational checks are checks you must complete before operating any forklift. They are completed to ensure the forklift you are going to operate is working properly and safely.

Pre operational or 'Pre op' checklists generally can be found in the operators' Logbook or Manufacturer's handbook specific for the forklift. Logbooks should be checked and completed as per any regulatory requirements and safe work procedures.

A 'Pre Op' checklist consists of Physical (E.g. touching and feeling various parts of the machine) and Visual checks (E.g. looking at the different part of the machine).

Pre operational checks:

- Data Plate
- Safety Guards
- Tyres
- Fuels
- Under machine for fluid leaks
- Fluids:
 - Engine oil
 - Coolant
 - Hydraulic oil
 - Brake fluid
 - Battery water levels
- Hydraulic Systems (cylinders/hoses)
- Mast assembly (chains/pulleys)
- Fork Tines or attachments
- Battery
- Seat and seatbelt
- Counterweight
- Warning decals
- Security of LPG cylinder
- Gas compliance plate
- Air filter (Diesel)

Tyre checks

Forklift can be fitted with 1 of 2 main types of tyres, solid rubber and pneumatic (air filled tyres).

When checking solid rubber tyres, you need to check for:

- No chunks or large pieces of rubber missing
- Not worn down too far
- Any wear should be even (no flat spots)

Check wheel nuts to ensure the wheels are secure. When a forklift is fitted with pneumatic or air-filled tyres it is important to make sure they have the correct pressure. This will help with keeping the forklift stable



Start-Up Checks

Once you have started your forklift truck it is necessary for you to conduct further checks.

These checks include:

- Seatbelt fastens and fits properly
- Familiarise yourself the controls and visible decals
- Lights and turn signals are working
- Warning devices (horn, reverse beeper) are working.
- Gauges are working
- Steering, pedals and brakes are in working order (check this while moving)
- All controls work to their full extent and are smooth
- Park brake
- Fuel Level

You should test your forklift to ensure all mechanical functions are working correctly before you begin work.

Things to check for:

- Forks extend to maximum height
- Forward and backward tilt are working
- Chain tension is equal when forks are at maximum height
- Chains are on rollers correctly
- There are no oil leaks from seals when at full extension.



Load Data Plate (Load Plate)

Your forklift has a limited capacity. The amount of weight your forklift can carry is known as the forklifts 'rated capacity', this is the maximum load the forklift can carry at a specific load centre distance and load height as shown on the forklifts data plate.

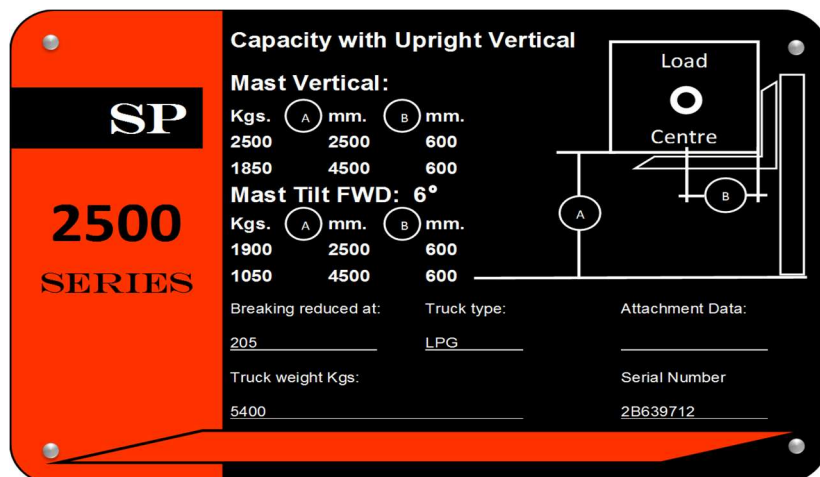
Most forklifts have two 'Safe Working Loads' (SWL's) stamped on the Load Rating Plate. These are Mast Vertical Capacity and Mast Tilt Forward Capacity.

In each case the SWL is the maximum load that can be lifted with the mast and load at the position stated on the Load Rating Plate. This load **MUST NOT** be exceeded.

If the weight of the load to be carried is more than the SWL, the forklift can:

- Cause instability (e.g Topple forward)
- Cause physical damage to the forklift (eg. Bent forks)

The picture below shows a typical load rating plate.



In this example:

In the mast vertical position, where the load centre is 600mm, the forklift can carry a maximum of 2500kg at a height of 2500mm and 1850kg at a height of 4500mm.

This means that when the mast is vertical you would never lift a load greater than recommended on the forks at the specified height. In the mast forward tilt position, where the mast is tilted forward at 6°, the forklift can lift no more than 1900kgs or 1050kgs at the relevant heights and at the recommended load centre distance recorded on the data plate.

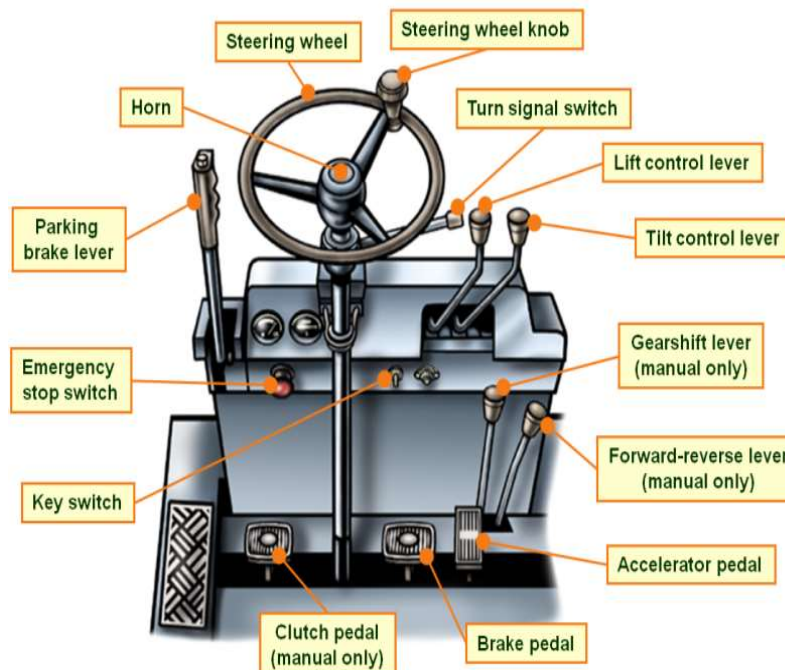
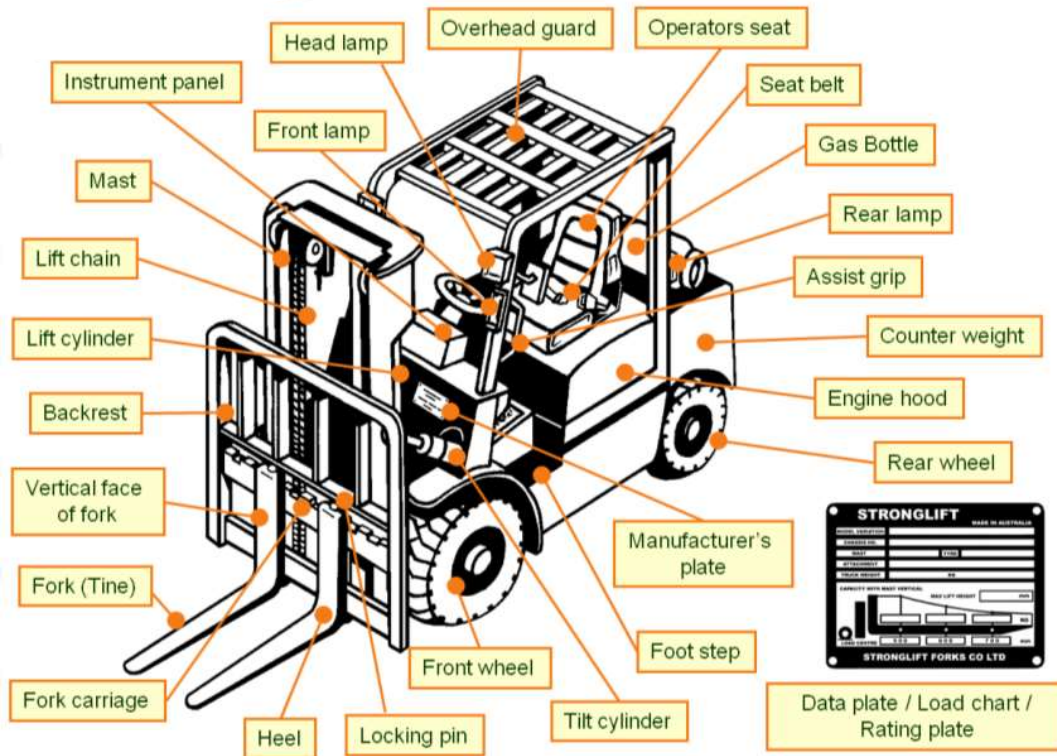
As you can see the SWL is different in the mast vertical and mast tilt forward position

Forklift safety guards

- ▶ Forklifts are manufactured to adhere to strict safety standards.
- ▶ There are 3 major safe guards on a forklift. These are:
 - The load Backrest - prevents the load from fouling the mast and secures the load that the forklift is carrying
 - The overhead guard - protects the operator from falling objects
 - The foot guard - protects the operator legs from impact damage or from any object protruding through the mast
- ▶ All of these guards have been designed to protect the operator



Forklift Components Diagram



Fault Reporting

If you find a fault with your forklift remember this simple acronym:

KTRR

- Key – remove the key from the machine
- Tag – place a danger tag (out of service tag) on the machine
- Record - record the fault on the pre operational checklist/Logbook
- Report – report the fault to your supervisor



Repairs

All repairs to a forklift must be undertaken by approved personnel or by a forklift mechanic. Always notify your supervisor of any maintenance or repairs that need to be carried out.

You can only carry out minor repairs if you are authorised and competent to do so.



Assessing the Load

The first thing you must do before shifting a load is check the weight of the load to see if the forklift can pick it up. You will damage or tip the forklift over if you try to lift a load that is too heavy. A load may or may not be marked with its weight. There are a few ways to check the weight of a load

- Read the consignment note or manifest
- Read the weigh bridge certificate
- Calculate the weight of the load (if the weight is marked)
- The loads weight may appear on the load itself or on the packaging
- Weigh the load

It is also important to check the pallet is in good condition. If the pallet is damaged, transfer the load onto a new pallet before you travel with it. If the load is unbalanced or unsafely loaded, re-stack it safely. If the load is uneven re-sack it so that most of the weight is closest to the face of the load backrest.



Operating the Forklift

Make sure you plan your travel path before you commence. Make sure you check your travel path for any obstacles or other hazards and adequate control measures are applied prior to operation.

You should ensure you have checked and inspected your path of travel in accordance with workplace procedures. Ensuring you have also planned for the locations of where loads will be placed. If the site has a traffic management plan implemented, it should be confirmed and understood before operating the forklift.

► If your view is obstructed, you must:

- Check the path is clear
- Check mirrors
- Look over both shoulders
- Sound your horn
- Reverse carefully
- Use a spotter/guide if required

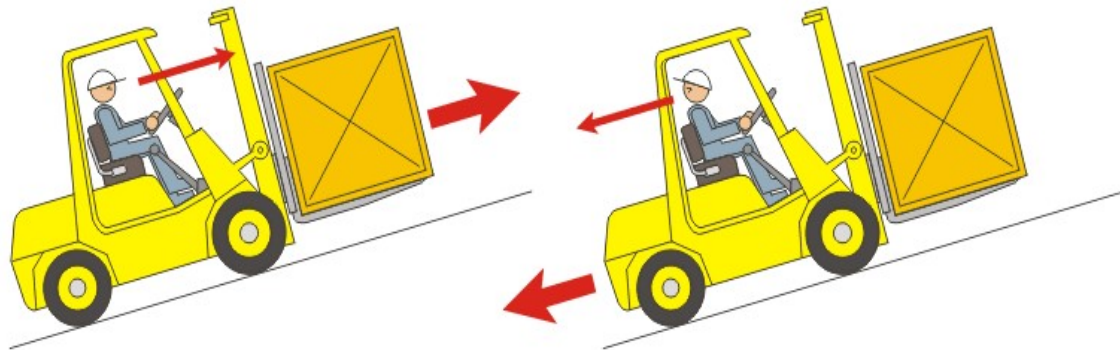
It is important to monitor your load as you travel. This ensures the safety of people around and allows you to make sure the load remains stable whilst travelling.



Traveling on A Ramp

When carrying a load up or down an incline or ramp, always face the fork arms or load uphill. Never turn while travelling up or down an incline, this can cause instability in the forklift and you can also lose your load.

If you cannot see over the load have a spotter guide you.



General operations

Never allow anyone to walk or stand under a raised load, even if the forks are not carrying a load. Major injury or even death may be a result if the load falls or the hydraulics fail.

Passengers are not permitted to be carried on a forklift unless it has been designed to carry more than one person. It must have an approved seat and a seatbelt for the additional passenger.



Travelling with a load

Never travel with a load raised as this could cause the forklift to become unstable.

Carry loads at a safe travel height at all times. Travel height of the load should be as low as possible/practical, this is generally axle height of the forklift you are operating or below.

A load must never be carried on one fork arm:

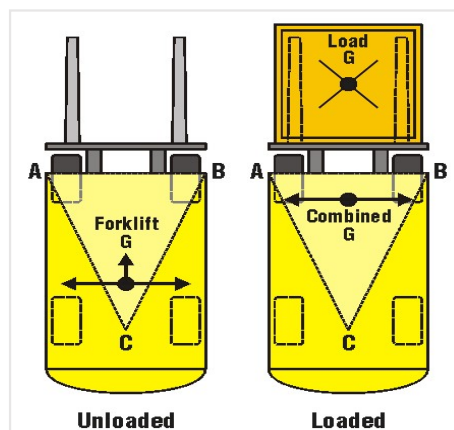
- You can cause damage to the fork arm
- You may cause instability in the forklift and the load.

Stability Triangle

The triangle formed between points A, B and C is called the Stability Triangle. The forklift will not tip over as long as the centre of gravity remains inside the triangle. Typically when a counterbalanced forklift is unloaded the centre of gravity (G) will sit far back in the triangle. The centre of gravity only has a small distance to move laterally to be outside of the triangle. Driving a forklift unloaded at speed can easily result in the forklift becoming unstable and tipping over.

When the vehicle is loaded it forms a 'combined centre of gravity'. The reason for this is due to both the forklift and the load having their own individual centres of gravity. When the forklift picks up a load both the centres of gravity combine. As you can see in the diagram on the right the centre of gravity (G) shifts towards line A-B. Theoretically, the maximum load will result in the centre of gravity (G) being at the line A-B. As a result the forklift becomes more stable at this point due to point (G) moving towards the centre of the triangle.

If the load exceeds the counterweight point (G), it will move forward past line A-B. This will result in the forklift tipping forwards.



Stable Travel

Forklifts have a narrow wheel base. They are generally not very stable and can overturn easily if you are not careful. There are 2 types of instability in a forklift.

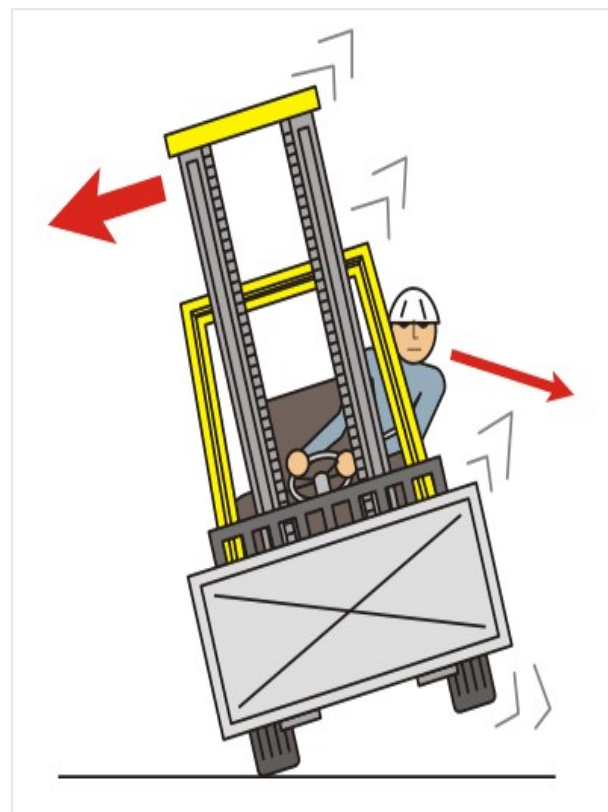
These are Lateral instability (tip over sideways) and Longitudinal instability (tip over length ways).

Causes of tipping sideways;

- Driving too fast
- Uneven load
- Surface is uneven or unstable
- Braking too hard when turning
- Turning too sharply at high speed
- Turning with the load raised
- Travelling across an incline
- Side shift off centre
- Underinflated/flat tyre

Causes of tipping forwards;

- Driving too fast
- Uneven load
- Surface is uneven or unstable
- Braking hard
- Travelling down an incline with the load facing downhill
- The forklift is overloaded
- Mast is tilted forwards while travelling
- Load is positioned on the end of the forks rather than against the back rest
- Load centre longer than recommended



Make sure you plan your travel path before you commence. Make sure you check your travel path for any obstacles or other hazards and adequate control measures are applied.

Forklift roll-over procedure

If your forklift is tipping over you must NEVER JUMP OUT. If you attempt to jump out you could be caught under the frame and crushed.

In the case of a roll over you should:

- Remain in the forklift/Stay seated
- Brace yourself until the forklift has stopped moving

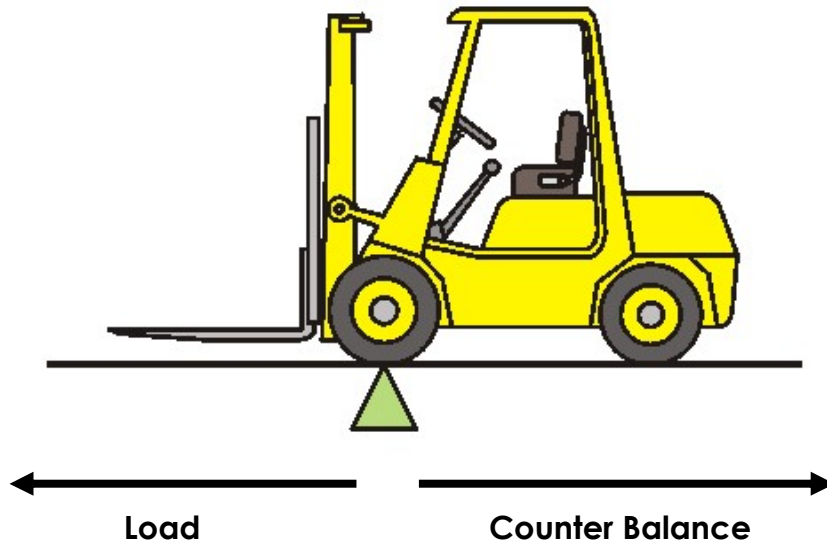
Seatbelts should also be worn as they:

- Stop the operator falling out in the event of a tip over
- Stop the operator being thrown into the forklift mast/frame or out of the machine in a collision



Point of Balance (Fulcrum)

The point of balance on a conventional counter balanced forklift is the pivot or balancing point of the forklift. This is where the front tyres touch the ground.



Counter Balance

This is the weight of the forklift behind the point of balance, and includes the counterweight. Everything in front of the Point of Balance is load and everything behind the Point of Balance is counterweight.

Unapproved counterweights are not to be added to the forklift. This will affect the lifting capacity of the forklift and can cause the forklift to become unstable. You must consult the manufacturer for approval of additional counterweight



Carrying a load

When carrying a load it is important to ensure your side shift is centralised. Carrying a load with the side shift and load over to one side of the machine can cause major instability to the forklift and may result in the forklift tipping over.



Attachments and ancillary equipment

The forklift can be used in numerous ways to carry loads by using different attachments.

Before any attachment can be used on a forklift the manufacturers specifications must be checked to ensure the attachment can be applied to that particular forklift and will be capable of carrying out the intended operation.

If you have never operated the forklift with the attachment you intend to use, you must be given appropriate information and training on its usage.

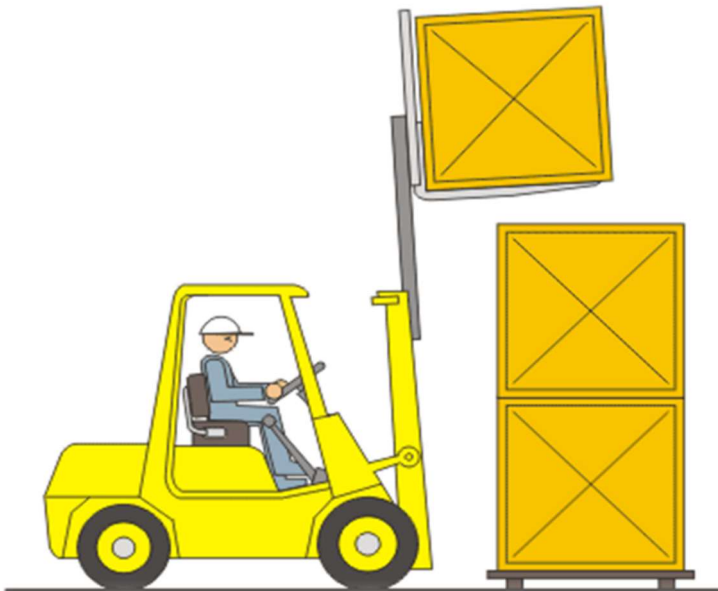
Common attachments include:

- Jib Attachments
- Work Platforms
- Lifting Attachments
- Clamps (Bale, Tyre, Paper and Drum)

Stacking loads

Special precautions are necessary when stacking materials.

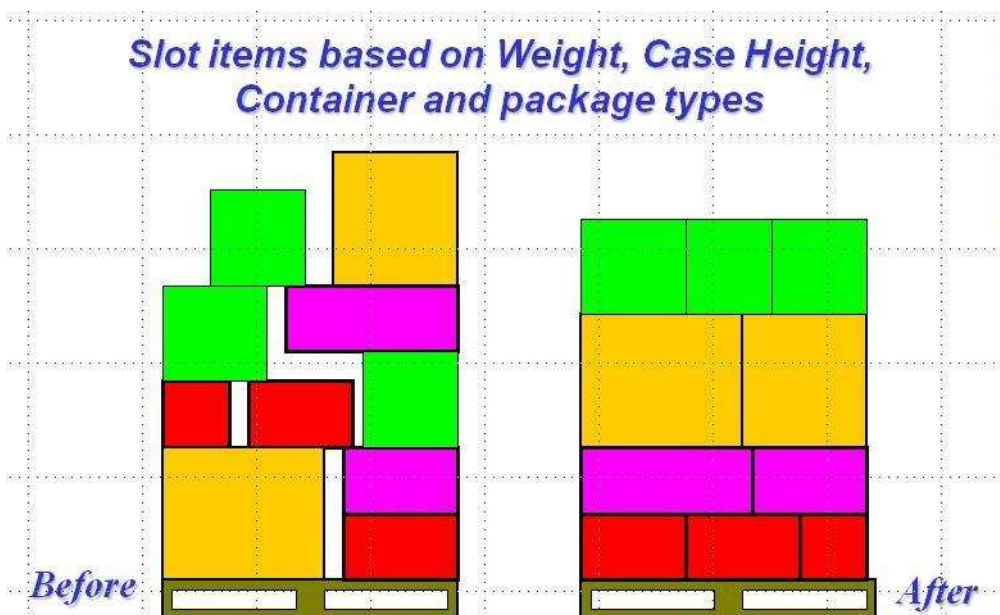
- Loads must be stacked on firm and stable surface.
- Materials should not be stacked too high as to become unstable.
- Heavy items must be placed on the bottom.



Damaged pallets

If you come across a pallet that is unsafely loaded restack the load safely. Any damaged pallets should also be replaced.

If you are carrying bulky, oversized or unsecured loads it must be secured on a pallet and either shrink wrapped or strapped.

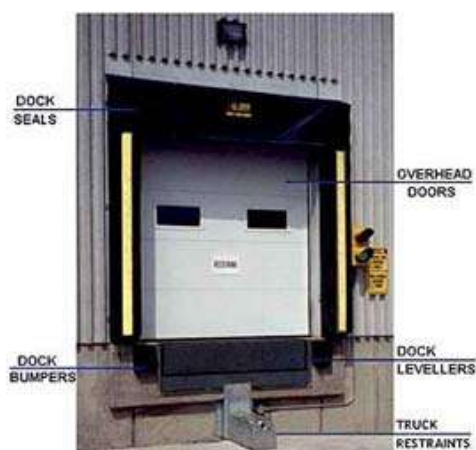


Loading Docks

Forklifts are often driven onto trucks, trailers or railroad cars over a dock board (can also be known as a bridging plate) at loading docks. If the truck, trailer or car is not secured to the dock or otherwise chocked, it can move over time. The dock board can then fall between the trailer and the dock as the forklift crosses it.

You can secure wheel chocks with a chain at each loading dock bay and tell the truck driver that they must place them in front of the rear wheels. Another way of securing the trailer is to use a vehicle restraint system mounted onto the dock that clamps onto a bar below the trailer as it backs into place. This system will signal when the restraint is engaged or if there is a problem.

Sometimes a trailer is left at a loading dock without a truck attached. Use trailer jacks to prevent the trailer from up-ending when a forklift drives to the front of the trailer to load or unload.



Workplace emergencies

In an emergency if you are operating the forklift you must give way to all emergency vehicles.

These include:

- Police
- Ambulance
- Fire
- Emergency SES vehicles
- Service Vehicles



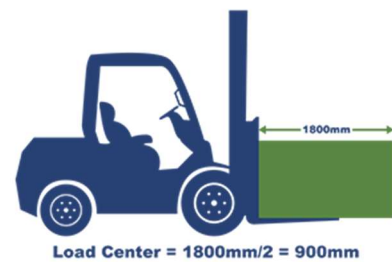
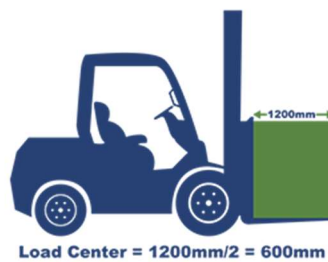
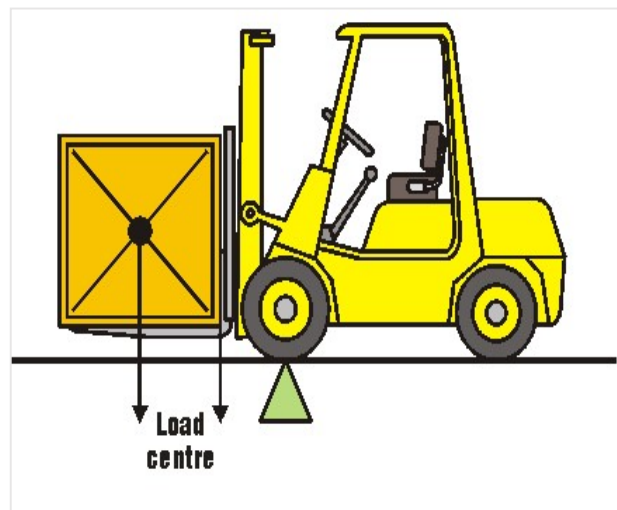
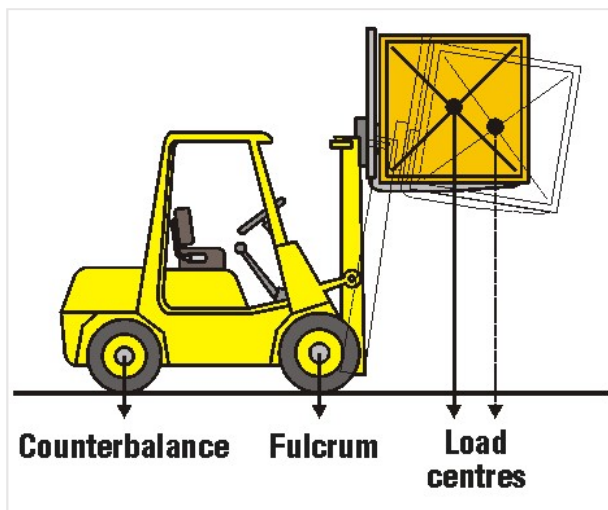
Forklift Load Centre Distance

Load Centre Distance (LCD)

Understanding load centre is vital for safe operation.

The load centre is the distance from the vertical face or heel of the fork arms, to the loads centre of gravity.

If the load is not picked up hard against the heel of the fork arms the forklifts capacity will reduce and you can also affect the stability of the machine



Parking and Shutting Down

When parking the forklift, you must ensure that the forklift will not become a hazard to others or the workplace.

You must not park in front of, on or near;

- Exits and Doorways
- First Aid stations
- Firefighting equipment
- Safe walkways
- Refuelling areas
- Near blind corners
- Near emergency exits

Before disembarking the machine, you must;

- Engage the handbrake and ensure the forklift is in neutral.
- Lower the fork arms to the ground, using forward tilt so that the fork tips are touching
- Turn the engine off
- Remove the key (this ensures no unauthorised personnel operate it)
- Dismount the forklift using the 3 points of contact
- Shut off the LP gas supply
- If you have been using an electric forklift you may need to recharge it

If you must park the forklift on an inclined surface you must 'chock the wheels' of the forklift in addition to the normal parking procedure.



Post operational Checks

When you have completed a shift, and have parked and shut down your forklift, you must complete a Post Operational check to ensure that the forklift is safe for the next person to use.

Post operational checks need to be carried out, in order to:

- Detect any structural damage that may have occurred during the operation of the forklift
- Make sure all the forklift systems are closed down and the forklift will not present any hazards to others in the workplace
- Look for any leaks in oil or hydraulic lines that could affect safe operation of the vehicle when it is next started
- Report any faults or service requirements



one stop

