FORKLIFT TRUCK
SAFETY AND LICENCE GUIDE

Training support material for:

TLILIC0003
Licence to operate
a forklift truck

Produced by:

EASY GUIDES
Australia Pty Ltd

PICTURE BASED. PLAIN ENGLISH. LEARNING MADE EASY.

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This learner support material is designed to help trainees prepare for the requirements of the Units of Competency:

TLILIC0003 –
Licence to operate a forklift truck

contained in the TLI Transport and Logistics Training Package.

Application

This unit specifies the skills and knowledge required to operate a forklift truck safely in accordance with all relevant legislative requirements. Competence in this unit, does not in itself result in a HRWL licence to operate this plant.

Forklift truck means a powered industrial truck equipped with lifting media made up of a mast and an elevating load carriage to which is attached a pair of fork arms or other attachments that can be raised 900 mm or more above the ground, but does not include a pedestrian-operated truck or a pallet truck.

A person performing this work is required to hold a forklift truck High Risk Work Licence (HRWL).

This unit requires a person operating a forklift truck to:

- Plan work/task
- Prepare for work/task
- Perform work/task
- Pack up

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit of competency.

This unit is based on the licensing requirements of Part 4.5 of the Model Work Health and Safety (WHS) Regulations and meets Commonwealth, State and Territory HRWL requirements.

The National Assessment Instrument (NAI) is the mandated assessment for the HRWL to operate the relevant licencing class as detailed in this unit.

Edition 1: Version 2 – May 2020

We owe much thanks to input from numerous contributors and subject matter experts. Easy Guides Australia would like to acknowledge the valuable contribution of all those who have given us feedback and suggestions to develop and continue to improve the quality of this publication and related training products.

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INTRODUCTION TO FORKLIFT TRUCKS

What is a forklift truck?

A forklift is a powered industrial truck used to lift and move loads. It has a mast and an elevating load carriage with a pair of fork arms or other load-holding parts. As you can see below, there are different types of forklifts. The most common forklift is the counterbalance forklift truck.

This series of images were used with permission from Linde

Counterbalance forklift truck

Order picking forklift truck (LO licence)

Walkie reach stacker

Rough terrain forklift truck

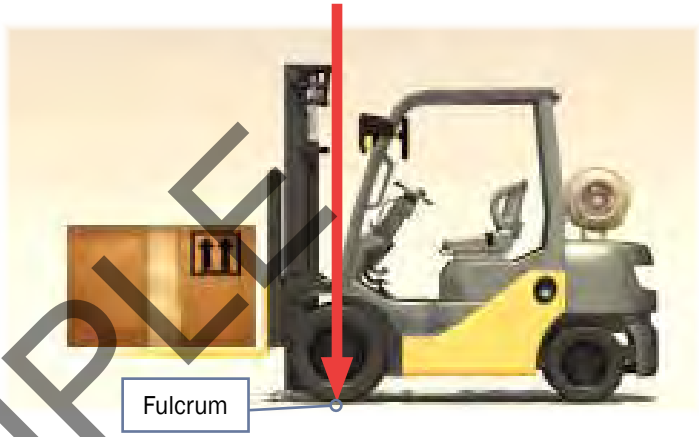
Narrow aisle turret truck (Lo licence)

Sit-on reach forklift truck

Counterbalance forklift

The most common forklift is the counterbalance type. This means they carry the load on the front mounted forks (tynes) and use all the weight behind the front wheels to counterbalance the load.

The point of balance on a forklift is called the **fulcrum**. The fulcrum is where a vertical line drawn through the centre of the front axle would meet the ground. An easy way to remember this is the fulcrum is where the front wheels touch the ground.

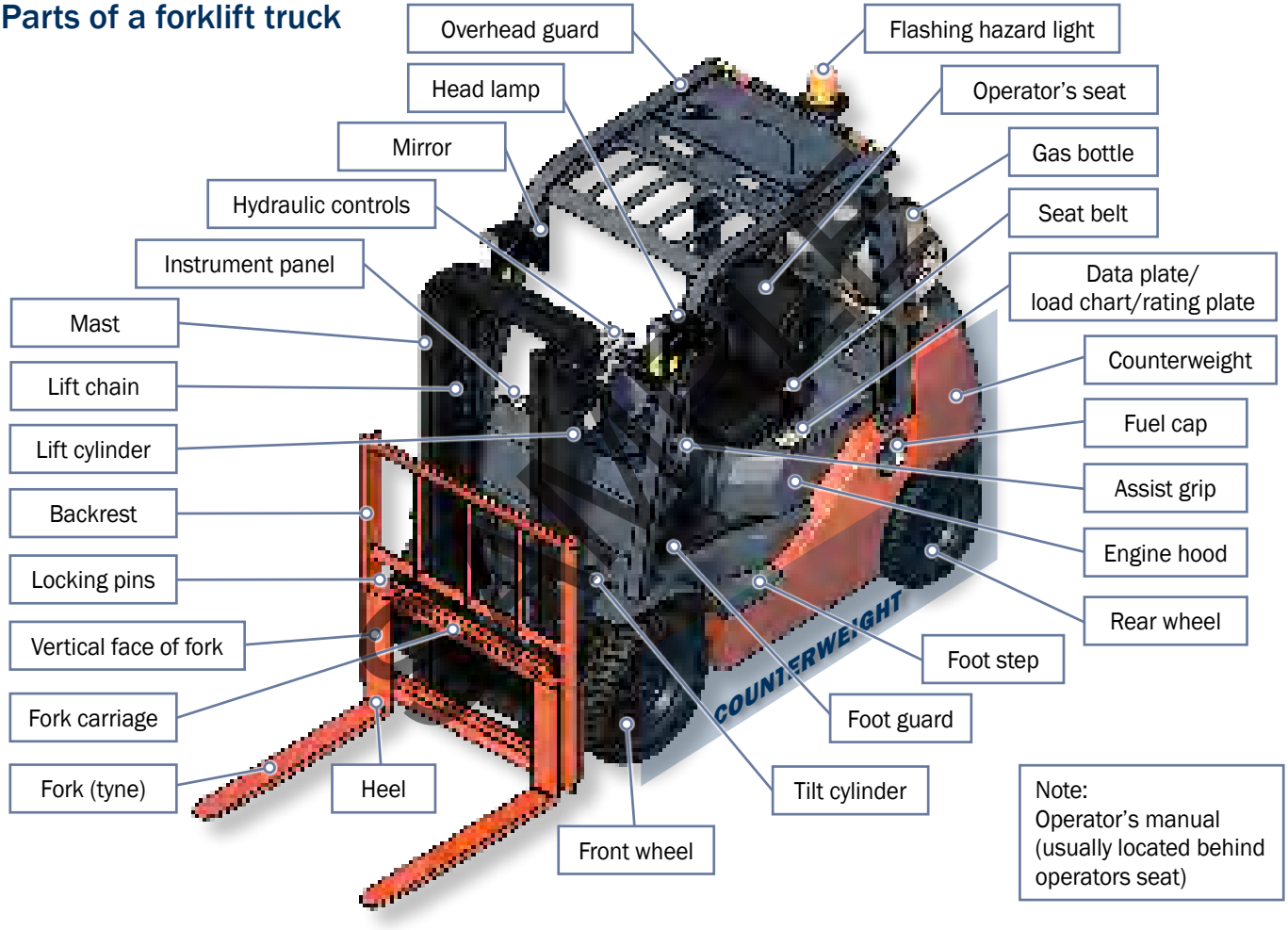


Everything behind the fulcrum acts as a counterweight.

Think of the forklift as being like a see-saw. If you have more weight than counterweight the forklift will tip forwards.

You cannot add more counterweight to try to lift a heavier load. Forklifts are not designed for this. If you did this you could damage the forklift.

Parts of a forklift truck



Note:
Operator's manual (usually located behind operators seat)

Licensing

Operating a forklift can be very **dangerous**.

This is why you must have a licence to operate a forklift in Australia.

- The only way to get your forklift licence is to complete an accredited course through a registered training organisation (RTO).
- To pass and get your licence, you must do a practical test to show you have learnt the basics of operating a forklift.
- You also have to pass a knowledge test.

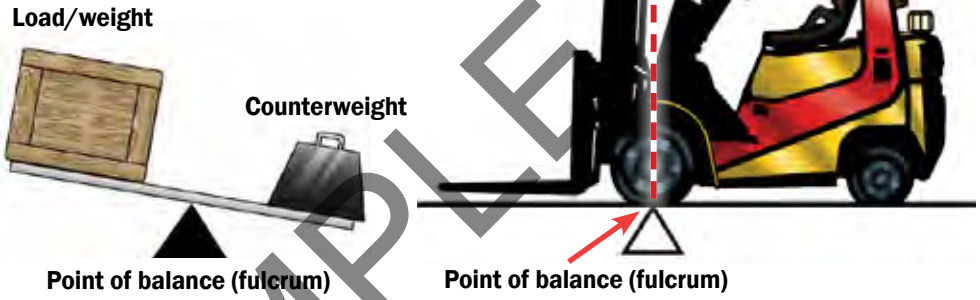
QUESTION 1

A forklift has a point of balance (fulcrum).

Where is it?

The fulcrum (point of balance) is at the bottom of the front tyre.

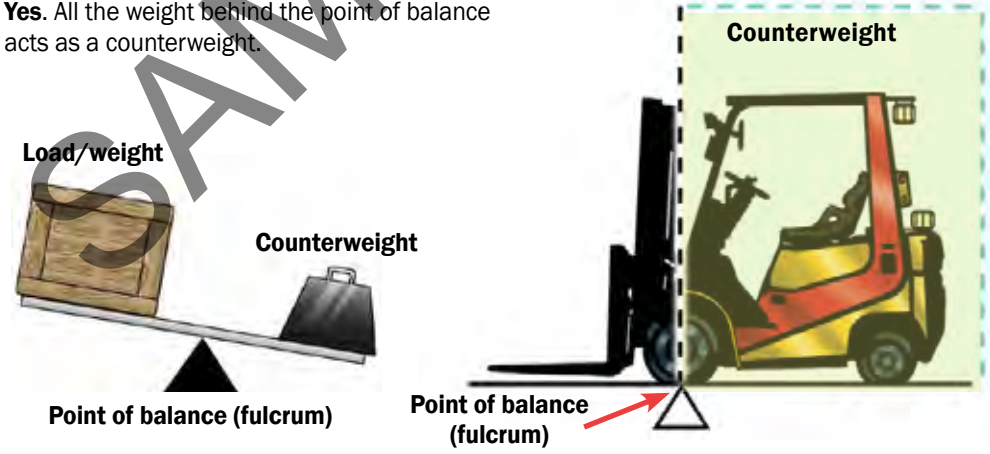
It is the point where the front tyre touches the ground.



QUESTION 2

Does all of the weight behind the point of balance work as a counterweight?

Yes. All the weight behind the point of balance acts as a counterweight.

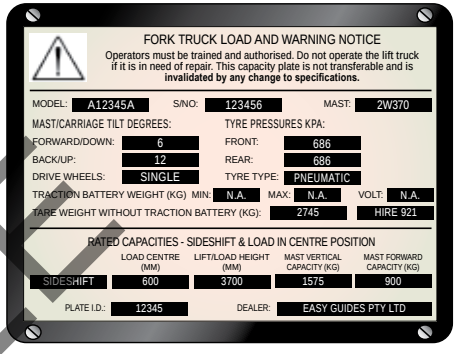


QUESTION 3

Are you allowed to put more counterweight on a forklift without checking the manufacturer's instructions?

No. Forklifts are made to lift specific maximum loads.

Changing the counterweights could cause an accident.



ELEMENT 1

PLAN WORK/TASK

Task requirements

Before operating the forklift you must know what the work task requires you to do.

Task requirements may be given to you verbally, in writing or electronically. They may be called work orders or something similar. If you are unclear about the requirements you should always speak to a supervisor or relevant person.

When the task requirements are known, you will be able to consider and plan for other important things such as:

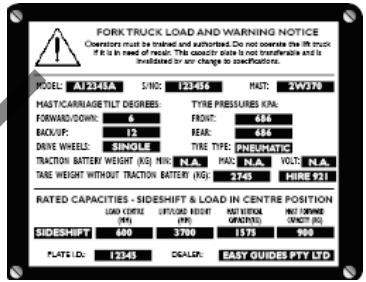
Communication 	Attachment method (for the load) 
Where will you do the lift? What do you need to do? 	What equipment do you need? Is the equipment available? 

Task requirements (continued)

Do you need any permits?

Does the load have any special features?

Does the forklift have enough capacity to carry the load? Check the data plate.



Blind spots caused by:

- Corners
- The mast
- The load.

Hazard versus risk

What is the difference?

Different hazards and risks emerge constantly—sometimes instantly.

Hazard

A hazard is any thing or any situation which could injure or harm you.

In other words, it is anything that can hurt you.

Risk

A risk is the chance of a hazard causing harm such as injury, illness or even death.

In other words, how likely it is that somebody or something may be harmed by the hazard.

Site inspection

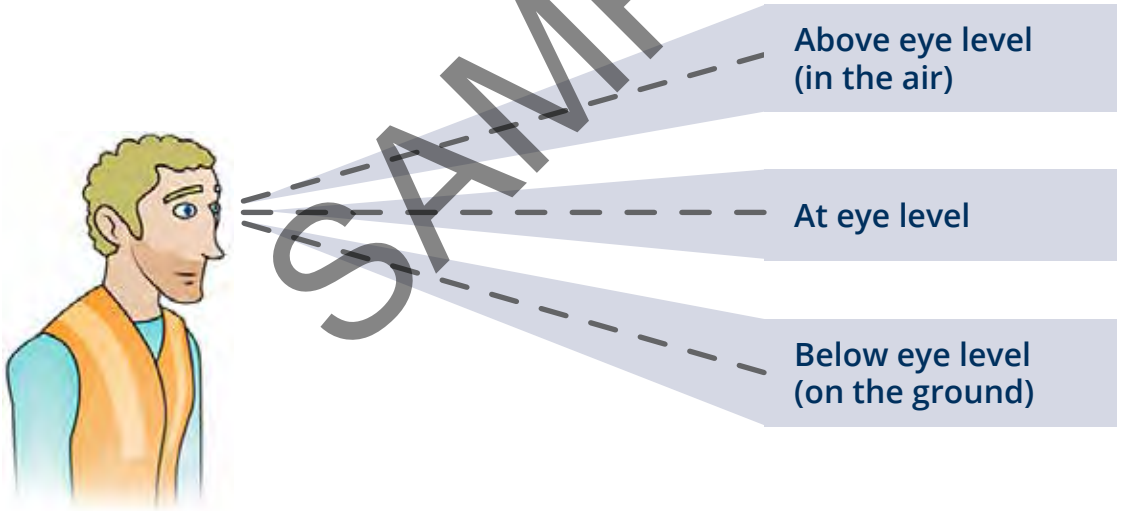
There are a lot of hazards and risks on work sites that you need to be aware of. Hazards can cause accidents, injuries and even death.

Hazards and hazard controls need to be considered when planning work.

The work site should be inspected by looking for hazards and risks that exist:

- Above eye level (in the air)
- At eye level
- Below eye level (on the ground).

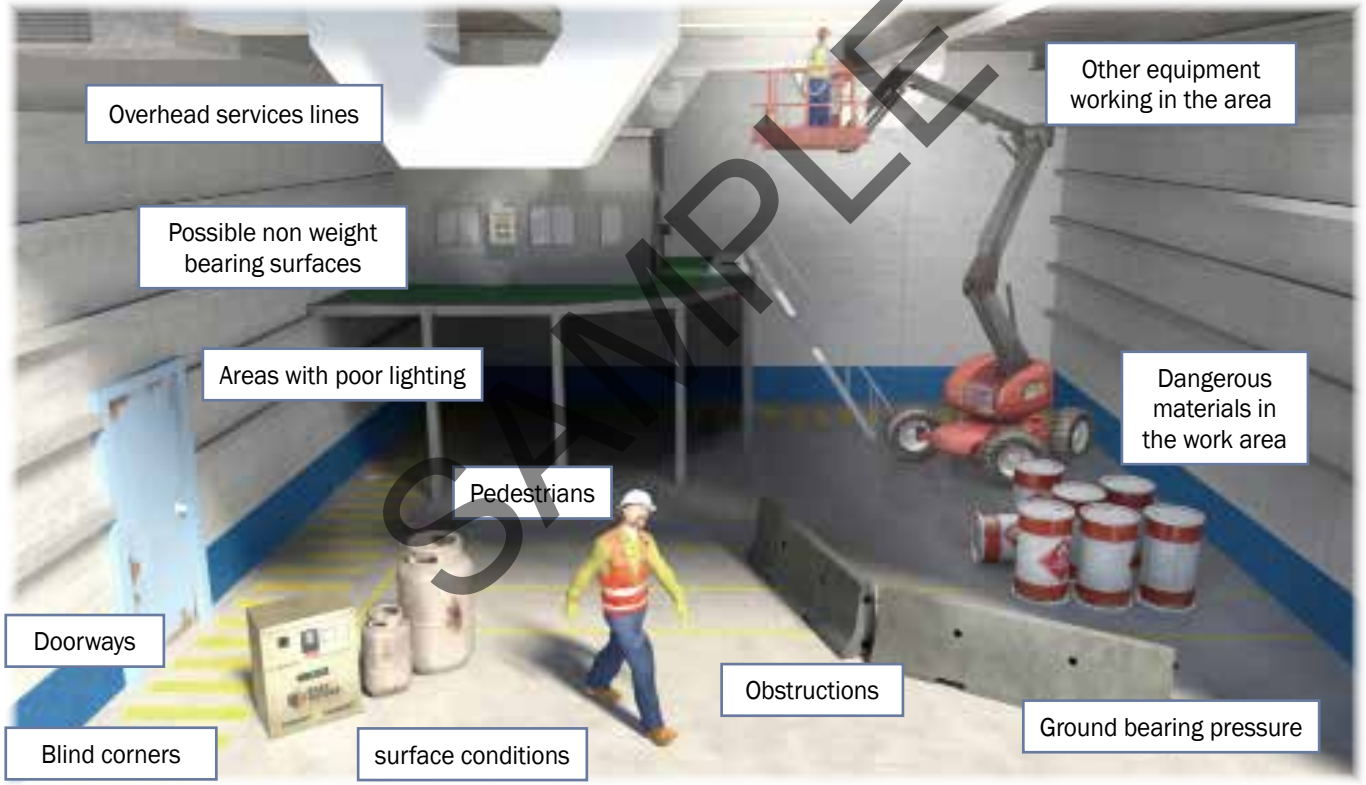
You should **always** follow workplace procedures for conducting site inspections.



Hazards – indoors

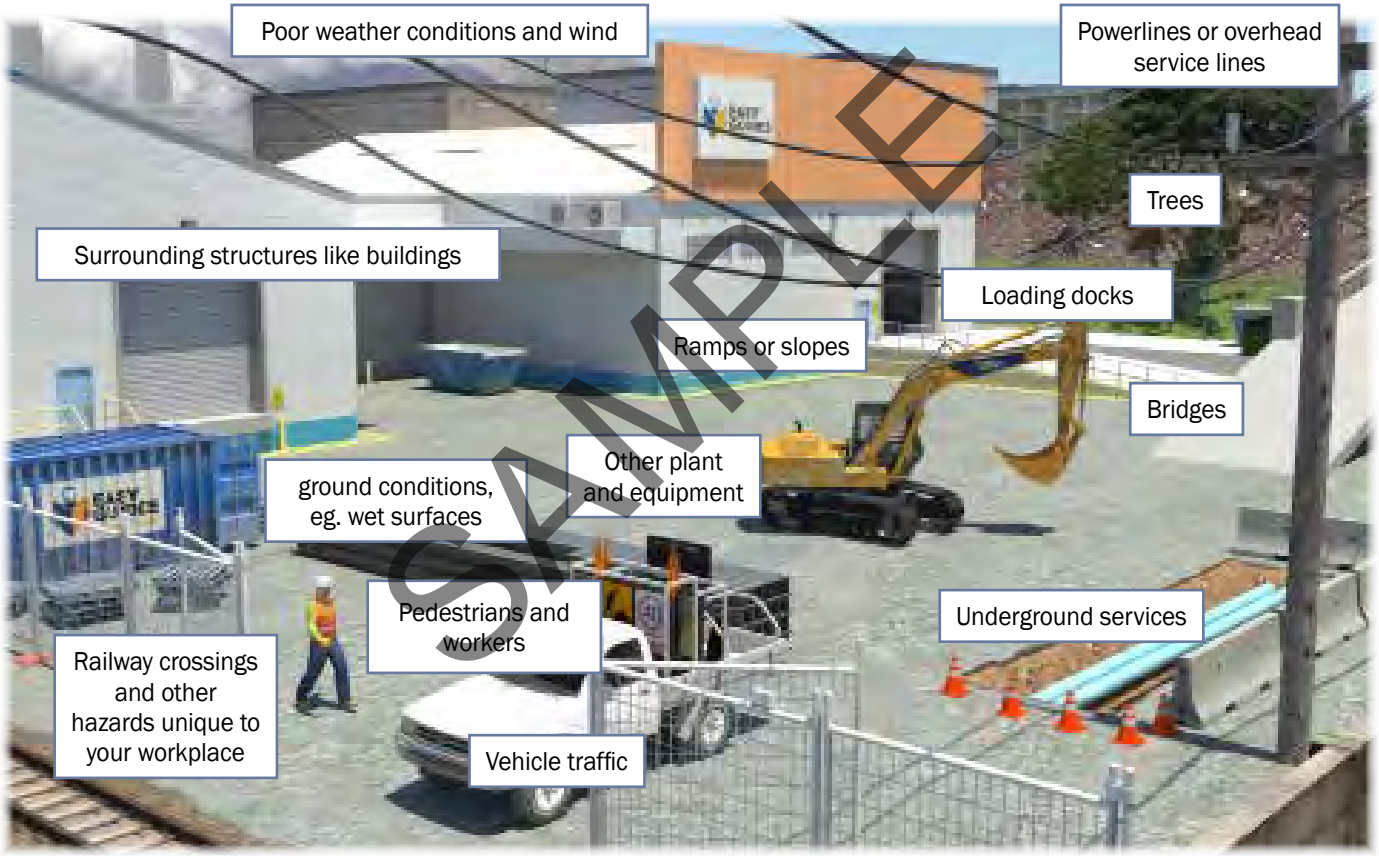
Before you begin work, you must be aware of hazards. A **hazard** is any thing or situation with the potential to cause injury or harm. In other words it is any 'thing' or 'action' that can hurt you or other workers.

If you are working indoors you must think about things like:



Hazards – outdoors

If you are working outdoors there may be hazards such as:



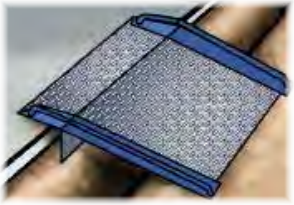
Inspect the operating surface

It is important to inspect the operating surface for many reasons:

- So you can identify any hazards that exist
- To determine the suitability of the surface
- So you can find out the best path for driving the forklift and moving and placing loads.

The operating surface can have an affect on the forklifts stability and should be assessed before you start work. This will help you to decide if it creates a hazard as well as what will be the correct type of forklift to use. For example, if the surface is hard and flat such as concrete, a forklift fitted with solid tyres will be fine. However if you were working on a rough, uneven surface such as on a construction site, then a rough terrain forklift fitted with pneumatic tyres would be needed.

Some things you should look for when assessing the operating surface include:

Backfilled ground or covered trenches 	Damaged or cracked bitumen or concrete and potholes 	Hard compacted soil or soft soil 
Railway tracks 	Rough, uneven, sloping surfaces 	Steel decks, ramps and grates 

Suitability of forklift and attachment

Every forklift has a data plate. You must check the data plate before using the forklift. The data plate tells you important things about the forklift. This includes telling you how much the forklift can safely lift and what attachments you can use.

The data plate helps you work out if the forklift and attachment are suitable for the load.

Make and model of the forklift

Serial number

Attachment type

Forklift weight

Load centre distance

Maximum lift height

Rated capacity – both vertical and tilt

Rated capacity

The rated capacity is the amount of weight the forklift is designed to lift at a certain load height and load centre distance as is shown on the data plate.

The rated capacity or the load centre distance of the forklift may vary depending on:

- The height of the lift
- The load centre distance (The most common is 600mm)
- The mast position (vertical or forward)
- Any attachments that are fitted.

The rated capacity is displayed on the forklift data plate and may also be called the **capacity** or **maximum capacity**.

The rated capacity may be reduced once the load is lifted over a certain height.	An increase in load centre will reduce the forklifts rated capacity and stability.	The rated capacity and stability will be reduced when the mast is tilted forward.
		

Checking the rated capacity

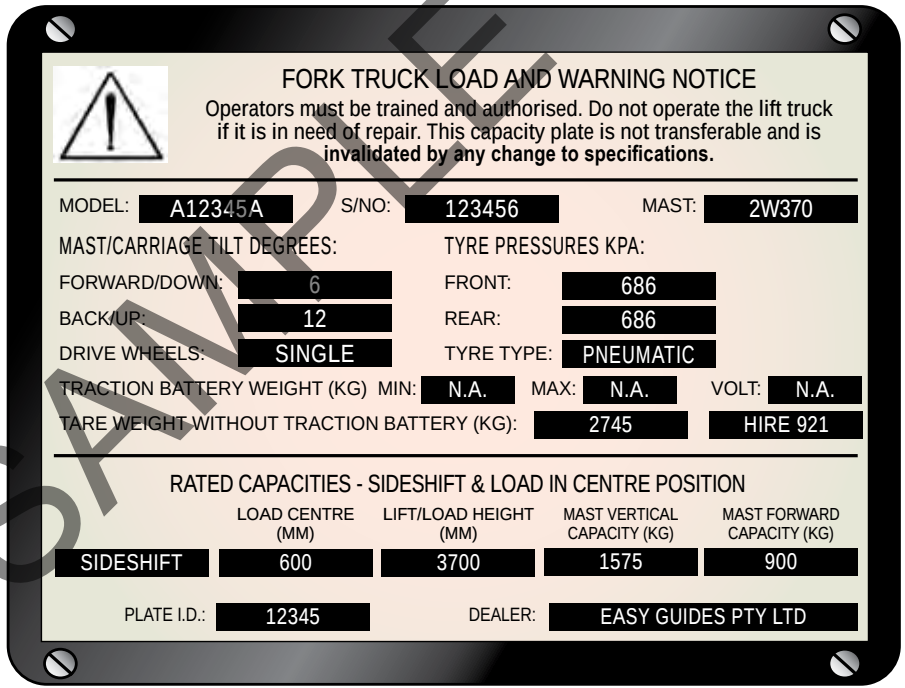
Check the data plate to find the rated capacity.

The forklift with the following data plate attached has the rated capacity of:

1575 kg with a **sideshift attachment** lifting a load to a **3700 mm height** with **vertical mast** and a **600 mm load centre**

OR

900 kg with a **sideshift attachment** lifting a load to a **3700 mm height** with **forward tilted mast** and a **600 mm load centre**

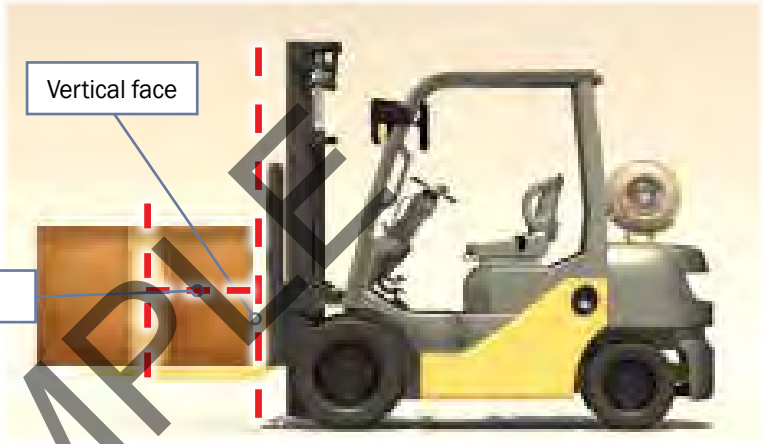


Load centre distance

Load centre distance is the **distance measured from the vertical face of the forks to the centre of gravity of the load.**

The load centre distance affects how much weight the forklift can lift.

The load centre distance will be marked on your forklift's data plate.



For example, this forklift is lifting a 1500 kg load.

The forklift rated capacity is **1575 kg** at a **600 mm load centre** distance.

It's okay to lift this weight.

But the load centre distance must be checked to make sure it is 600 mm or less first. 600mm is the most common load centre distance in millimetres.

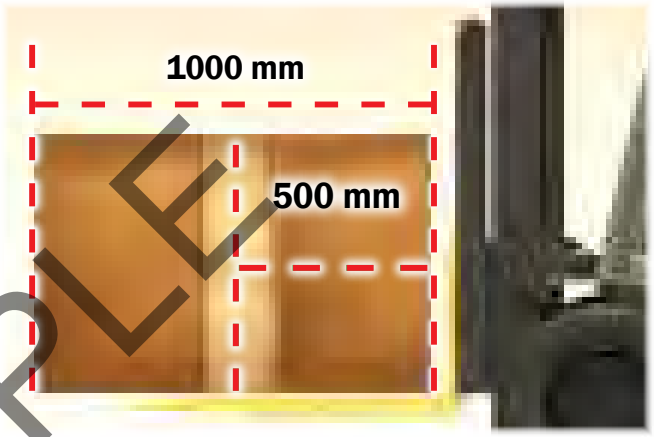
Calculating the load centre distance

Measure from the vertical face of the forks to the front of the load. For this load the measurement is 1 metre (or 1000 mm).

Halve this measurement and you get the load centre distance. With this load it's 500 mm.

This forklift can **safely** lift and carry this load if:

- The load centre distance on the data plate is greater than 500 mm
- The weight of the load is within capacity
- The load is against the face of the forks.



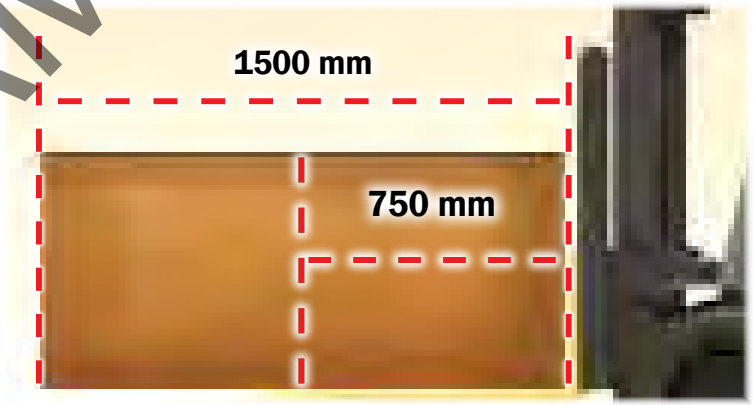
But watch what happens when we change the load centre distance of the same 1500 kg load.

The distance from the vertical face of the forks to the front of the load is now one and a half metres (or 1500 mm).

This makes the load centre distance 750 mm. The maximum load centre distance for this forklift is 600 mm.

This forklift cannot safely lift this load.

The forklift would be unstable and the lifting capacity reduced. This might cause it to tip over.



Things that affect load centre

The load centre distance can change if the load is not pushed back against the backrest.

Adding an attachment could reduce or increase the load centre distance of the forklift.

When the load centre distance increases, the forklift can become less stable and the capacity can be reduced.

Non-standard or irregular loads can also have a different load centre.

For example, the load pictured has an unusual shape. It has more weight at the top than the bottom.

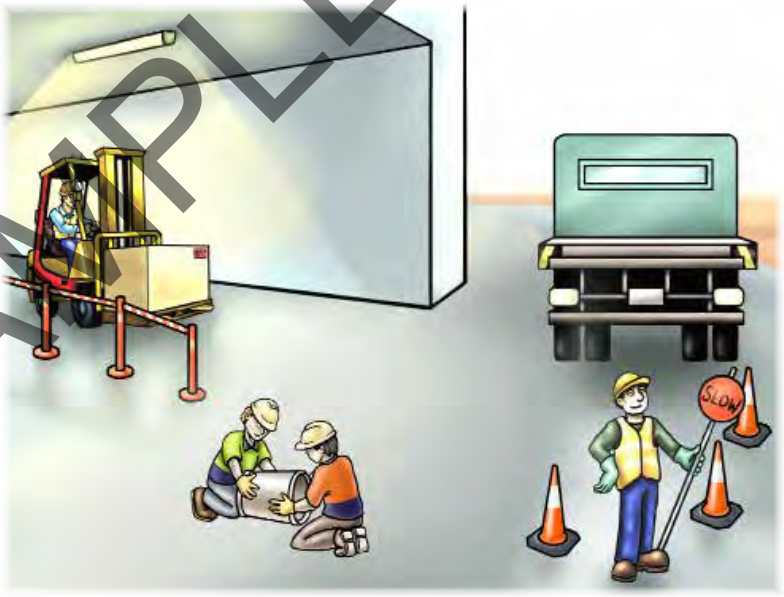
This changes the centre of gravity of the load, which also changes the load centre distance. This could cause instability and overloading.

Path of travel

Inspecting the work area also helps you to determine the most appropriate pathways for operating the forklift and for moving and placing loads.

When planning your path of travel you should consider some of the following things:

- Is there enough ventilation and fresh air?
- When should you sound the horn?
- Will you need to reverse?
- Are there any ramps or slopes?
- Where will you have to stop?
- Where should you slow down?
- What is the speed limit?
- Are there places the forklift can't go?
- Where will there be pedestrians?
- Is there a suitable area to place the load?



Hazard control

When hazards are identified you must report them to the relevant people. You should report the control measures you will use for the hazard. Always follow workplace procedures for controlling hazards.

The Hierarchy of Hazard Control is a list of controls that you can use to eliminate or lower the danger from a hazard in the workplace. Make sure controls are set up before you start the job or as soon as you find a hazard.

These are the **six** (6) levels in the hierarchy from the **first choice** to the **last choice**.

1. **Elimination:**
   If possible, remove (take away) the hazard.

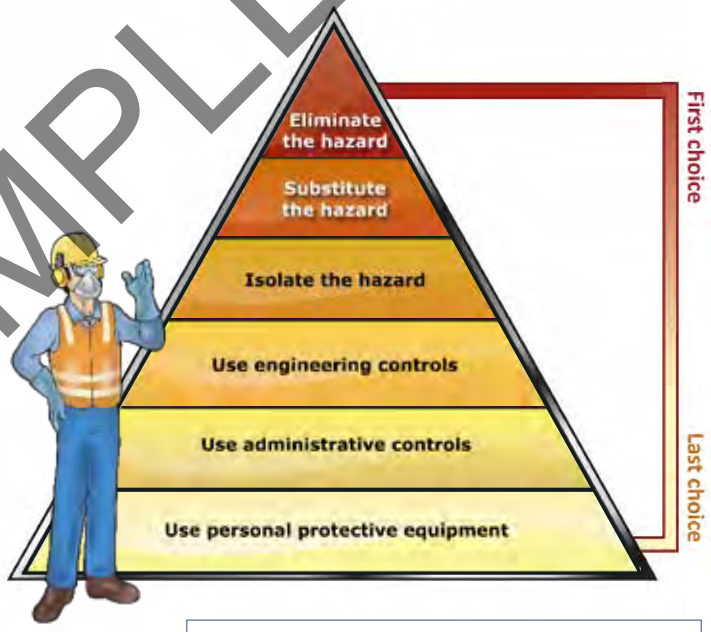
2. **Substitution:**
   Use a safer method if you can't remove the hazard.

3. **Isolation:**
   Stop access to the hazardous (dangerous) area.

4. **Engineering control measures:**
   Change the tools, equipment or environment to make it safer.

5. **Administrative practices:**
   Reduce the time the worker is exposed to the hazards by using training, job rotation, the timing of jobs, etc.

6. **Personal Protective Equipment (PPE):**
   Use PPE as your **last** line of defence.



Memory aid: Every Saturday I Eat A Pie

Hazard control (continued)

The operator

A forklift operator who is not fit for work is a hazard to other workers as well as themselves. You need to stay alert when you use a forklift.

Never use a forklift if you:

Are over-tired 	Are on medication that makes you drowsy 
Have consumed alcohol 	Have taken illegal drugs. 

Hazard control (continued)

Refuelling and charging

Forklifts can be powered by either a combustion engine fuelled by gas, diesel or petrol or an electric motor run by a battery. No matter which type you operate you will need to refuel or recharge the power source at some stage.

There are hazards you need to consider when refuelling or recharging your forklift and measures you can take to control the hazards.

Refuelling

- Refer to workplace policies and procedures and manufacturer's instructions for refuelling
- Wear the appropriate personal protective equipment
- There is a risk of fuel igniting and catching fire if you leave the forklift running. Always turn the forklift **off** while you are refuelling.

Recharging

- Refer to workplace policies and procedures and manufacturer's instructions for recharging
- Wear the appropriate personal protective equipment
- Make sure the battery charger is switched off before connecting or disconnecting the battery
- When charging, batteries give off explosive gasses. Always charge batteries in an area with good air flow to prevent the build-up of gasses.

Hazard control (continued)

Overhead powerlines

Always check for overhead powerlines. Make sure your forklift and anything you are carrying does not come into contact with powerlines.

There is a National Australian Standard number AS 2550.1 – which outlines the distances you need to work from powerlines.

If you need to know the voltage of powerlines, you should contact the local power supply company.

Note:
Some states have their own rules.
You must always check the distances for your state or territory as they may be different.

Overhead powerlines on poles (National Standard)

These are usually **'Low Voltage'**. This means powerlines of less than 133KV.

The information below is taken from the National Standard.

Always check the distances for your state or territory, as they may be different.

AS2550.1 Powerline distances

Powerline distances "Look up and live!"

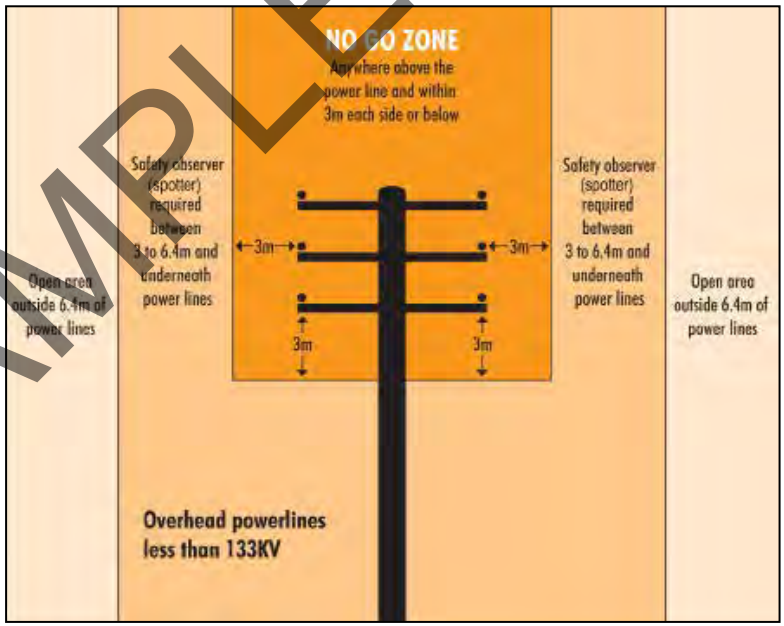
Always check overhead for powerlines and make sure you and any equipment or materials you are using do not come into contact with them.

The safe operating distances for working near powerlines are outlined on the following pages.

A **spotter** is required if you are working between 3 to 6.4 metres from distribution lines on poles.

The term **'spotter'** is defined as a safety observer who is a person competent for the sole task of observing and warning against unsafe approach to overhead powerlines and other electrical apparatus.

In some states or territories a spotter **must be** qualified.



Above is the National Standard. **Always check the distances for your state or territory, as they may be different.**

Overhead powerlines on towers (National Standard)

These are usually **'High Voltage'**. This means powerlines of more than 133KV.

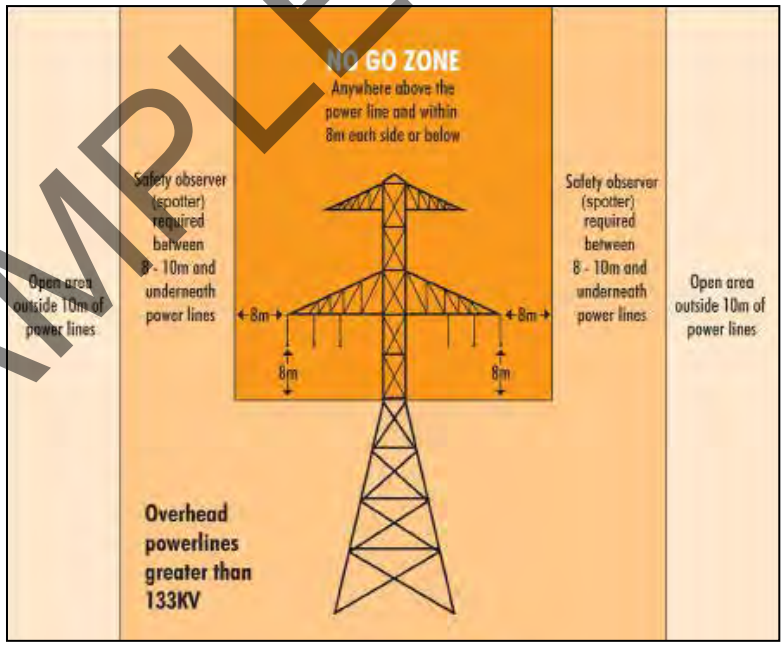
The information below is taken from the National Standard.

Always check the distances for your state or territory, as they may be different.

AS2550.1
Powerline distances

A **spotter** is required if you are working between 8 to 10 metres from transmission lines on **towers**.

The term **'spotter'** is defined as a safety observer who is a person competent for the sole task of observing and warning against unsafe approach to overhead powerlines and other electrical apparatus.



Above is the National Standard. **Always check the distances for your state or territory, as they may be different.**

Hazard control (continued)

Working closer to powerlines

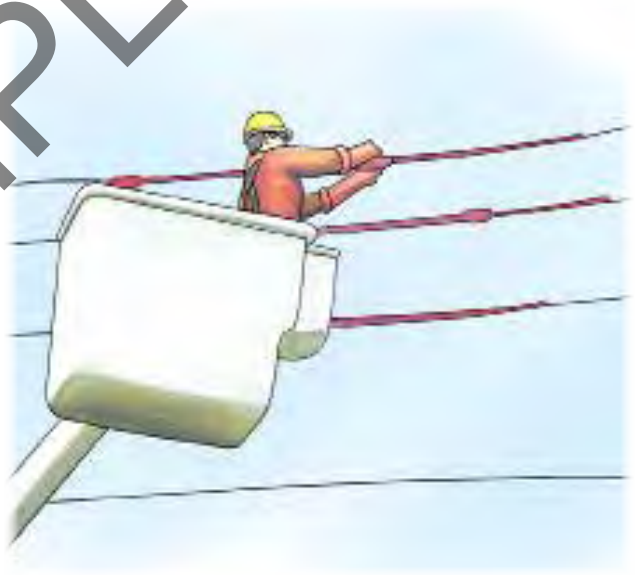
Sometimes you might be allowed to work closer to powerlines than the minimum distances.

To do this you would need to do one of the following:

Ask the electricity supply authority to turn the power off.

A spotter can be used if this is allowed in your state or territory.

If the power can't be turned off, the supply authority will need to be asked to **insulate** the power lines by covering them with insulation.



Hazard control (continued)

Tiger tails

Tiger tails are **black and yellow pipes** that hang off powerlines. They are a **warning device** to make the powerlines easier to see.

Be aware that tiger tails are very different to insulated powerlines.

Tiger tails:

- **DO NOT** insulate wires
- **DO NOT** protect you from the risk of electrocution or electric shock
- **DO NOT** allow you to work closer to powerlines

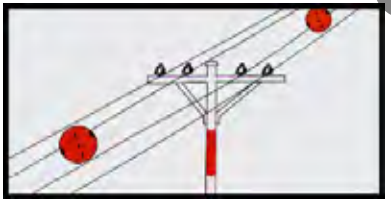
Markers

Markers of different colors such as white and orange.

Poles

Poles with the lower section painted up to 3m above ground.

Power line marker



Warning / danger signs

Hazard control (continued)

Lighting

The work area must have sufficient lighting for you to safely operate a forklift. A dark work area is a hazard.

Lux meter

Lighting can be tested with a device called a lux meter.

The recommended lux for safe work in a warehouse is 80 - 160 lux but this can depend on the work being carried out.

A risk assessment should be done to check the lighting conditions are appropriate for forklift operation and pedestrians.

If the lighting is not good, you must **not** operate until sufficient lighting is in place.

Hazard control (continued)

Confined spaces

Forklifts can be either:

- Internal combustion powered (for example gas, petrol, diesel)
- Electric powered.

You **must** use the right forklift for the job and work area.

Note:
Carbon monoxide is an invisible, poisonous gas.
In the illustration below it is shown as a cloud to illustrate how the gas can build up in a confined space.

For areas that are closed or partly closed you **must** use an **electric forklift**.

This is because electric motors **do not** create gasses.

Forklifts with internal combustion engines give off **carbon monoxide**.

- This can build up in closed or partly closed areas without you knowing
- This could cause you to lose consciousness. If you didn't get help you could die.
- That's why you **must** choose an electric forklift for work in confined spaces.

Hazard control (continued)

Personal Protective Equipment (PPE)

The best way to make the workplace safe is to take away hazards altogether. But often you can't do this. This is where Personal Protective Equipment (or PPE) can help.

PPE is clothing or equipment worn on the body to protect you from hazards. PPE will not take away the risk of harm altogether, but it will help keep you safe. These are some examples of PPE.

Note: Before starting any work all PPE should be chosen and checked to make sure it is in good working order

Hazard control (continued)

PPE examples

Here are examples of how personal protective equipment can protect you and your work mates:

Safety shoes can protect your feet.

Safety helmet or hard hat can protect your head from falling objects.

Safety glasses or goggles can protect your eyes from harmful objects.

Dust masks can stop you from breathing in harmful dust.

Traffic management

Pedestrians and other vehicles are a major hazard where forklifts are in operation. Whenever there is a chance of forklifts colliding with pedestrians or other vehicles in the workplace a traffic management plan should be in place.

Always look at your workplace traffic management plan before operating the forklift.

Rear-end swing

Because forklifts steer with the rear wheels, when a forklift turns it creates a hazard called **rear-end swing**.

Rear-end swing is the fast sideways movement at the rear (counterweight section) of the forklift.

Counterweight section

Rear-end swing is hazardous to any pedestrians, other vehicles and structures in the area.

Remember:
Pedestrians and forklifts do not mix!

Traffic management (continued)

The best method of controlling this hazard is by completely separating the forklift so it cannot come into contact with pedestrians, other vehicles or structures. You need to set up a traffic management plan. Some ways to do this include:

Pedestrian exclusion zones

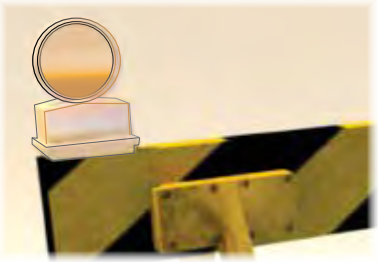
Vehicle exclusion zones

Warning signs

Barriers and bollards

Flag person or traffic controller

Hazard lights (flashing)



Note: If your work involves a public road you should contact your local authority for the relevant traffic management requirements and guidelines. In some states/terrirories you may need to be licensed to control traffic.

Communication

Communication in the workplace is very important when planning your work. By communicating with the appropriate people on the worksite you can:

- Get information about the types of hazards you might come across and how you can keep yourself and others safe
- Make sure you are following workplace policies and procedures
- Get information about task requirements.

Some of the people you might communicate with are:

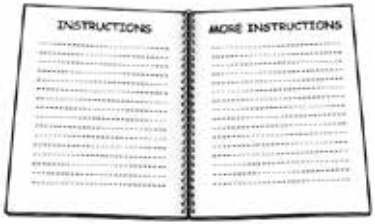
Your supervisor or team leader. Use eye contact.

Having a meeting before you start work.

Communication (continued)

There are many different ways you can communicate. Some examples are:

Written instructions



Signs

Hand gestures or signals

Stop the forklift and ask you workmate to make the signal clear if you are not sure what it is.

Listening and asking questions (face to face or two-way radio) to check understanding.

Audible and visual warning devices and traffic warning systems.

Such as:

- Motion alarms
- Flashing warning lights
- Proximity warning systems.

These may also be used to communicate the presence of a forklift in the area.

Confirm work task requirements

You should make sure that anything you have planned for in the work area is in line with work place policies and procedures.

This includes things like:

- Site inspections
- Assessing the operating surface
- Suitability of the forklift for the load
- Paths for operating the forklift
- Hazard and risk control measures
- Traffic management
- Communication.

If you are unsure, always refer to the workplace policies and procedures.

OR Speak with the appropriate person for confirmation.

QUESTION 12

You are about to operate the forklift.

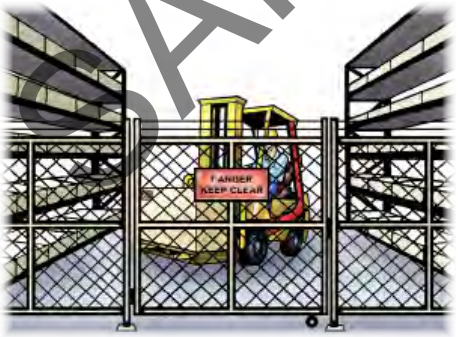
What are some things you must plan for **other than site hazards**?

Communication

Attachment method (for the load)

Where will you do the lift?

What do you need to do?



What equipment do you need?

Is the equipment available?

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QUESTION 12

...CONTINUED FROM PREVIOUS PAGE

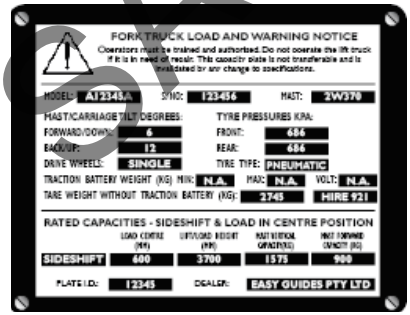
You are about to operate the forklift.

What are some things you must plan for **other than site hazards**?

Do you need any permits?

Does the load have any special features that you need to think about before you lift it?

Does the forklift have enough capacity to carry the load? Check the data plate.



Direction you will travel. Look for blind spots caused by:

- Corners
- The mast
- The load

QUESTION 13

You need to plan for possible hazards before you use the forklift. The hazards could be inside or outside.

Name some hazards you might have to plan for **inside**.

Indoor hazards:

- Overhead services lines
- Non weight bearing surfaces
- Doorways
- Areas with poor lighting
- Pedestrians
- Ground bearing pressures
- Obstructions
- Dangerous materials in the work area
- Other equipment working in the area
- Other hazards unique to the work area.

QUESTION 14

You need to plan for possible hazards before you use the forklift. The hazards could be inside or outside.

Name some hazards you might have to plan for **outside**.

Outdoor hazards:

- Weather conditions
- Ramps or slopes
- Bridges
- Trees
- Vehicle traffic
- Pedestrians
- Other plant and equipment
- Surrounding buildings
- Pavement obstructions
- Underground services
- Powerlines or overhead service lines
- Railway crossings and other hazards unique to your workplace

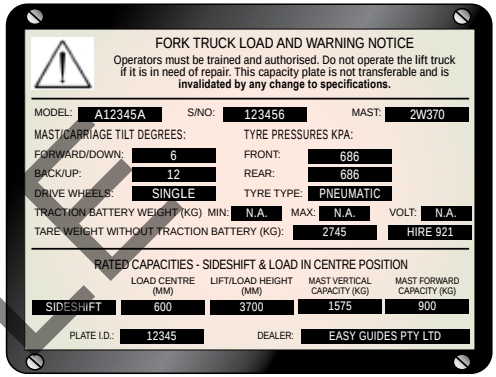
QUESTION 15

Every forklift must have a data plate with information about the forklift.

Give some examples of information on a data plate.

Data plate

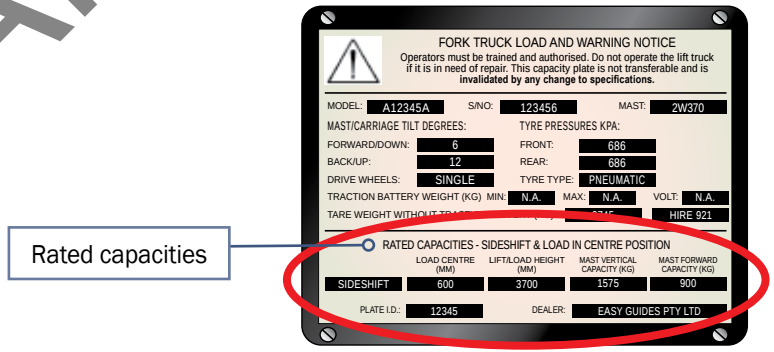
- Make and model
- Serial number
- Maximum capacity on full forward tilt
- Load capacity
- Load centre
- Weight
- Height



QUESTION 16

What does the **rated capacity** of a forklift mean?

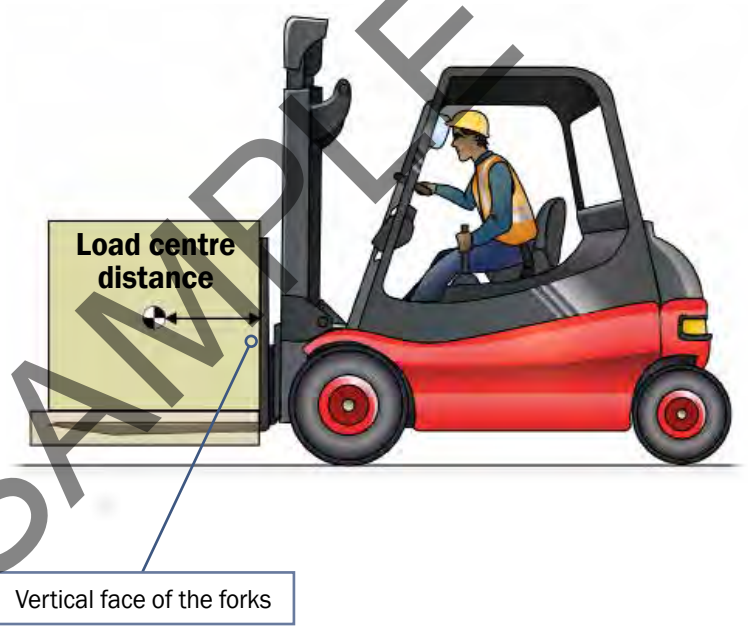
Rated capacity is how much weight (maximum load) a forklift is allowed to lift at the load centre distance and load height shown on the data plate.



QUESTION 17

What does load centre distance mean?

Load centre distance is the distance from the vertical face of the forks to the centre of gravity of the load.



QUESTION 18

The load centre distance is measured from the vertical face of the forks to the centre of gravity of the load.

The forklift trucks in these pictures are rated at 1000 kg at 600 mm load centre.

Which forklift is unsafely carrying a load **outside** its limits?

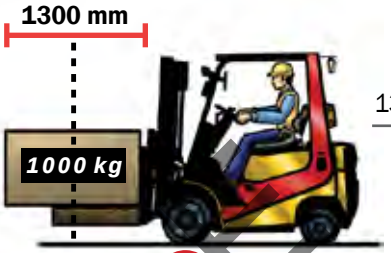
Forklift A is unsafely operating outside its limits.

To work this out:

Divide the distance from the vertical face of the forks to the end of the load to get the load centre distance.

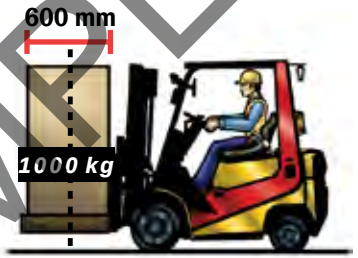
The load centre in **Forklift A** is 650 mm. This is 50 mm more than the 600 mm load centre limit.

The forklift could tip over forwards.



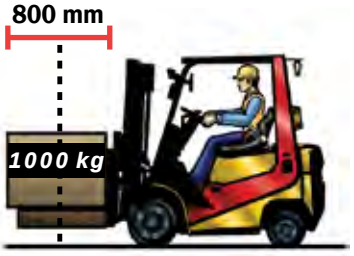
A

$\frac{1300}{2}$ = 650 mm load centre



B

$\frac{600}{2}$ = 300 mm load centre



C

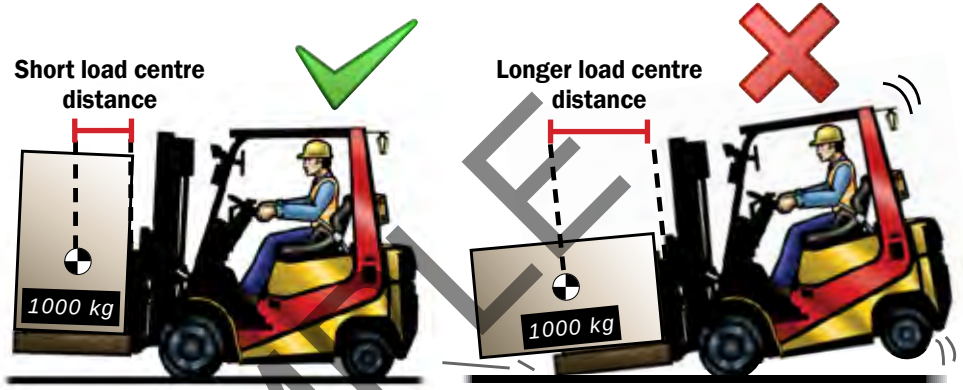
$\frac{800}{2}$ = 400 mm load centre

QUESTION 19

The forklift's capacity is the weight it is allowed to lift at a particular load centre distance, or load height.

If the load centre distance gets longer, what can happen to the forklift truck's capacity to carry weight?

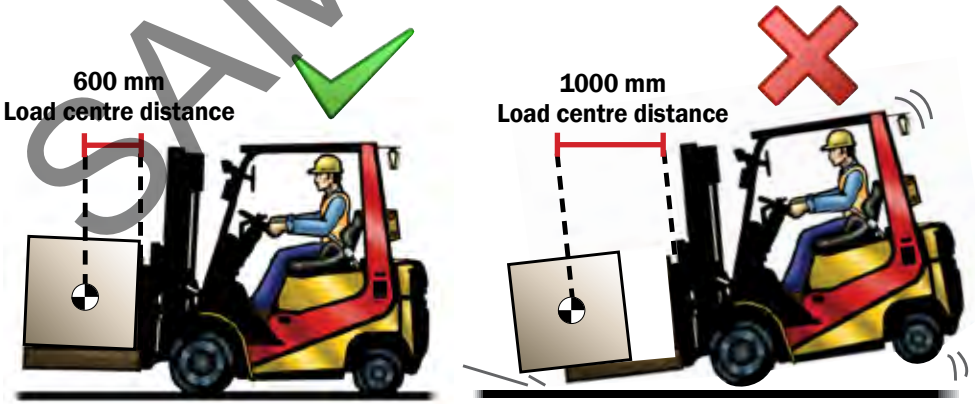
As the load centre distance gets longer, the weight it can safely lift gets less.



QUESTION 20

If the load is not pushed up right against the heel of the forklift truck's tynes (forks), what might happen?

The forklift can carry less load and may be unstable and could tip over.



QUESTION 21

When should you set up your hazard (risk) controls?

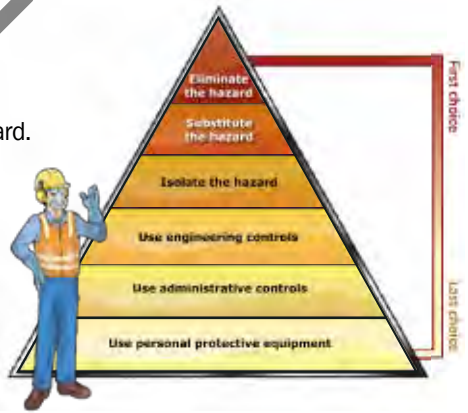
Before you start the job.
As soon as you find a hazard.

QUESTION 22

The Hierarchy of Hazard Control is a list of controls that you can use to eliminate or lower the danger from a hazard in the workplace.

What are the six (6) levels in the hierarchy from the first choice to the last choice?

1. **Elimination:**
   If possible, remove (take away) the hazard.
2. **Substitution:**
   Use a safer method if you can't remove the hazard.
3. **Isolation:**
   Stop access to the hazardous (dangerous) area.
4. **Engineering Control Measures:**
   Change the tools, equipment or environment to make it safer.
5. **Administrative Practices:**
   Reduce the time the worker is exposed to the hazards by using training, job rotation, the timing of jobs, etc.
6. **Personal Protective Equipment (PPE):**
   Use PPE as your **last line** of defence.



Memory aid: Every **S**aturday **I E**at **A P**ie

QUESTION 23

You need to refuel the forklift truck. The forklift uses diesel, petrol, LPG or compressed natural gas (CNG).

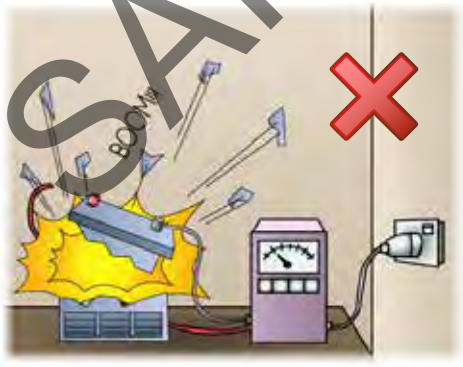
What is the risk if you leave the engine running while you refuel?

The fuel or fuel vapour could catch on fire.

QUESTION 24

Why should you charge a battery in an area with good air flow?

Batteries give off gasses which can explode. Good air flow helps to remove the gasses.



QUESTION 25

Who could you talk to if you need to find out the voltage of overhead powerlines?

Your local power supply company.

QUESTION 26

You are using a forklift near powerlines. Working near powerlines is very dangerous and can kill you.

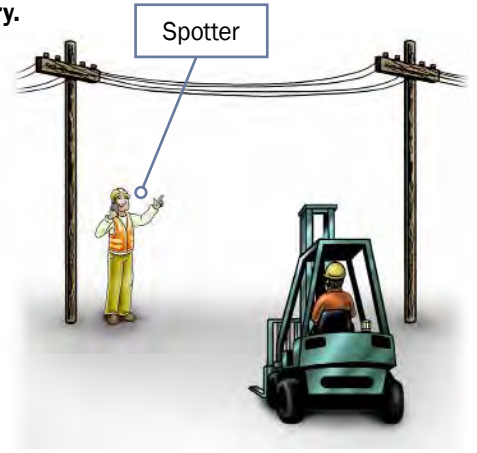
What are the minimum safe distance rules you must follow?

You must refer to the rules for your state/territory.

Some states/territories may or may not allow the use of a spotter.

The distances in some states/territories may depend on the voltage of the powerlines.

For example, in Victoria the National Standard applies.



QUESTION 27

What are some ways you can work closer to powerlines than the minimum distances allowed?

- You might be able to get permission from the electricity supply authority
- The power company may be able to turn off (disconnect) the power supply
- If you can't turn the power off, the power lines will need to be covered by insulation
- Use a spotter in the exclusion zone (if you are allowed to in your state/territory).

QUESTION 28

Tiger tails are black and yellow pipes that are on powerlines.

What are they for?

Tiger tails **warn** that powerlines are there.

Tiger tails:

- **DO NOT** insulate wires
- **DO NOT** protect you from the risk of electrocution or electric shock
- **DO NOT** allow you to work closer to powerlines

QUESTION 29

You are using a forklift in a dark place.

What do you need to have?

You need good lighting in the area so that you can see everything clearly and easily.

QUESTION 30

A confined space is somewhere that doesn't have much space or fresh air. It can be dangerous to use a fuel powered forklift (petrol, diesel, LPG) in a restricted space with little air flow.

What is the best type of forklift to use in a space with restricted air flow?

If there is restricted air flow there may be dangerous gasses that can stop you breathing properly.

You could become unconscious.

If you didn't get help, you could be overcome by the gasses and die.

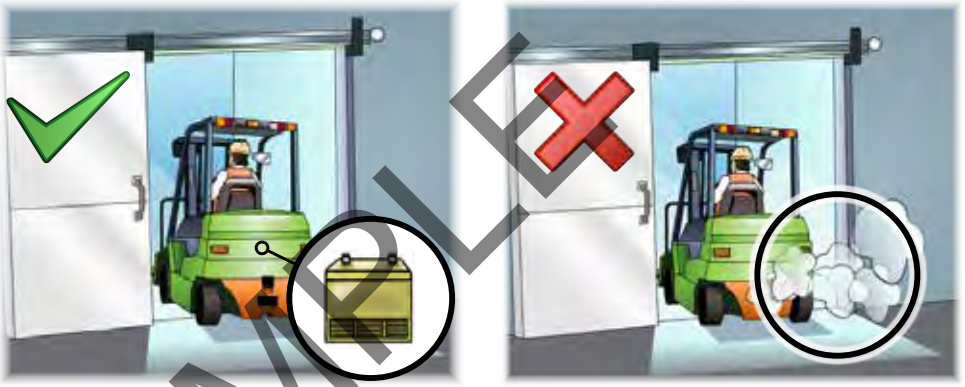
The safest type of forklift to use in this situation is a battery powered forklift / electric or a hydrogen powered forklift.

QUESTION 31

You are working in a confined space. A confined space is a closed area, or an area with not much space or fresh air.

What kind of forklift truck is best to use in a confined space?

Use an electric (battery powered) forklift truck in a confined space because it does not give off gasses.



QUESTION 32

When is the best time to choose and check your PPE and other safety equipment?

- Before you start work.
- When you are planning the job.

QUESTION 33

Forklift trucks steer with their rear tyres. This causes **rear-end swing**.

Why must you be careful of rear-end swing?

The forklift might hit people, other vehicles, or structures.

QUESTION 34

Rear-end swing is **dangerous**.

Who is it most dangerous to?

It can be dangerous to all people in the area where the forklift is working.

Note: Refer to company policies and procedures for minimum operating distances near pedestrians

QUESTION 35

How can you warn and direct pedestrians or workmates on site?

- Barricades (safety fences) to protect people
- Flashing yellow hazard lights to warn people
- Pedestrian exclusion zones
- A flag person to direct people
- Warning signs

QUESTION 36

How can you warn and direct vehicles (cars, bikes, trucks and mobile plant) on site?

- Barricades (safety fences)
- Flashing yellow hazard lights
- Warning signs
- Vehicle exclusion zone
- A flag person to control the traffic. You might need to be a licensed traffic controller.

Always refer to your sites traffic management plan

QUESTION 37

Who might you talk to about workplace hazards before you start the job?

- Your manager, supervisor or team leader. They must be allowed to take responsibility for the work being done.
- Workmates
- safety officers
- OHS/WHS representatives
- OHS / WHS committee members
- Workplace engineers, if you have them.

QUESTION 38

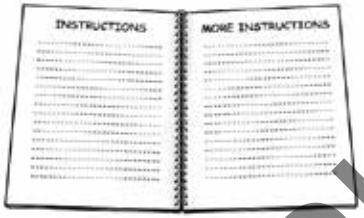
Why is it important to talk to people about workplace hazards before starting work?

- To help you follow the rules and work procedures for the site. This helps keep you and others safe.
- To know what the hazards are and how to control them.
- To find out about any specific hazards.
- To find out about any specific ground conditions that may be a hazard.

QUESTION 39

Name some ways you can communicate and give information to other workmates on a site.

Instructions



Signs

Using workplace systems and procedures

Listening and asking questions