

# Study Information

TLILIC2001 Licence to Operate a Forklift

**It is a requirement to study this material prior to course  
commencement**



Training for the Future

**Forklift Training and Assessment Centre**

# Attendee Information

Thank you for booking your course with Assess To Lift

Date of course \_\_\_\_\_

Course Code: TLILIC2001 Licence to Operate a Forklift

[www.assesstolift.com.au](http://www.assesstolift.com.au)

## Contact Information

0422318226

## Address of training facility

Unit 5/83 Gavenlock Rd Tuggerah 2259

(Half way down Gavenlock Rd, please park on the road, we are the back set of units)

## Time:

**8am- 300pm** (estimated finish)

## What to bring to your course

100 points of identification

(acceptable forms of identification can be found on our website. Please ensure that you have checked this. Insufficient identification will prevent you from sitting your licencing assessment)

Enclosed shoes and comfortable clothing (PPE will be supplied)

This Study Guide

## Additional information:

### **You will be required to study the theory prior to attendance**

You will receive a 30min lunch break, you may bring your lunch or there are takeaway shops located in close proximity of the training centre

**You must be 18 years old to sit Assessment**

# CHANGING LP GAS BOTTLES

Always wear gloves when changing gas bottles. Liquid gas is extremely cold and will cause nasty "frost burns" if it contacts the skin. Because it is so cold it is possible for the shut off valve to be frozen open allowing liquid gas to escape when hoses are disconnected. Goggles should also be worn.

Turn off the valve before attempting to disconnect hoses.

When liquid gas is released into the atmosphere it will return to its gaseous form and increase in volume, many times. This can easily fill the workshop with explosive gas. It is therefore vital that no naked flames or electrical panels, where continually sparking contacts are present, are in the vicinity of gas bottle changing operations. No smoking within 30 meters.

LP Gas is heavier than air and will, if allowed to escape, gather in low lying areas such as drains, service pits in workshops, basements, sewers to name a few. Always change bottles in open, well ventilated areas.

If an escape of gas occurs, keep onlookers away and notify a supervisor immediately. Gas may be dispersed with high pressure air or water. If you suspect that gas has escaped into sewerage system immediately notify your supervisor and be sure that the appropriate authorities are notified.

# CHARGING BATTERIES

The charging and changing of batteries at battery charging installations should be done according to the manufacturer's instructions. Only people who have received proper training should be allowed to charge and change batteries on industrial lift trucks. Where PPE like face shields, aprons and rubber gloves are provided the worker must, so far as the worker is reasonably able, use or wear the equipment in line with information, training or reasonable instruction given.

The industrial lift truck should be parked in a safe position and the parking brake applied before battery charging begins. Operators should check the vent caps in the batteries are functioning correctly and stay in place during charging to prevent electrolyte spraying.

The cover over the battery should be held open while the battery is on charge to allow any generated gases to escape. Potentially explosive hydrogen gas is generated during the charging process.

People involved in a battery charging operation should consider the following safety precautions:

- No smoking
- No open flames
- Do not use mobile phones or other electronic devices
- Do not use metal objects that might strike a spark near battery cells
- Wear eye protection and other PPE as required
- Remove rings and bracelets

In areas where batteries are charged or changed, it is important there are washing facilities including eye washing and cleaning-up facilities for removing acid spills. If acid is spilt a 'spill kit' should be on hand to remove the hazard. If workers are splashed with battery acid they should quickly remove contaminated clothing and flush skin with large quantities of water. Fire extinguishers should be available in the charging area. The area should be ventilated so gases generated during battery charging are dispersed to prevent an explosive mixture developing.

(Extracted from 'General Guide for Industrial Lift Trucks' Published by Safe Work Australia 2014)

## Section 1-Theory Component

### 1. Can an employer let you do High Risk Work (HRW) if you are not licenced?

*Not unless you are enrolled in an approved course with an RTO and are being directly supervised by a licenced driver for that HRW class. The RTO must authorise this training*

### 2. What evidence do you need to supply to an employer to be able to conduct HRW?

*You can either supply the employer with a copy of your current HRW photo licence or supply evidence to prove that you are enrolled in an approved course with an RTO for that licence class (further conditions apply if you are driving under the supervision of the RTO)*

### 3. List 3 sources of information that might apply to safe forklift operations

*WHS Act and Regulations*

*Australian and International Standards relating to forklifts and racking systems*

*Codes of practice*

*Manufacturer specifications and operators manuals*

### 4. You have a HRW licence. Under Work Health and Safety laws (WHS) what are your responsibilities while working?

*You must work in a way that is safe. You must not risk the health and safety of others or yourself*

### 5. You can be penalised for not doing high risk work safely. What might the penalties be?



*You may have your licence suspended or cancelled. You may not be able to renew your licence.*

### 6. You have passed your HRW licence test. You must now apply for your photo identification HRW work licence. You must submit the Notice of Satisfactory Assessment (NSA) form from your RTO. How many days do you have to lodge this application?

*From the time that you get your Statement of Attainment you have 60 days to lodge your HRW licence application. If you fail to submit within this timeframe your NSA will be void*

**7. Can you renew your HRW licence if more than twelve months have passed since the expiry date? Explain your answer?**

*No. A HRW licence must be renewed every 5 years. If more than twelve months have passed since your licence has expired, you will be required to enrol in an approved course with an RTO*

**8. Why is it important to communicate with others prior to operation?**

*To help you follow Safe Operating Procedures (SOP's)*

**9. Who might you talk to about hazards before you start the job?**

*Supervisor, Workmates, WHS Representatives, Safety Officers, Site Engineers*

**10. Why is it dangerous to use internal combustion engines (petrol, diesel, LPG) in restricted or confined spaces?**



*Persons in the restricted space could be overcome by the toxic gas generated by the internal combustion engine (carbon monoxide)*

**11. Why must batteries be charged in a well-ventilated area?**



*To reduce the build-up of explosive gases (hydrogen)*

**12. Should a forklift truck be refuelled while the engine is running?**

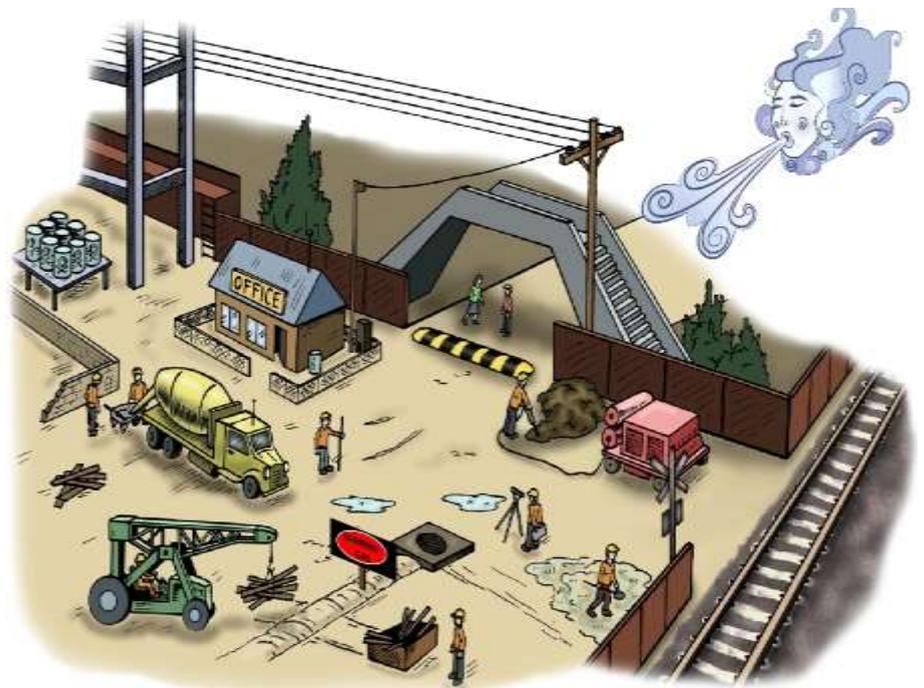
*No, the running engine could ignite the fuel*

**13. You need to plan for possible hazards before you use the forklift. Name 8 hazards.**



- Doorways*
- Blind Corners*
- Dangerous Material*
- Overhead lighting*
- Support Beams*
- Other Machinery*
- Obstructions*
- Co-workers*

- Power lines*
- Service Lines*
- Railway Lines*
- Uneven ground*
- Buildings*
- Weather*
- Hazards unique to the workplace*



**14. The Hierarchy of Control is a list of actions that you can use to eliminate or lower the danger from hazards in the workplace. What are the six levels?**



**ELIMINATION:** if possible, remove (take away the hazard and you will take away the risk)

**SUBSTITUTION:** Use a safer method/tool to reduce the risk. For example, use an electric forklift in an area with reduced or no airflow

**ISOLATION:** Stop access to the dangerous area. For example, barricades, fences etc

**ENGINEERING CONTROLS:** Use tools, equipment to make it safer. For example guards at the base of racking systems

**ADMINISTRATIVE CONTROLS:** Reduce the time the workers are exposed to the hazard by using training, job rotation, safe operating procedures etc

**PPE:** (Personal Protective Equipment) Use PPE if the above controls are not enough to minimise the risk

**15. When is the best time to check your PPE and other safety equipment?**

*Before use*

**16. What is the most suitable type of forklift to be used in an area with restricted air flow?**

*A battery (electric) powered forklift*

**17. List 3 things you would need to consider when choosing an appropriate forklift for use**

- Weight of load*
- Air flow in area of work*
- Rated capacity of forklift*
- Mast height*
- Surface conditions*



**19. You are using a forklift near power lines. Working near power lines is very dangerous and can kill you. What are the minimum distances you must follow?**

**3m –Under 132 000 volts**  
**6m –Between 132 000 and 330 000 volts**  
**8m–Above 330 000 volts**

**20. Who could you talk to if you needed to find out the voltage of overhead power lines?**

*Your local power supply company*

**21. What are some ways that you can work closer to power lines than the minimum safe distances allowed?**

- *The power company may be able to turn the power off (disconnect) the power lines.*
- *The power lines may be covered by insulation*
- *Seek a permit from the relevant authority*

**22. List three things that will need to be considered or controlled when working around powerlines under a permit.**

*Movement of obstructions, adequate lighting, pedestrian control, excavation safeguards, safety tagging on switches and isolators, use of safety observers in and out of exclusion zones (where State/Territory laws allow) PPE*

**23. What visual system can be used to warn workers of nearby power lines?**



*Tiger tails warn that power lines are there*

**24. Name 4 ways you can communicate and give information to other workmates on site**



*Signs*



*hand signals & gestures*



*written and verbal instructions*



*Listen and ask questions*

**25. Why should you look over your forklift and do a visual check before using it?**

*You must make sure the forklift is safe for operation*

**26. During your pre-start check you notice the data plate is missing or unreadable or you notice that there is a fault with the forklift. What action would you take?**

**3T's**



Take the keys out

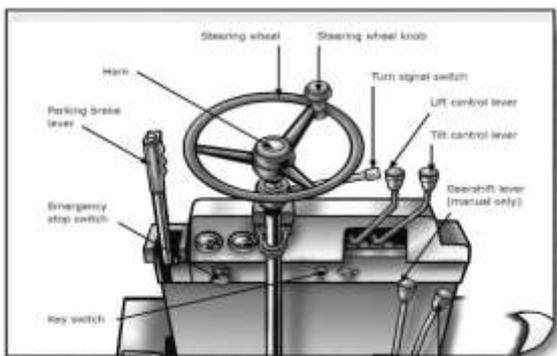


Tag the machine  
and update the logbook



Tell your boss

**27. You should know all the controls on your forklift. Forklift controls may be different on each forklift. How can you learn about the controls?**



*You should check the operator's manual or undergo induction training*

**28. You have found a problem with the forklift truck. What should you do?**

**3T's**



Take the keys out



Tag the machine  
and update logbook



Tell your boss

**29. List 4 things you would check for on a forklift with solid rubber tyres.**

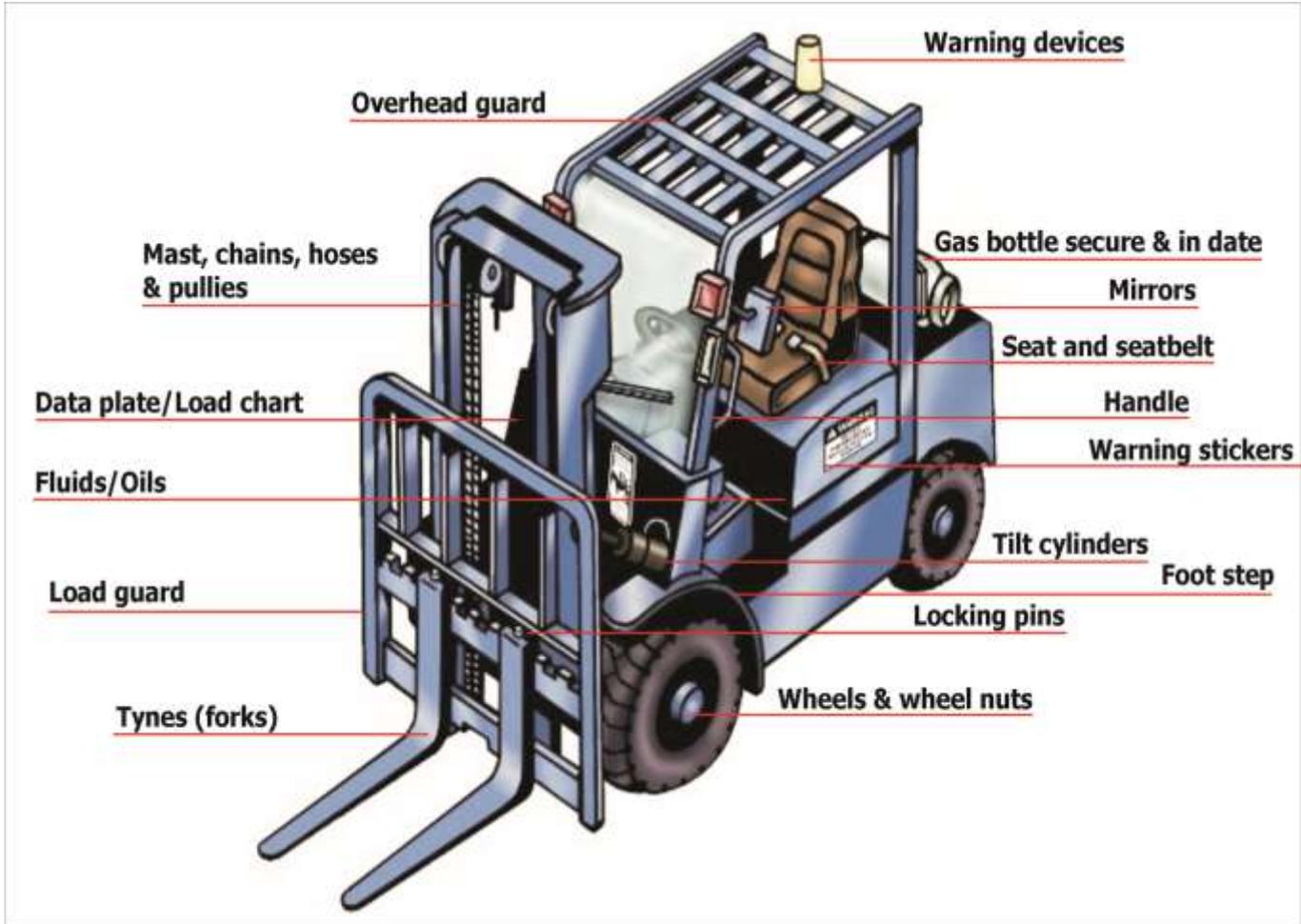
- Check that the tyre wear is even
- Check the outer tread is not worn down (must be kept above the wear line)
- Check that no big pieces of rubber are missing and there are no cracks
- Check that the tyres are securely fitted



**30. When should you do pre-start checks on a forklift?**

*Prior to use*

**31. List 7 different parts of the forklift that you would check during a pre-start check**



**32. Forklifts have safety guards to keep the operator safe. What safety guards do they have and what important functions do they perform?**

- *Foot guard-Protects the operator's feet*
- *Load guard-Protects the mast and the operator from falling loads*
- *Overhead guard-Protects the operator from falling objects*

**33. Why do all tyres need to have the right air pressure?**

*A flat tyre can make the forklift unstable and could cause it to tip over sideways*

**34. You need to do a start-up check to check the forklift is safe and working properly. List 7 start-up checks you should make after you have started the forklift.**

- *The seat is adjusted and your seat belt is on*
- *The machine is started correctly (foot on brake, handbrake engaged & forklift is in neutral)*
- *Gauges-warning lights, fuel or battery charge level*
- *Kill switch (where fitted)*
- *Lights & blinkers*
- *Reverse lights, reverse beeper and flashing light*
- *Horn*
- *Hydraulics work correctly to their full extents (all the way)*
- *Steering in reverse motion*
- *Foot brake, hand brake and dead man's switch (where fitted)*
- *Steering in a forward motion*

**35. What type of safety devices could a forklift have? List 3**

- *Flashing light*
- *Horn*
- *Reversing beeper*
- *Dead man's switch*
- *Kill switches*
- *Emergency decent device (hydraulic)*
- *Turtle mode/speed limiters*
- *Pedestrian sensors*

**36. Under what circumstances could an operator make minor repairs to a forklift truck?**

*Only if the operator was a competent person and authorised by the employer*

**37. List 3 ways you can check the weight of a load**



*Read the weight of the load*



*Check the weigh bridge note or consignment note*



*Calculate the load  
ie 50(kg) x6  
+ 20kg for the pallet  
=320kg*

*You can also weigh the load if you have scales built into your fork tynes*

**38. What is meant by the term “Rated Capacity” in relation to a forklift truck?**

*It is the maximum load that a forklift is designed to carry at different heights and different load centres*

Example Forklift Data Plate Showing the Rated Capacity						
Model	CG185		Type		LP	
Serial	C3-00091R		Mast Type		STP	
Mast Tilt	Back	12 Degrees	Forward		6 Degrees	
Drive Wheels	56L		Truck Weight		3080 Kg	
Tyre Pressure	Front	900 kPa	Rear		790 kPa	
	Mast Vertical	Mast Tilted Forward	Lift Height	Load Centre	Attachment Model	Attachment Serial
HSS	1430 Kg	900 Kg	3500 mm	600 mm	D800179	T90107
	1475 Kg	930 Kg	3300 mm	600 mm		

**39. When should you put risk control measures in place?**

*Before you start the job or as soon as you find the hazard*

**40. List 3 ways you can warn and direct pedestrians, workmates and vehicles on site.**



- Barricades or fences*
- A flag person*
- Flashing yellow hazard lights*
- Warning signs*
- Vehicle/Pedestrian exclusion zones*
- Scaffolding, hoarding or gantry*



**41. You are using a forklift in a dark place. What do you need to have?**

*You need to have good overhead lighting in the area so that you can see everything clearly and easily*

**42. Why is rear end swing dangerous on forklift trucks fitted with rear end steering?**

*The rapid sideways movement at the rear of the forklift truck creates a hazard for people nearby.*



**43. What precautions should the operator take when operating the forklift on wet or slippery surfaces?**

*Reduce speed, proceed with caution, and avoid ramps or inclines*

**44. You need to move a load up or down a ramp. Which direction should the forklift be moving?**

*When you are moving up the ramp the forklift must be going forward with the load facing uphill  
When you are moving down the ramp the forklift must be going in reverse with the load facing uphill*



**45. Why is it unsafe to turn a forklift on a ramp or a sloping surface? List 2 reasons.**

*Because the lateral stability is affected and the forklift could tip sideways or the load could slide*

**46. Are you allowed to add additional counterweights to on a forklift truck without checking with the forklift manufacturer?**

*No. Forklifts are made to lift specific maximum loads. Changing the counterweight could cause an accident.*

**47. Should a load be raised or lowered near or over people? Explain your answer**

*No. Not under any circumstances. Loads must never be raised or passed over people, it is dangerous and against safe operating procedures.*

**48. Some of your workmates want to ride on the forklift truck. Is this ok?**

*Only if it is designed for it (the forklift must be fitted with an approved passenger seat, seatbelt and footguard)*

**49. How does the seatbelt keep you safe?**

*The seatbelt keeps you in the seat. If the forklift is in a collision or tips over it will hold you in*

**50. Why is it not safe to turn a forklift with the load raised in the air?**

*Because it makes the forklift unstable and it could tip over sideways*

**51. Why does the side shift attachment need to be centralised before shifting a load?**

*To maintain balance and stop the forklift from tipping sideways*

**52. You have to move a load on the forklift and your view is obstructed. List 4 things you would do before moving**

- *Pathway check (shutdown the machine and get out of the forklift and have a look)*
- *Look over both shoulders AND reverse*
- *Use warning devices*
- *Get a guide*

**53. When you are moving a forklift, what is a safe height for the load and fork arms?**



*Axle height or as low as possible to the ground without scraping.*

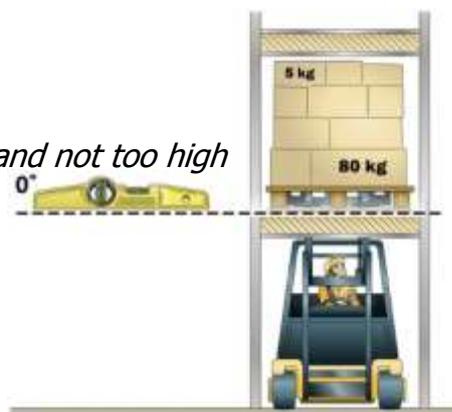
**54. Why should a load not be carried by only one arm of the forklift? Give to reasons**

*The fork arm carrying the load may be damaged and the forklift truck could tip over sideways*

**55. What three things do you need to think about when you stack loads on top of each other?**

*Stack the goods on a solid and level surface*

*The stack of goods should be stable, balanced and not too high  
Heavy goods need to be at the bottom*



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Review 11/18

**56. A Pallet appears to be unsafely loaded. What would you do before attempting to lift it?**

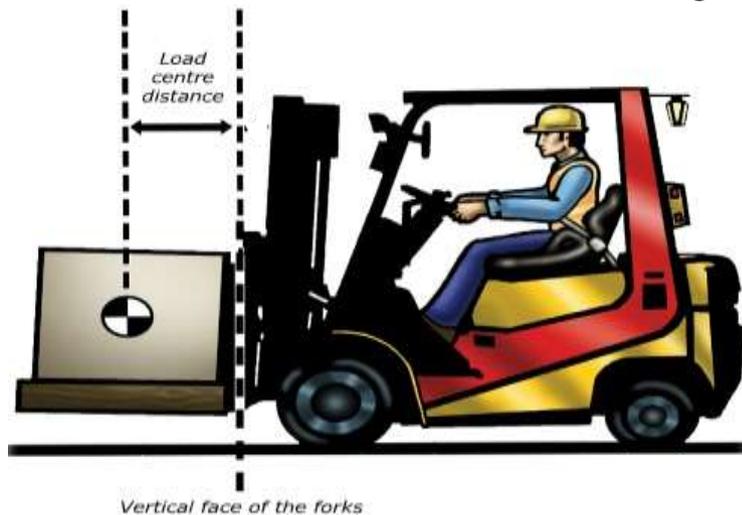
*Restack it so it is safe*

**57. What should be provided for the gap between a truck and a loading dock before shifting a load?**

*You need to use a secured bridge plate or a secured dock plate to cover the gap*

**58. What does 'Load Centre Distance' mean?**

*It is the distance from the vertical face of the forks to the centre of gravity of the load*



**59. If the load is not pushed right up against the heel of the fork arms, what might happen?**

*The load centre distance will be greater which means the forklift can't carry as much and may tip forward*

**60. Name 6 operating conditions that may cause the forklift to tip over sideways. (lateral instability)**

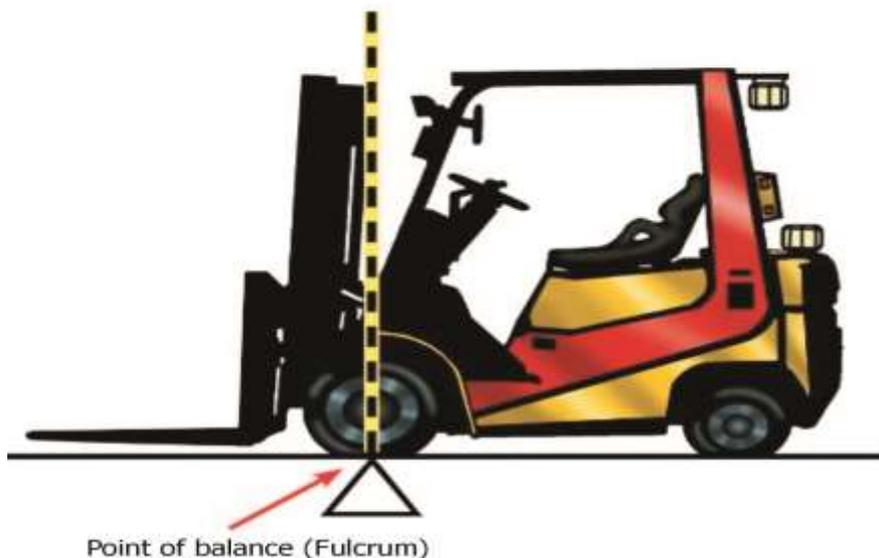
- *Turning at speed*
- *Turning on a ramp*
- *Turning with a raised load*
- *Driving over uneven surfaces*
- *Unevenly distributed load (centre of gravity off to one side)*
- *Driving with a flat or uninflated tyre*
- *Load shifting sideways*
- *Driving too fast (loaded or unloaded)*
- *Side shift not centred*
- *Incorrect load placement*

**61. Name 6 operating conditions that may cause the forklift to tip forward or backwards lengthways (longitudinal instability)**

- *Driving forwards downhill (especially with a heavy load)*
- *Braking too hard*
- *Overloading*
- *Not using the mast tilt correctly*
- *Load not pushed right up against the heel of the forks*
- *Load centre too far forward (unevenly distributed load)*
- *Shifting of load centre forward (centre of load is forward of the approved load centre)*
- *Driving over uneven surfaces*
- *Driving too fast (loaded or unloaded)*

**62. Where is the forward point of balance or fulcrum for a forklift truck?**

*Where a line drawn vertically, passing through the centre of the front axle meets the ground (bottom of front wheel)*



**63. Is all the weight behind the point of balance acting as a counterweight?**

*Yes*

**64. Why should you keep checking your load while you are moving?**

*To make sure people are safe, and to make sure the load is still stable*

**65. You have an emergency situation at work. List three parties you would need to contact and three key pieces of information that you would need to pass on**

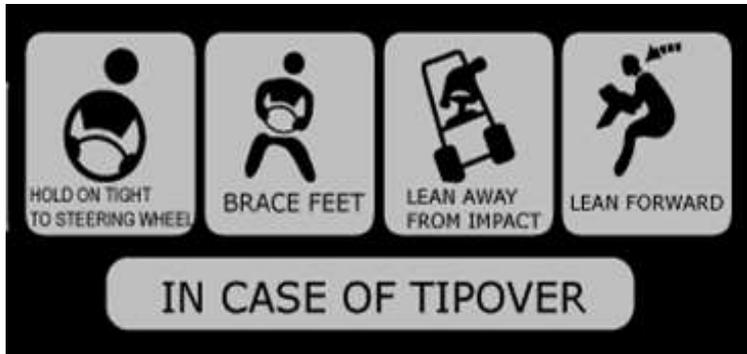
*Notify 000, your supervisor, co-workers and your safety officer  
Call emergency services and give them all the important details:*



- *The type of emergency*
- *The location of the emergency*
- *How many people are injured*
- *If there are any unsafe areas*

**66. List 3 actions you should take if the forklift starts to tip sideways and you think it might tip over?**

*Stay on the forklift. Do not jump off. Brace yourself and lean away from impact or lean over the steering wheel*



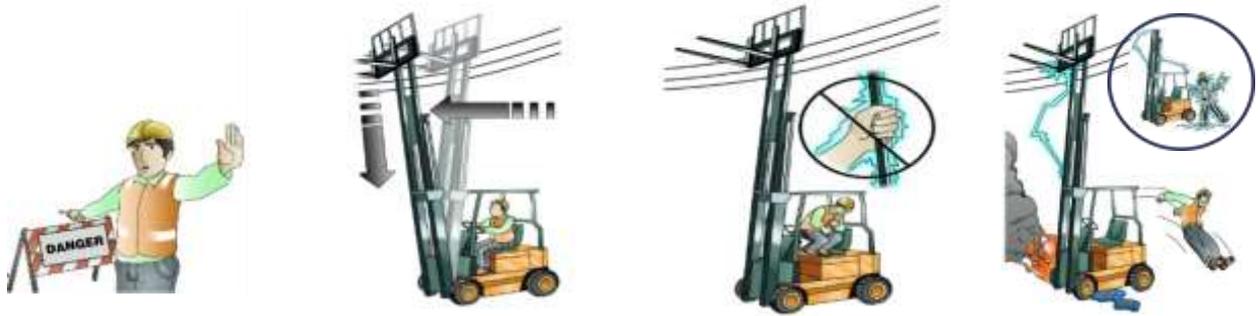
**67. List four actions you could take if there was a loss or failure of steering or braking systems**

- Apply kill switch if possible/remove foot from accelerator*
- Slowly apply handbrake*
- Take the key*
- Tag forklift and update operator logbook*
- Tell your boss*

**68. List four actions you could take if there was a loss or failure of hydraulic functions**

- Apply kill switch if possible*
- Warn others near forklift*
- Lower forks if possible or barricade area off (the forks can be lowered even if the engine is off)*
- Take the key*
- Tag forklift and update operator logbook*
- Tell your boss*

**69. What would you do if you drove your forklift mast into power lines? List the 5 required actions in the correct order.**



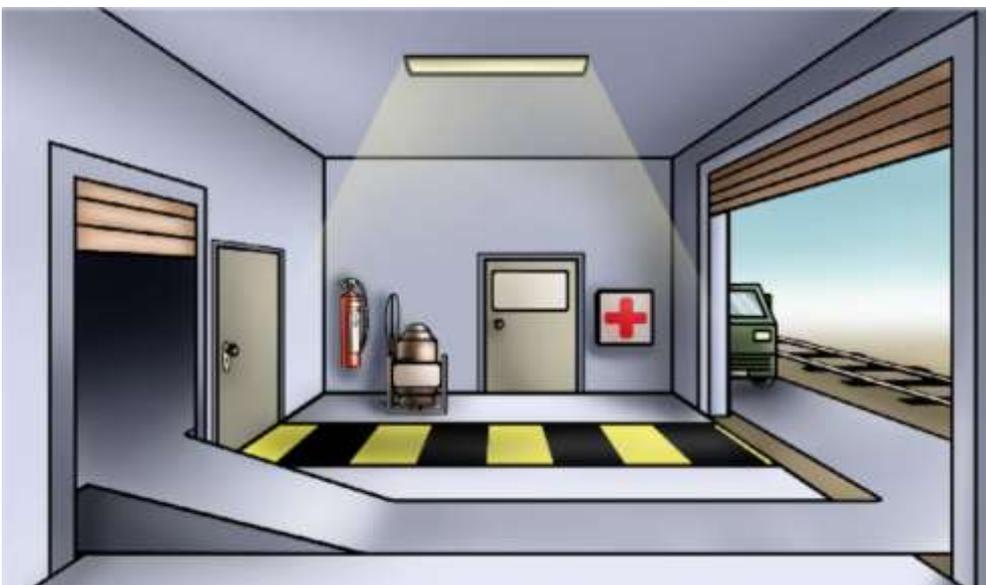
1. Warn others to stay away
2. Attempt to break contact with the lines
3. Stay in the vehicle until conditions are safe. If you must leave the vehicle, jump without touching the forklift and the ground at the same time. Either jump or shuffle until you are at least 8m away
4. Power company, boss and Safe Work NSW need to be alerted
5. Service the forklift by authorised party before using again

**70. There has been an accident at your work site. Which vehicles have the right of way in an emergency?**

*All Emergency vehicles*



**71. You are looking for a place to park the forklift truck. List 4 places where you would not park.**



- Doorways and exits*
- Fire equipment*
- First Aid Stations*
- Less than 3 meters from train tracks*
- Pedestrian walkway*
- Refuelling sites*
- Ramp or slopes*
- Emergency exits*
- Blind Corners*

**72. What are the normal parking procedures when you park a forklift truck?**

- *Tynes (forks) should be flat on the ground*
- *Put park brake on*
- *Put forklift in neutral*
- *Take key out*
- *Follow any site specific safety procedures*

**73. If your forklift must be parked on an inclined surface, what precautions would you take?**

*In addition to normal parking procedures, chock the wheels of the forklift*



**74. Why do you need to take the key out of the ignition when leaving the forklift unattended?**

*To stop the forklift truck being moved by someone who is unauthorised.*

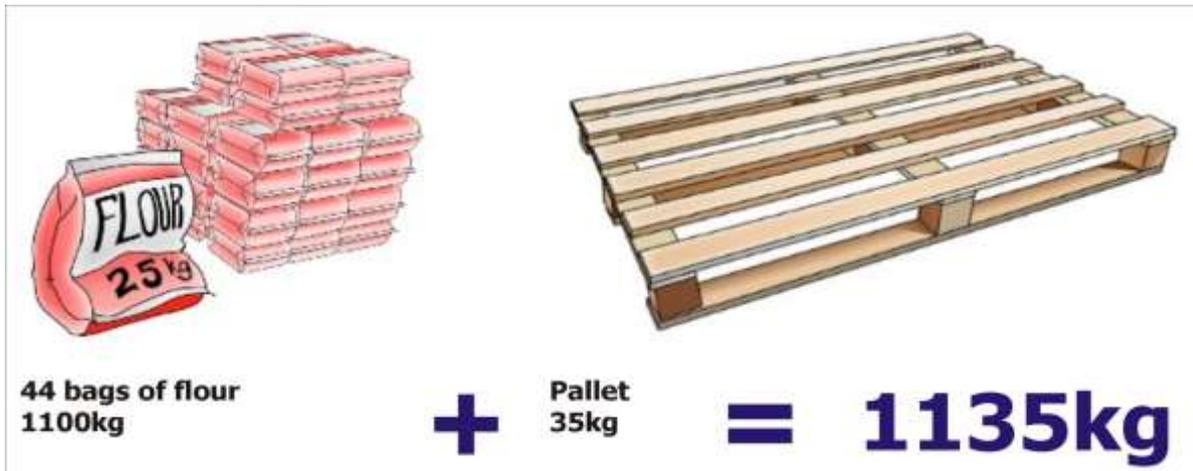
**75. You are doing post operational checks and you notice a fault on the forklift. What would you do?**

**3T's** - *Take the key out, tag the machine and update the logbook, tell the boss*

## Section 2: Calculations

### 2.1 Working out the weight of a load

**1. You have to move a load of flour there are 11 bags per row, 4 rows high on a pallet. Each bag weighs 25kg. The pallet weighs 35kg. What is the full weight of the load? Show how you worked it out.**



#### Step 1:

**Work out the total amount of bags:**

11(bags in each row/layer) x 4 (rows/layers high) = 44 bags in total

#### Step 2:

**Work out the weight of all of the bags together:**

Each bag weighs 25 kg each and there are 44 bags in total so

44 bags x 25 (kg for each bag) = All of the bags together weigh 1100Kg in total

#### Step 3:

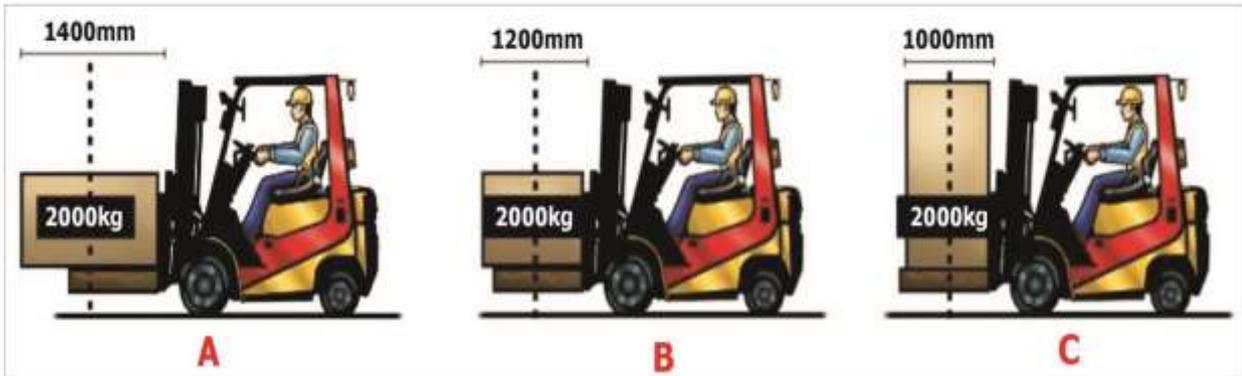
**Work out the total weight of the load by adding the pallet weight to the total weight of the bags:**

1100kg (the total weight of the bags) + 35kg (the weight of the pallet)

=Total weight of the load = 1135kg

Hint: If you mark the weight of the pallet, times (x) all the other numbers together and then add (+) the weight of the pallet you will get the total weight of the load

## 2.2 Load Centres



Load centre distance is the distance from the vertical face of the fork arms through to the centre of gravity of the load. The centre of gravity of each load above is marked by a dotted line and the total load length is marked across the top.

To work out the load centre distance for each of these loads you will need to divide ( $\div$ ) the load length by 2. This formula will work for any evenly distributed load.

For example load 'A' would be worked out as follows:  
 $1400\text{mm long} \div 2 = 700\text{mm}$

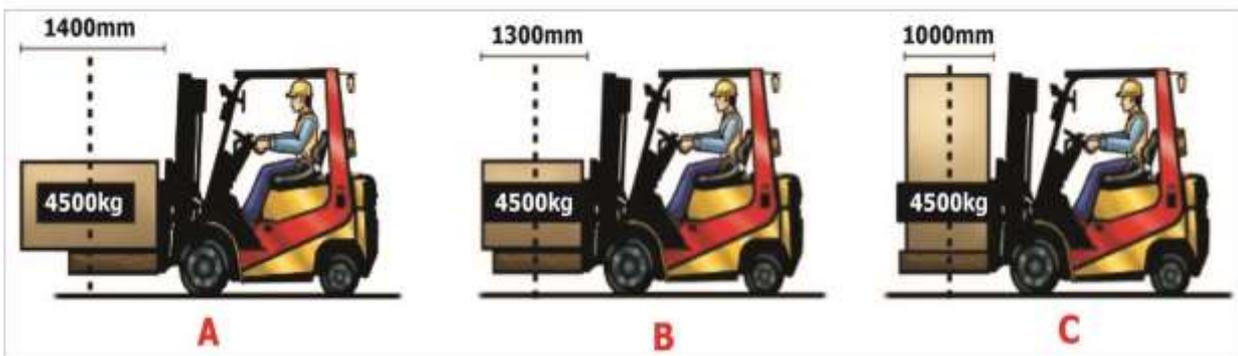
The load centre distance for load 'A' is 700mm

The load centre distance for load 'B' is 600mm

The load centre distance for load 'C' is 500mm

**2. All of the forklifts in the above diagram are rated at 2000kg at a 600mm load centre. Which forklift is overloaded?**

*Load A*



**3. All of the forklifts in the above diagram are rated at 4000kg at a 600mm load centre. Which forklift is within capacity?**

*Load C*

**USE THE DATA PLATE FOR THE NEXT 7 QUESTIONS**

MODEL	FG25H12			TILT LIMITED POSITIVELY TO				
MANUFACTURER	KOMATSU			FORWARDS	6	DEGREES		
SERIAL NO	528734		BACKWARDS	6	DEGREES			
UNIT NO	K13308		ALTERNATE CAPACITY WITH MAST IN FORWARD TILT POSITION With Forks					
MAST HEIGHT / TYPE	4.5	M	FV	RATED CAPACITY MAST VERTICAL With Forks				
SERVICE WEIGHT	3789		MAX CAPACITY (KG)	LOAD CENTRE (MM)	HEIGHT (MM)	MAX CAPACITY (KG)	LOAD CENTRE (MM)	HEIGHT (MM)
ATTACHMENT TYPE	S/SHIFT		1900	600	4500	1610	600	4500
MODEL			With Attachments			With Attachments		
TYPE kPo								
AXLE LOADING (UNLADEN)KG								
BATTERY								
REF NO	00-0012-RGR		Date Of Installation					

**4. You have to lift a load that is within the forklifts capacity and put it on a shelf. The shelf is 4200mm off the ground. Can you lift this load? Why or why not.**

*Yes. It is less than the maximum lift height*

**5. What is the rated capacity of this forklift with the mast in a vertical position?**

*1900kg at a 600mm load centre at a height of 4500mm*

**6. What is the rated capacity of this forklift with the mast in a forward tilt position?**

*1610kg at a 600mm load centre at a height of 4500mm*

**7. You are about to lift a load. The load centre is 700mm. The weight of the load is 1900kg. Can you lift this load? Why or why not.**

*No. The load centre is more than 600mm*

**8. What type of attachments can you use on this forklift?**

*A side-shift attachment is the only attachment listed and therefore the only attachment permitted for use.*

**9. What happens to the weight capacity of a forklift when an attachment is used?**

*The attachment reduces the lifting capacity of the forklift. The load centre may also increase*

**10. What types of attachments can be used on this forklift?**

*Only side shift can be used. If an attachment is used it must be listed on the data plate with the reduced rated capacity of the forklift clearly displayed for operator use*

## **Section 3: Practical**

Your practical training and assessment will require for you to complete the following tasks. Please note that the site inspection and pre-operational checklists are used for training and assessment conducted at our premises and may need to be adjusted for onsite delivery.

### **3.1- Routine checks**

#### **3.1.1 Site inspection**

It is important to walk around the site prior to operation to ensure that it is safe and suitable

You will need to check for the following:

##### **Look up**

- Electrical wires
- Light fittings/adequate lighting
- Service lines
- Roof beams
- Any overhead obstructions ie overhead cranes

##### **Look around and down**

- Pallet racking has SWL markings, guards fitted and is free from damage
- People (Sally)
- Power Supply area
- Dangerous goods or hazardous substances
- Doorways
- First aid boxes/kits
- Other equipment
- Machinery
- Obstructions on ground (removes any rubbish) and ground conditions
- Pedestrian exclusion zone (marked/isolated)
- Signage
- Fire-fighting equipment

##### **Look out**

- Roller door
- Slope
- Drain (isolated)
- Blind corners
- Air conditioner units
- Other buildings
- Weather conditions
- Outdoor exclusion zone isolated and marked

### **3.1.2 Pre-start checks (visual checks)**

It is important to check the forklift prior to operation to ensure that it is safe and suitable for the work to be performed and that it conforms to Australian Standard (AS) 2359

#### **You will need to check the following:**

- Fork arms-sharp tips or curls, undue wear, cracks in heels
- Fork arm locking pins-secure and evenly spaced OR slide function- condition and ram is free from leaks
- Side shift ram - good condition and free from leaks
- Load backrest-secure and in good condition
- Mast assembly- no cracks, damage, stressed welds or paint separation
- Mast chains, hoses and pullies-no leaks or damage
- Warning stickers-present and understood
- Hydraulic lift and tilt rams-condition and no leaks
- Tyres-wear line, even wear, wheel nuts tight, no chunks of rubber missing
- Foot guard- secure and in good condition
- Windscreen-clean and not cracked
- Lights/indicators-secure, not broken
- Mirrors-clean and not cracked
- Grab Handle- secure
- Foot step- no obstructions and not slippery
- Overhead guard-secure and in good condition
- Controls- pedal rubber, lever and kill switch are in good condition
- Seat-Secure and in good condition
- Seat belt-tagged, no frays, locks and does up correctly
- Tail lights and flashing light- secure and free from damage
- Gas bottle-secure, in date (within 10 years of stamp) and no leaks (LPG only)
- Counterbalance bolt is securely fitted
- Data plate- present, legible and understood
- Gas compliance plate-present (LPG only)
- Battery retaining plates –secure (electric only)
- Battery connections –secure (electric only)
- Battery -condition and electrolyte levels (electric only)
- Operator logbook -present and checked/updated for faults
- Check the engine and fluid levels
  - Coolant
  - Hydraulic oil
  - Engine oil
  - Power steering fluid
  - Battery-water level, secure, corrosion
  - Brake fluid
  - Transmission oil
  - General condition of engine –no leaks or broken hoses

### **3.1.3 Start-up checks (key in checks)**

It is important to check the forklift prior to operation to ensure that it is safe and suitable for the work to be performed and that it conforms to Australian Standard (AS) 2359

#### **You will need to check/conduct the following:**

- Mount using three points of contact on left hand side of vehicle
- Adjust seat
- Put seat belt on
- Start machine correctly and check for abnormal noise
- Gauges-warning lights, battery charge/fuel levels
- Kill switch (electric forklifts or where fitted)
- Lights
- Indicators
- Brake lights
- Reverse lights
- Reverse beeper
- Flashing light
- Handbrake
- Horn
- All control functions-lift, tilt, side-shift and emergency decent (smoothly to full extent)\*
- Steering and brakes while moving in a reverse motion
- Dead man's switch (where fitted)
- Looks forward and checks for leaks where forklift had been sitting
- Steering and brakes while moving in a forwards motion

\*When using the hydraulic functions:

To raise fork arms	Bring the first lever up towards you to raise the forks and down and away from you to lower the forks
To tilt mast	Bring the second lever back towards you to tilt the mast back towards you and down and away from you to move the mast forward and away from you
To use side shift	Bring the third lever back towards you to take load guard and forks to the right and push the lever forward to move the load guard and forks to the left

## **3.2 SHIFT LOAD**

### **OPERATIONAL PERFORMANCE CRITERIA**

You will be required to operate the forklift to its full range of capacity. You will learn how to operate the forklift and be assessed on your ability to complete the following practical tasks:

- Removing and replacing a load from a ground level
- Removing and replacing a load from a medium level
- Removing and replacing a load from a high level
- Manoeuvring through a chicane loaded and unloaded in a forwards motion
- Manoeuvring through a chicane loaded and unloaded in a reverse motion

### **Picking up a load**

(Pick up, pull mast back, pull down)

- Assess the weight of the load
- Line up squarely with load (the centre of the mast should look like it is in line with the centre of the pallet)
- Raise fork arms to correct height
- Insert fork arms without scraping the pallet
- Drive into the pallet, adjusting steering where necessary to maintain a straight line
- Raise pallet slightly so that it clears the racking beam
- Apply a small amount of back tilt
- Look over both shoulders
- Sound horn
- Look back to the load and maintain view of the load until you are clear of the racking system
- Reverse in a straight line with the load until there is a 30cm distance between the end of the load and the face of the pallet racking
- Stop
- Lower load to a travel height (check that it is as low as possible without scraping the operating surface)
- Look over both shoulders
- Sound horn
- Travel at a safe speed without hitting any obstructions or having any near misses

## **Placing a load**

(line up, level mast out, lift up)

- Line load up squarely to the put away location
- Level out forks so the mast is vertical and load is completely horizontal
- Raise load to eye level and ensure that the mast tilt function is at the correct position
- Continue to raise load to correct height
- Drive slowly forward ensuring that the horizontal pallet boards remain parallel with the horizontal racking beams
- Gently lower pallet into position ensuring that the pallet 'locks in.' (the base horizontal board of the pallet at the back will hang over the back of the horizontal racking beam and the base horizontal board of the pallet at the front will hang over the front of the racking beam. If either board is sitting on the beam itself the pallet will need to be raised and repositioned)
- Ensure that fork arms are positioned correctly so that they are not touching any part of the pallet
- Look over both shoulders
- Sound horn
- Look back to the fork arms and maintain view until the forks are clear of load
- Reverse in a straight line (ensuring that fork arms do not come into contact with the load) until there is a 30cm distance between the end of the fork arms and the face of the pallet racking
- Stop
- Lower fork arms to a travel height (check that they are as low as possible without scraping the operating surface)
- Look over both shoulders
- Sound horn
- Travel at a safe speed without hitting any obstructions or having any near misses

## **Manoeuvring**

- Give way to other traffic (where applicable)
- Keep left in aisles for two way traffic (where applicable)
- Take appropriate action when the forklift is undetected by others by either stopping, slowing down and/or using the horn
- Take appropriate action where/when view is obstructed by either travelling in reverse, shutting down machine and climbing out for a better view or requesting a guide
- Keep all body parts within the vehicle. The operator may only lean out for a better view whilst forklift is stationary
- Use handbrake and or clutch brake where required and available

**EXPERIENCED DRIVERS PLEASE TAKE NOTE**  
**YOU CANNOT:**

- Use your hydraulic functions while the forklift is in motion (even when rolling)
- Turn with a raised load or forks. You can only turn when your forks or load are at a travel height
- Drive at speed (slow and steady shows competence and caution)
- Use forward tilt during standard load shifting operations. Your fork arms should be vertical when bare and slightly back tilted when loaded
- Correct poor lining up at height by turning. Either use your side-shift or lower your forks and line up again
- Allow any body part to be outside of the vehicle whilst manoeuvring

**ALWAYS:**

- Look over both shoulders and sound horn before you reverse
- Look in the direction of travel (except when removing or replacing a load)
- Have forks facing uphill when operating on ramps and sloping surfaces
- Use horn and slow down when approaching doorways

**3.3: SHUT DOWN EQUIPMENT**

You will be required to shut down the forklift correctly and secure the vehicle and site.

You will need to make sure that you do the following:

- Park equipment in a suitable location away from danger areas:
  - Access ways
  - Walkways
  - Fire/emergency exits
  - First aid facilities
  - Refuelling sites
  - Blind corners
  - No less than 3m from the nearest rail of a railway track
- Lower the fork arms/attachments to ground and tilt forward so that forks/attachments are resting flat on the supporting surface
- Place the forklift in neutral (where applicable)
- Apply the park brake (where applicable)
- Turn off the engine
- Remove the key to stop unauthorised use/log out if using fleet managed
- Dismount using three points of contact while facing the vehicle
- Check for leaks, damage, that everything is off and that the forklift is safe for the next user
- Enter any faults into the operator's logbook, tagging the machine, taking the key and telling an authorised person (where applicable)
- Turn the LPG cylinder off / connect electric forklift to battery recharger

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