

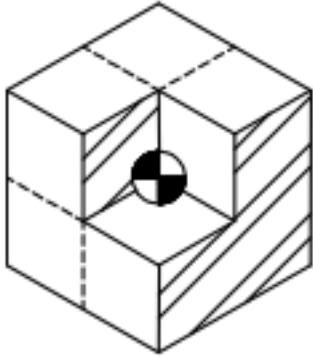


Understand the Capacity of your Lift-Truck

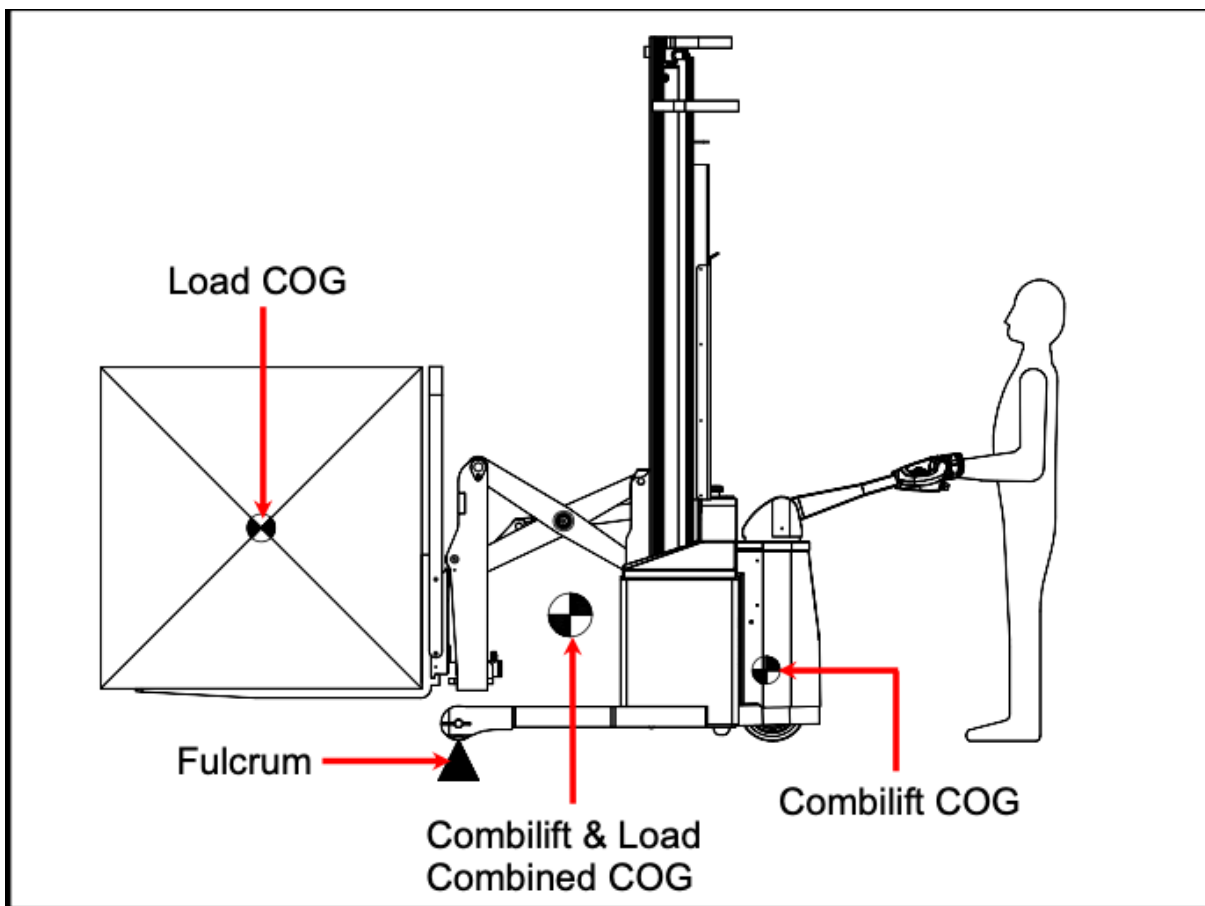
The basic function of a lift truck is to lift, move and place materials. It operates on the seesaw principle - two weights on opposite sides of a fulcrum. In this case, the load on the forks must be balanced by the weight of the Combi lift. The location of the centre of gravity of both the Combi lift and the load is a major factor.

Centre of Gravity (COG)

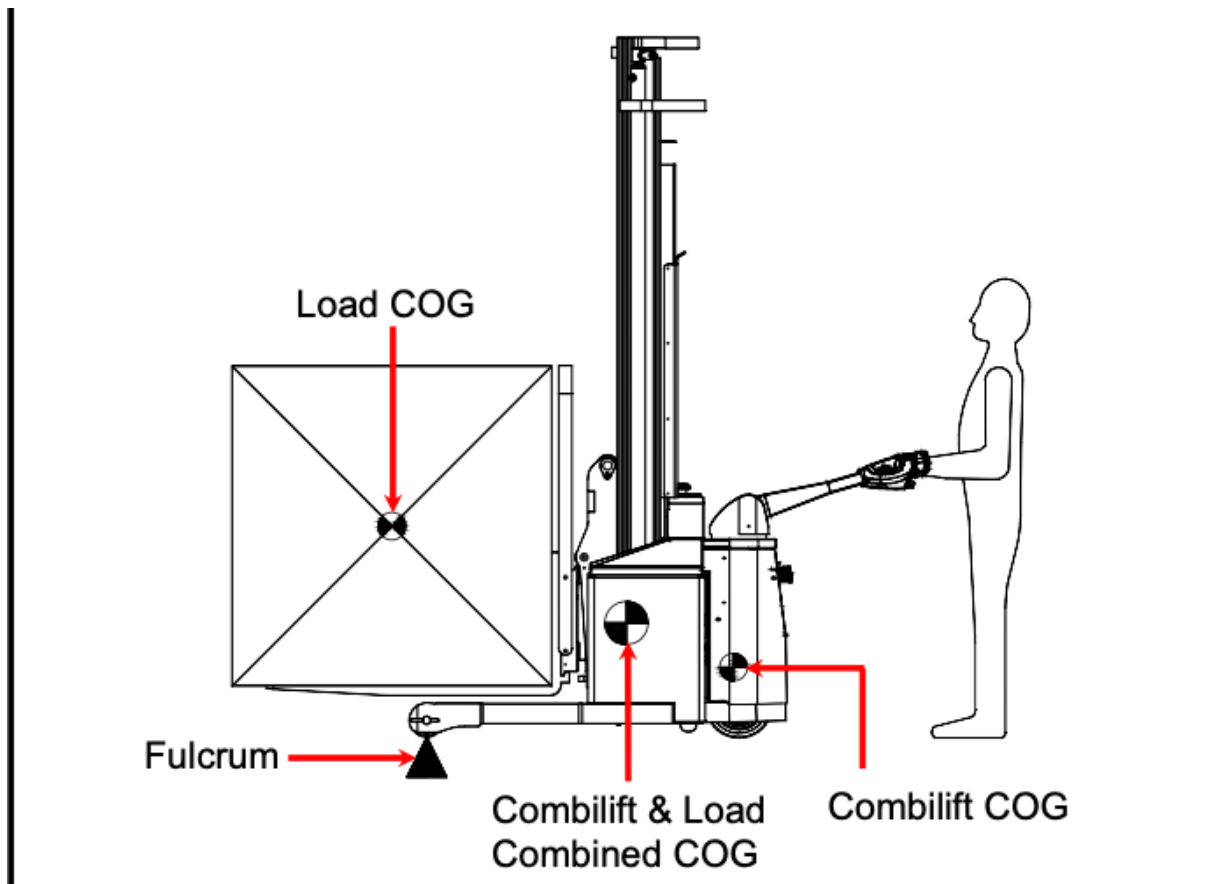
The centre of gravity of any object is the single point about which the object is balanced in all directions. Every object has a centre of gravity. When the lift truck picks up a load, the truck and load have a new, combined centre of gravity.



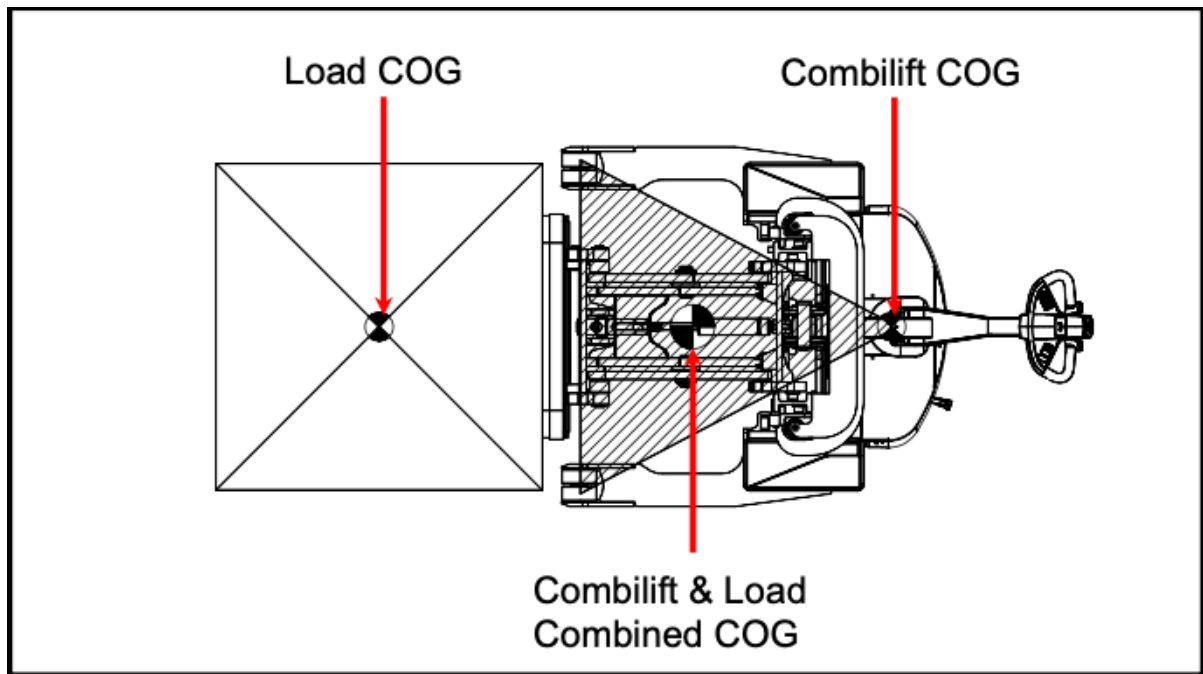
The Combi-WR has moving parts that change its centre of gravity. The centre of gravity moves forward and back as the pantograph is extended and retracted and also as the mast is tilted backwards and forwards. The centre of gravity also moves up and down as the mast moves up and down. moves up and down as the



The centre of gravity and therefore stability is also affected by the size, weight, shape and position of the load; the height to which it is raised; extension of the pantograph forward and backward; tilt and side shift. Truck movement such as acceleration, braking, turning and uneven surfaces will also affect truck stability.



To keep the lift truck stable, the combined Combi lift and load centre of gravity must stay within the area of the lift truck represented by a triangle drawn between the front left, front right and rear wheels. If the combined centre of gravity moves forward of the triangle front, the lift truck will tip forwards. If it moves outside the right or left of the triangle the truck will tip to the side.

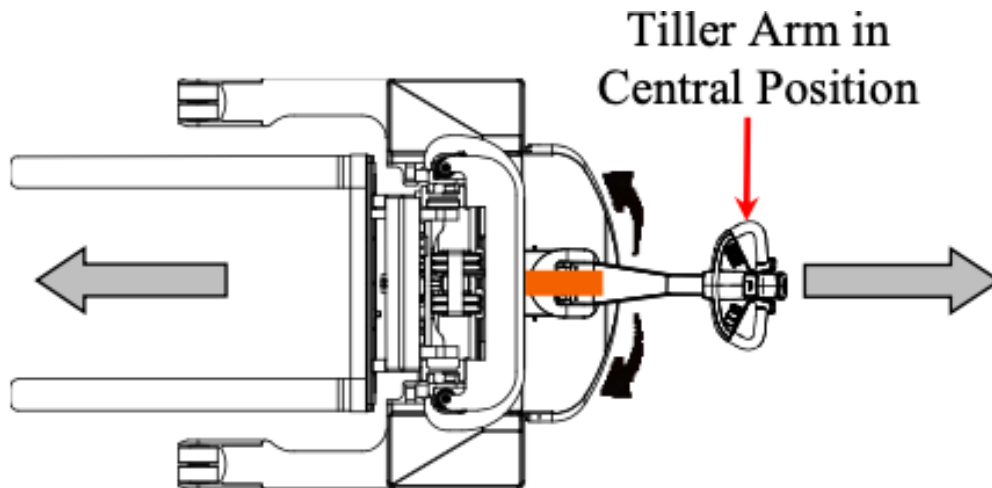


Understand the Drive Capabilities of your Lift-Truck

The Combi lift WR and WR4 trucks have a number of unique manoeuvrability features which are extremely beneficial when it comes to operating the truck in confined areas. These features are introduced in this section. The operation of the features is described in greater detail in the following sections.

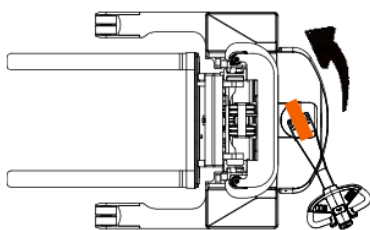
Normal Mode

Normal mode is the standard basic forward/reverse drive mode where the truck is steered from the back by turning the tiller arm. The drive wheel turns with the tiller arm to alter the direction of travel. See section 2.5: for more information on steering in normal mode.

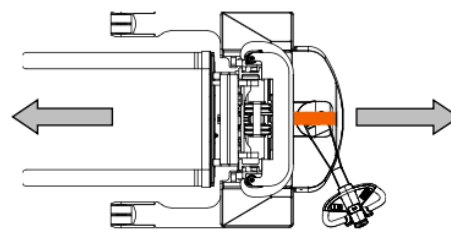


Drive wheel Alignment

- • When operating in normal mode the drive wheel alignment feature can be utilised.
- • When the drive wheel alignment button is pressed the drive wheel aligns itself parallel with the forks. This allows the truck to be driven in a straight line forward or backward with the tiller arm to either side of the truck. It is still possible to steer the truck from the side by turning the tiller arm after the wheel has aligned with the forks.
- • When the button is pressed again the drive wheel realigns with the tiller arm.
- • The drive wheel will also realign with the tiller arm if the tiller arm is turned past the central position.



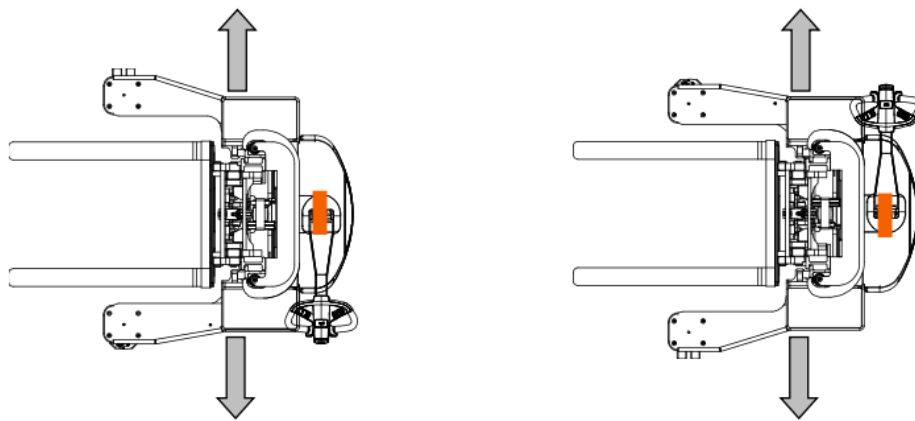
Drive wheel Aligned With Tiller Arm
Truck Turns In this Instance



Drive wheel Aligned With Forks
Truck Drives Straight In this Instance

Lateral Mode (WR4 Only)

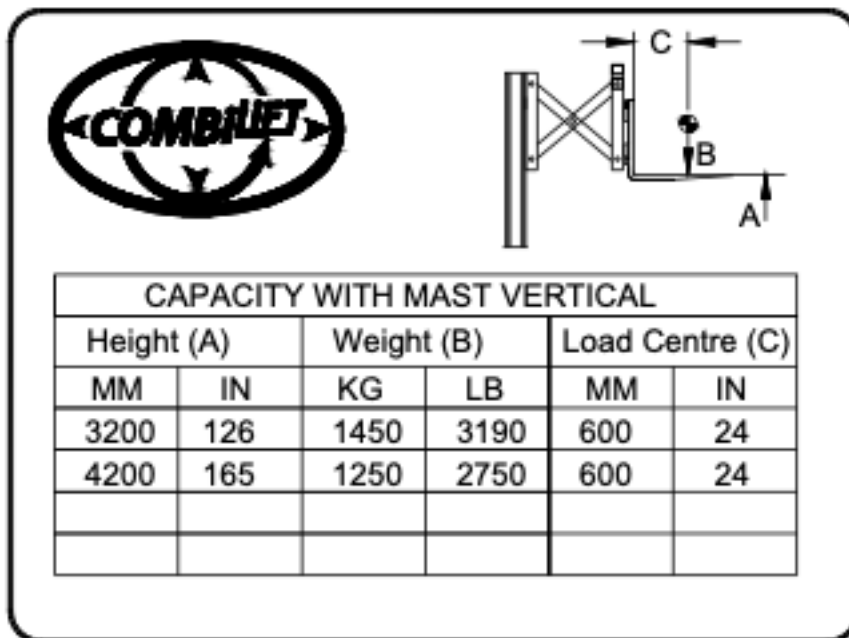
In addition to normal mode WR4 trucks have the ability to be driven in lateral mode. In lateral mode the truck can be driven in a straight line right or left. The truck is steered from either side by turning the tiller arm. The drive wheel turns with the tiller arm to change direction. See section 2.5: for more information on steering in normal mode.



WR4 trucks are also equipped with the drive wheel alignment feature. The drive wheel alignment feature is disabled when the truck is in lateral mode as activating it in this mode would cause a conflict in the steering system.

Load Chart

The rated capacity of the truck is illustrated on a load chart located on the machine. The load centre is determined by its centre of gravity and is measured from the front face of the forks to the centre of gravity of the load. It is assumed that the centre of gravity in the vertical direction is no greater than the specified horizontal load centre.



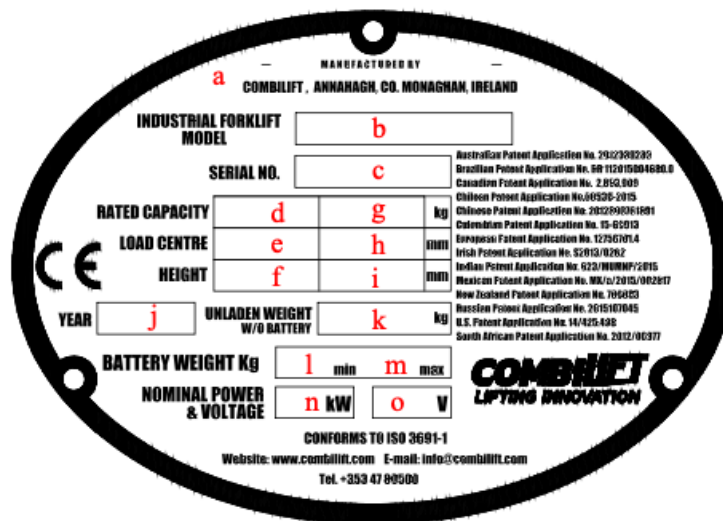
It is the responsibility of the operator to determine that the weight of the load to be handled is not greater than the capacity shown on the load chart. The operator **must not** handle any load that is greater than the capacity shown.

Serial Plate

A Serial Plate is affixed to every Combi lift truck. Please ensure that you are aware of the location of the serial plate on your truck. It is engraved with a number of details, which are required by law. These are:

1. The truck manufacturers name and address.
2. The model type of the truck.
3. The serial number of the truck.
4. The maximum load mass that the truck is rated to lift, with a load centre given in box **e**, to the lift height, given in box **f**.
5. The load centre that applies to the mass, given in box **d**.
6. The maximum height that the mass, given in box **d**, with load centre, given in box **e**, can be lifted to.
7. The maximum load mass that the truck is rated to lift, with a load centre given in box **h**, to the maximum lift height, given in box **i**.
8. The load centre that applies to the load mass, given in box **g**.

9. The maximum height the truck can lift a load to.
10. The year the truck was manufactured in.
11. The weight of the truck without a battery or a load.
12. The minimum permissible battery weight.
13. The maximum permissible battery weight.
14. The nominal power of the traction motor in kilowatts
15. The nominal voltage of the battery in volts



This plate should not be removed by anyone. If lost order a replacement from Combi lift immediately.

Warning Decals

There are a number of different decals located around the Combi lift. These decals have different functions. Some indicate warnings - such as nip points or moving parts, and some provide important information to the operator, such as grease point locations. It is important to study what each one means and where they are located.

Operating Conditions

The Combi lift can operate on a variety of different surfaces and in various conditions but the following should be noted:

Ground Surface:

Floor and road surfaces should be, firm, smooth and level and of adequate load bearing capacity. Approaches to kerbs, railway crossings etc. should also be firm, smooth and adequately ramped to prevent possible displacement.

Aisles:

Aisles should be arranged to eliminate corners, angles, inclines, steep ramps, narrow passages and low ceilings.

Headroom:

Structures over aisles, which may be potential obstacles should be defined and marked with a conspicuous colour. Low doorways should be marked with their clearance limits.

Operating in Hazardous Areas:

- • Standard trucks are not equipped to operate in cold stores, flammable or explosive areas, corrosive atmospheres or areas containing a high degree of dust contamination. Whilst specialised trucks may be fitted with the required safety equipment, operators must adhere to all specific operating instructions laid out for hazardous areas by the relevant authorities.
- • No spark proofing is fitted to the truck as standard; consequently standard trucks **MUST NOT** be used in flammable or explosive areas.

Gradients:

- • When differences in levels exist, gradient ramps should be provided, having smooth, gradual level changes at the top and bottom to prevent shocks to the load or fouling of the forks.
- • Do not drive across, turn or stack on gradients.
- • Correct gradient procedure should be followed at all times.
- • Do not park on a gradient. In an emergency apply the parking brake and chock the wheels but do not leave the truck unattended.
- • Always approach an incline straight on, and keep forks and /or load facing uphill at all times.

Adverse Weather Conditions:

There are a number of weather conditions for which extra care must be taken.

- • High Winds: Do not operate the truck in winds that are greater in speed than 50km/hr as this can have serious effects on the stability of the machine.
- • Electrical Storms: Always discontinue operation of the truck in the event of an approaching electrical storm due to the associated risks of lightning.
- • Extreme Temperatures: The Combi lift is rated to operate between -15°C and +45°C. If the temperature falls below or rises above this range discontinue operation of the machine in order to prevent damage to various components.

Machine Layout & Operator Controls

It is essential before you start operating the Combi lift to be familiar with the main components and controls of the machine, their function and where they are located. Figure 2.1 below indicates the main components of the Combi lift and figure 2.2 on the following page indicates all of the operator controls.

Machine Overview and Components

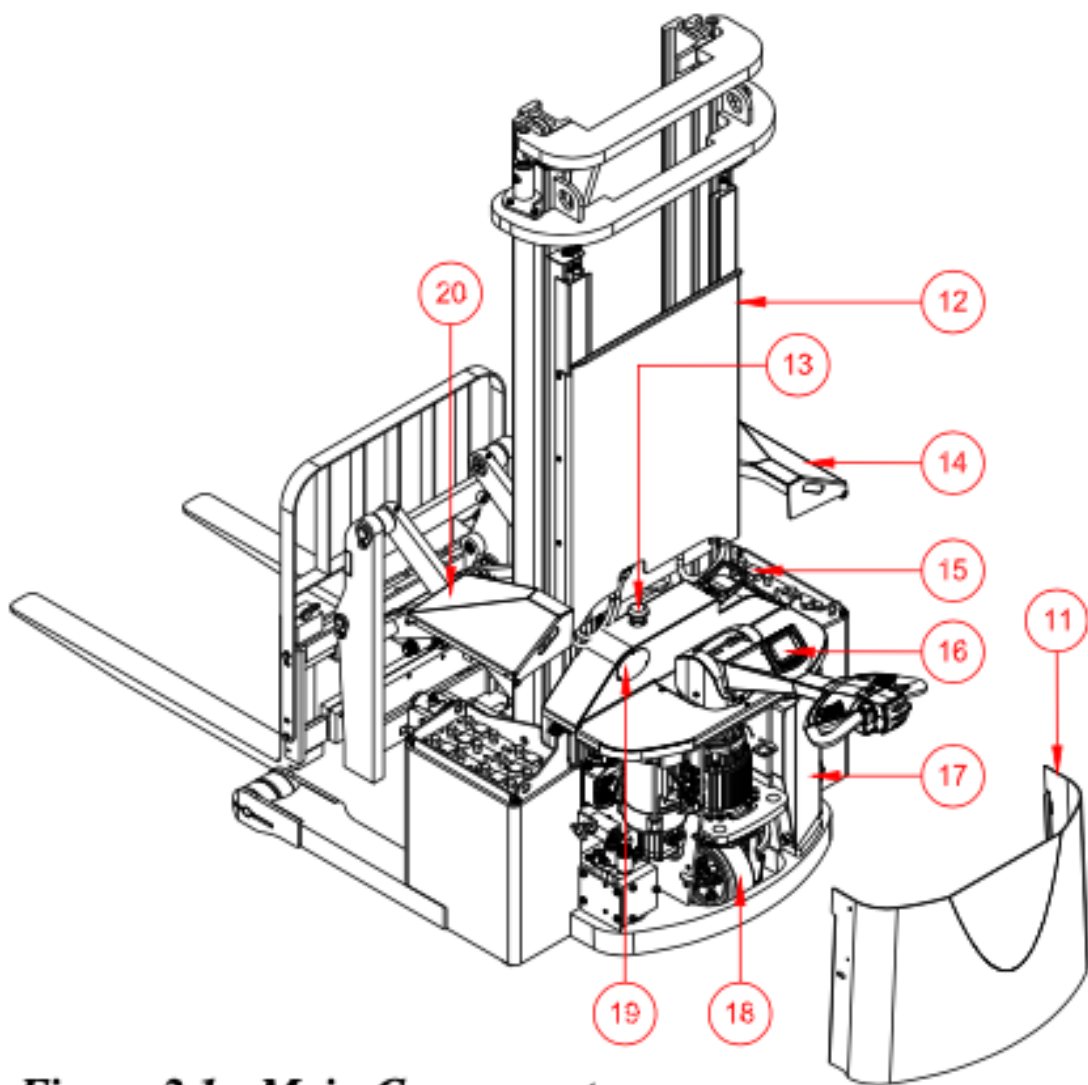
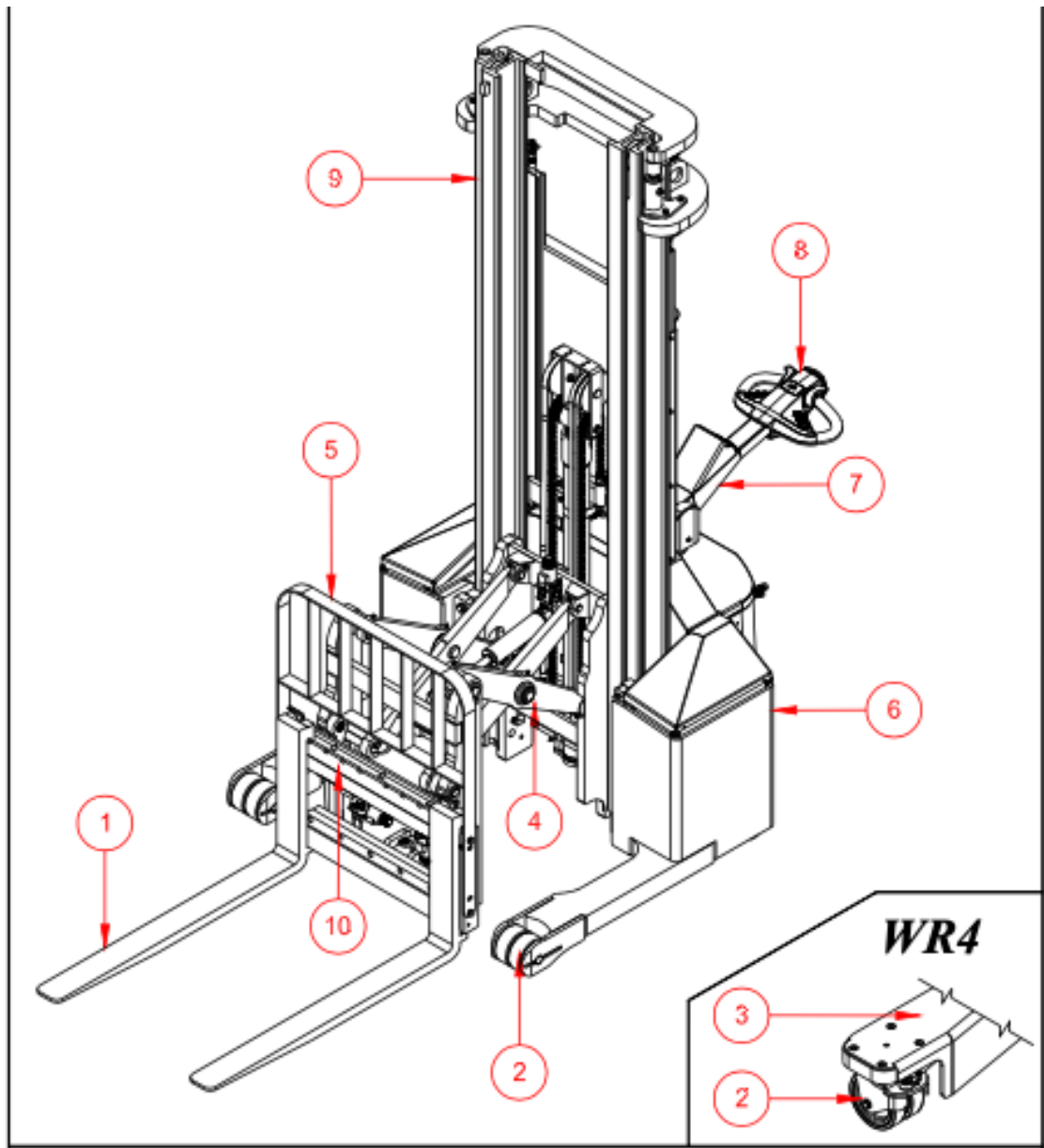


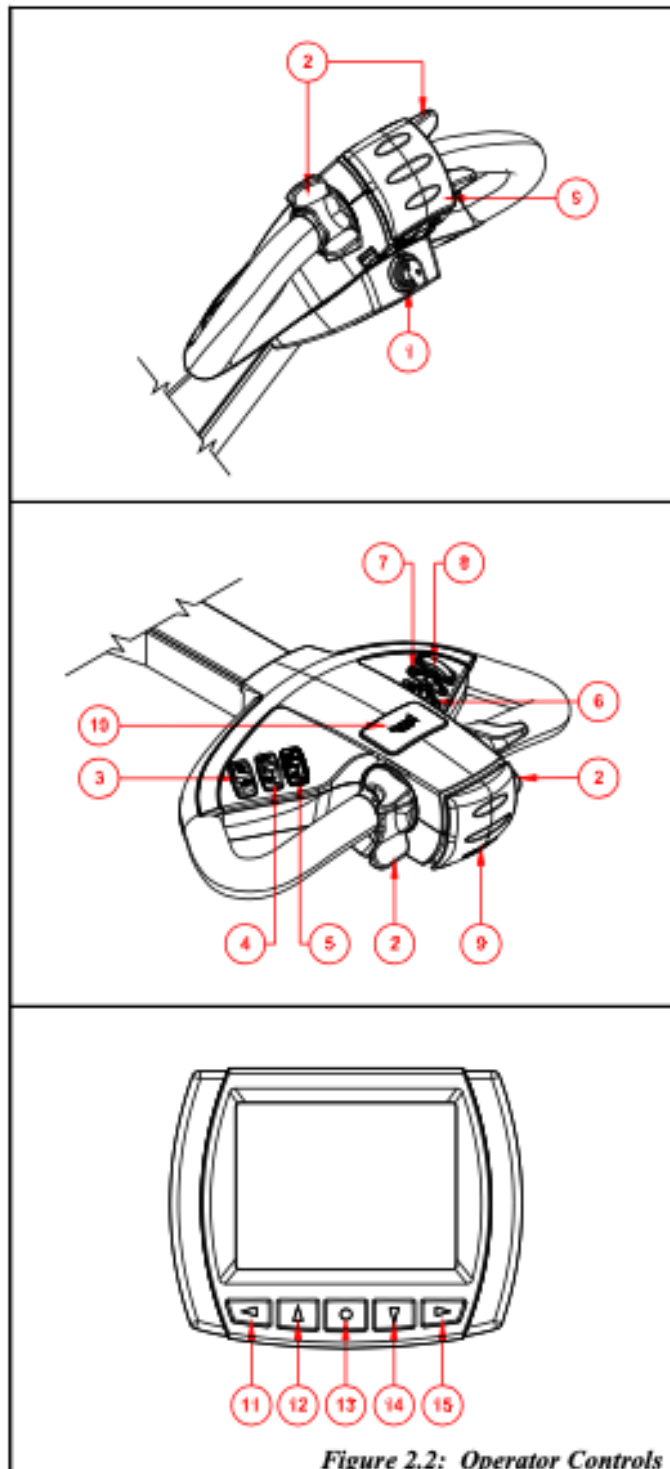
Figure 2.1: Main Components

- 17. Hydraulic Tank
- 18. Drive wheel
- 19. Serial Plate
- 20. LH Battery Cover

1. Forks
2. Fixed Front Wheels (WR)
2. 0°-90° Pivoting Front Wheels (WR4)
3. Platforms
4. Pantograph
5. Load Backrest
6. LH Battery
7. Tiller (Steering) Arm
8. Control Handle
9. Mast
10. Fork Carriage
11. Rear Access Door
12. Mast Screen
13. Battery Isolator Switch
14. RH Battery Cover
15. RH Battery



2.2: Operator Controls Layout



Controls List

1. Ignition Key Switch
2. Combined Direction/Throttle Controls
3. Drive Speed Switch
4. Tilt Control
5. Reach Control
6. Lift Control
7. Sideshift Control
8. Drive wheel Alignment Button
9. Reverse Button
10. Horn Button
11. Lateral Mode Button (*WR4 Only*)
12. Normal Mode Button (*WR4 Only*)
13. Menu/Select Button
14. Scroll Down Button
15. Scroll Right Button

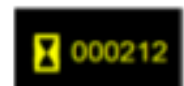
Clock

- The clock displays the day and time in analogue and digital format.
- To set the clock press the menu/select button on the dash console, now using the arrow buttons choose "User Functions" then "Time/Date". The following list will appear:
 - Set Hour
 - Set Minutes
 - Set Year
 - Set Month
 - Set Day
 - Set Weekday
 - Save & Exit
 - Cancel
- Use the arrow buttons to change the desired item.
- To set "Hour", use the up or down arrow buttons to highlight "Set Hour", then press right arrow button to highlight number. Then press up or down arrows to reach desired value. To move on to setting additional items, press left arrow button once and follow similar procedure to change other items.
- When finished setting all desired values, choose "Save & Exit".



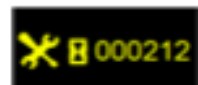
Hour Meter

- The hour meter records the total number of hours the truck has been operating for in hours and tenths of an hour.



Maintenance Monitor

- The maintenance monitor is used to determine the time since the last service. The time is displayed in hours and tenths of an hour.
- This can only be reset using the handheld programmer or laptop and should be reset by the service technician after each service.



Note

The maintenance monitor can only be reset by connecting a handheld programmer or a computer with the relevant software installed.

Battery Charge Indicator

- The battery charge indicator displays the level of charge remaining in the batteries.
- The image opposite shows that the battery has over 80% charge remaining.
- If the battery charge falls below 10% the lift function will no longer operate.

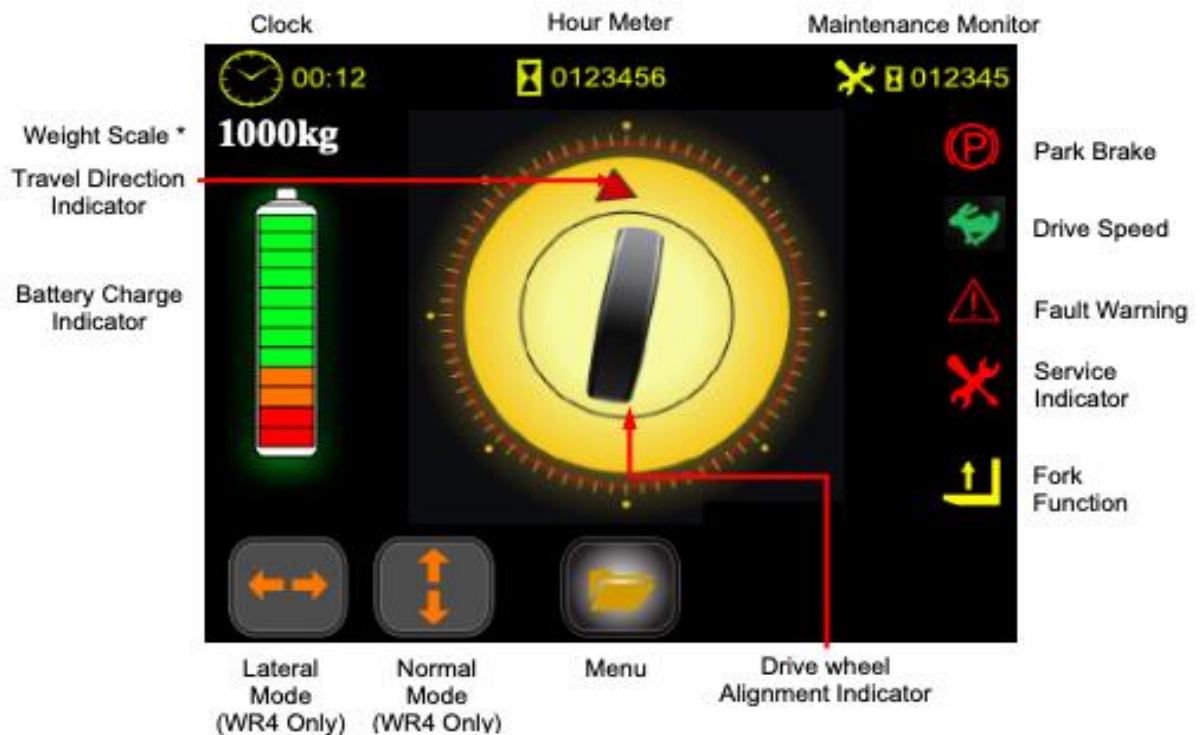


2.3: Display Console

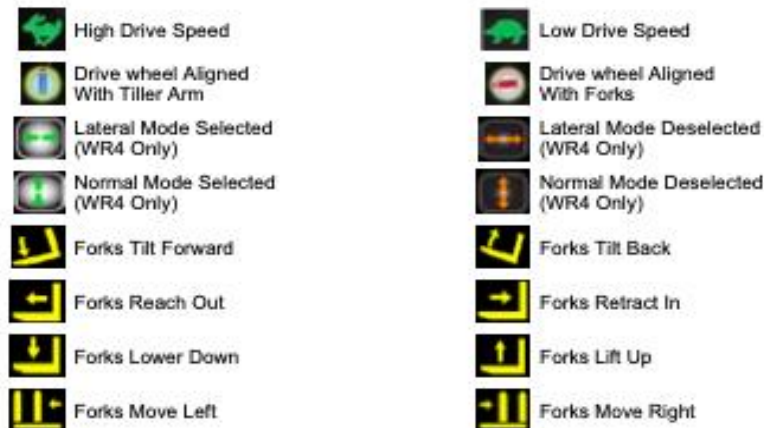
The display console consists of the Graphical User Interface (GUI) and 5 push buttons located along the bottom of the console. The GUI and the push button operations are detailed below.

Graphical User Interface (GUI)

The GUI located in the centre of the display console is illustrated below with all of the symbols described.



Some of the symbols on the GUI change depending on what has been selected by the operator or what functions are being used:



* If Fitted

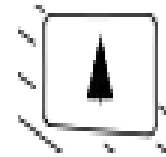
Lateral (Right/Left) Travel Mode Button (WR4 Only)

- The lateral travel mode selection button is located on the left side of the display console. See item 11 in figure 2.2:
- It permits control over the four directional capability of the WR4 truck.
- Press the button to align the front left wheel for lateral travel.
- The lateral facing arrows symbol above the button will change colour from amber to green and the symbol will be illuminated when the truck is in lateral mode.
- Wait until the wheels are fully aligned before pressing the throttle switch.



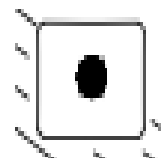
Normal (Forward/Reverse) Travel Mode Button (WR4 Only)

- The normal travel mode selection button is the second button from the left on the display console. See item 12 in figure 2.2:
- It permits control over the four directional capability of the WR4 truck.
- Press the button to align the front left wheel for normal travel.
- The Forward/Reverse facing arrows symbol above the button will change colour from amber to green and the symbol will be illuminated when the truck is normal mode.
- Wait until the wheels are fully aligned before pressing the throttle switch.



Menu/Select Button

- The Menu/Select button is the third button from the left on the dash console. See item 13 in figure 2.2:
- Press the button to enter the main menu on the GUI.
- Navigate to the desired menu choice using the arrow buttons. The choice will be highlighted in blue.
- Press the Menu/Select Button to select the highlighted choice.
- Details on how to set the clock are on page 9.



Drive wheel Alignment Button

- The drive wheel alignment push button is located on the right side of the control handle and is the far right button. See item 8 in figure 2.2:
- It controls the alignment of the drive wheel.
- To align the drive wheel with the forks press the button.

The wheel symbol in the middle of the screen will rotate to approximately parallel with the forks reflecting the position of the drive wheel. The symbol turns red in colour and a beeping sound is emitted from the display console to alert/warn the operator of the change to the steering/drive system.

- To realign the drive wheel with the tiller arm press the button again.

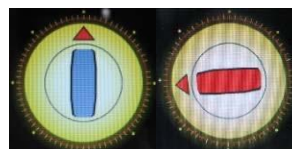
The wheel symbol in the middle of the screen will return to parallel with the tiller arm.

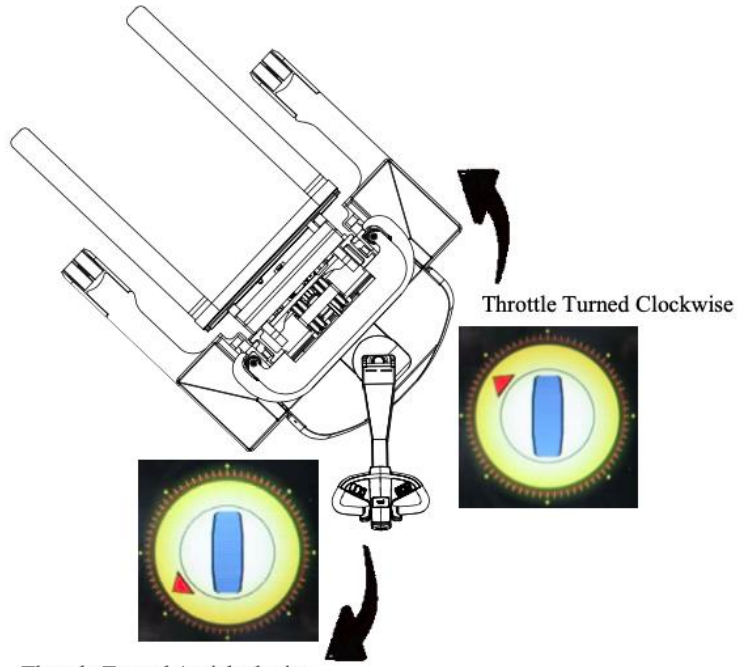
Reverse Button

- This is the large red push button is located at the end of the control handle.
- If the reverse button is hit when working in close quarters, the truck will reverse direction and move in the direction of the forks away from you, this is a safety feature to prevent getting trapped between the truck and a fixed object.
- Do not rely on this feature to prevent injuries, stand well clear of the truck and keep your hands and feet clear at all times.
- The button will not function when the tiller is in the fully up or down position as the brake is automatically applied in these instances.
- The button only operates when travelling in the direction battery first.

Horn Button

- The horn button is the push button located on top centre of the control handle.
- To operate the horn, press the button.





Throttle Turned Clockwise

Throttle Turned Anticlockwise

2.4: Operator Controls Descriptions

Now that the layout of the operator controls has been identified, the next step is to detail how the controls function.

Ignition Key Switch:

- This is a two-position key switch located on the underside of the control handle, which isolates the drive system when in the 'OFF' position.
- The key switch does not cut all power to the truck, to isolate the power press the isolator button shown on page 18.



Combined Direction/Throttle Butterfly Switches

- The combined direction/throttle butterfly switches are located either side of the centre of the control handle.
- When standing to the side of the truck always use the nearest switch.
- Turn the switch CLOCKWISE to drive the drive wheel clockwise i.e. FORWARD.
- Turn the switch ANTICLOCKWISE to drive the drive wheel anticlockwise i.e. REVERSE.
- As the switch is turned the truck speed increases proportionally.
- The drive direction is indicated by the red arrow near the centre of the display console screen.



Drive Speed Switch

- This two position rocker switch is located on the far left of the control handle. See item 3 in figure 2.2:
- For high speed travel press the hare side of the button.
- For low speed travel press the tortoise side of the button.
- Always select low speed when working in constricted spaces and in pedestrian areas.
- The hare or tortoise symbol will display on the screen depending on the selected drive speed.



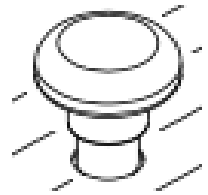
Tilt Control

- The tilt control slider switch is located on the left of the control handle and is the middle one of the three switches. See item 4 in figure 2.2:
- It controls the tilt function of the forks proportionally i.e. the further the slider is moved the faster the forks will tilt.
- To TILT the forks FORWARD, PUSH the slider FORWARD. The forward tilt symbol will display on the screen.
- To TILT the forks BACK, PULL the slider BACKWARD. The backward tilt symbol will display on the screen.



Battery Isolator Push Button Switch

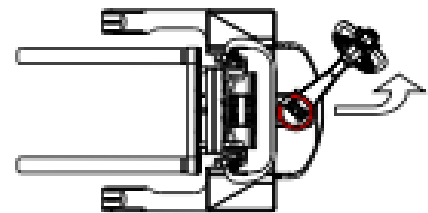
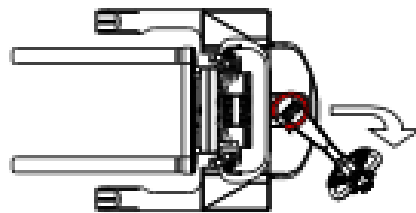
- This push button switch is used to disconnect power from the battery in the event of an emergency.
- It is located on the body of the truck in front of the operator.
- When the Combilift is not in use turn the switch to 'OFF' by pressing it down until it clicks into the closed position.
- The Combilift will not power-up unless the switch is returned to the 'ON' position by pulling the switch up.
- Note this button must be pressed before carrying out any work on the machine.



2.5: Steering (Tiller Arm)

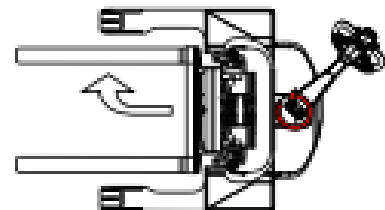
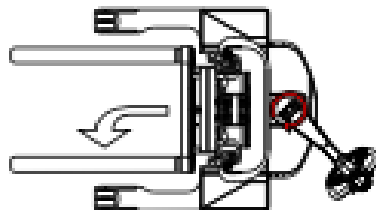
Steering in normal mode travelling with truck trailing

- Swing the tiller arm clockwise to turn the truck clockwise.
- Swing the tiller arm anticlockwise to turn the truck anticlockwise.



Steering in normal mode travelling with truck leading

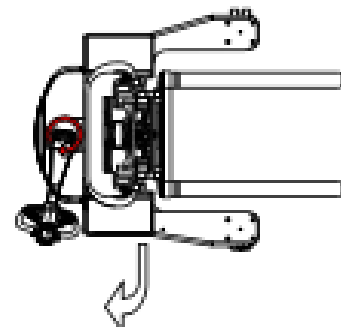
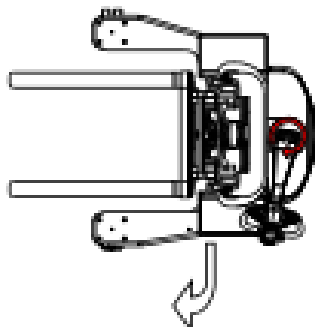
- Swing the tiller arm clockwise to turn the truck anticlockwise.
- Swing the tiller arm anticlockwise to turn the truck clockwise.



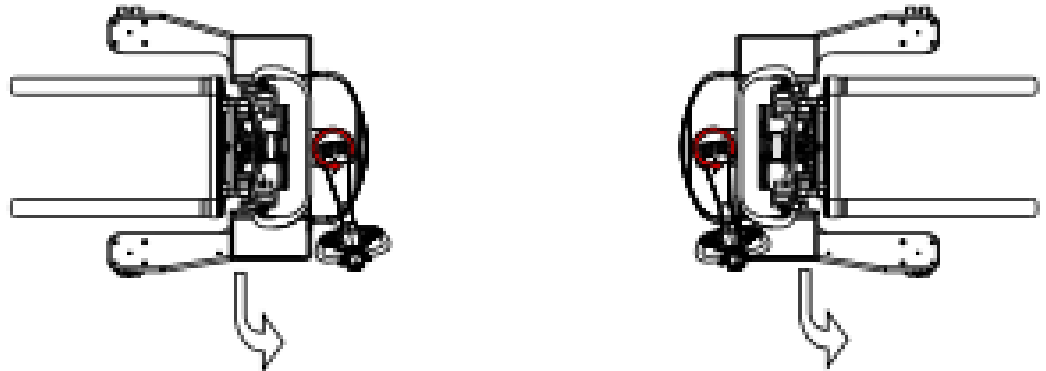
The following information is for WR4 Models Only

Steering in lateral mode travelling with truck trailing

- Swing the tiller arm clockwise to turn the truck clockwise.
- The truck follows in the direction the tiller is pointed.

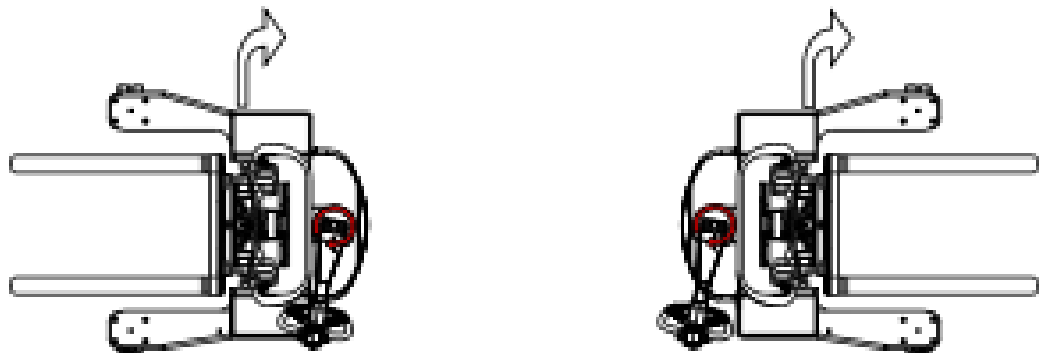


- Swing the tiller arm anticlockwise to turn the truck anticlockwise.
- The truck follows in the direction the tiller is pointed.

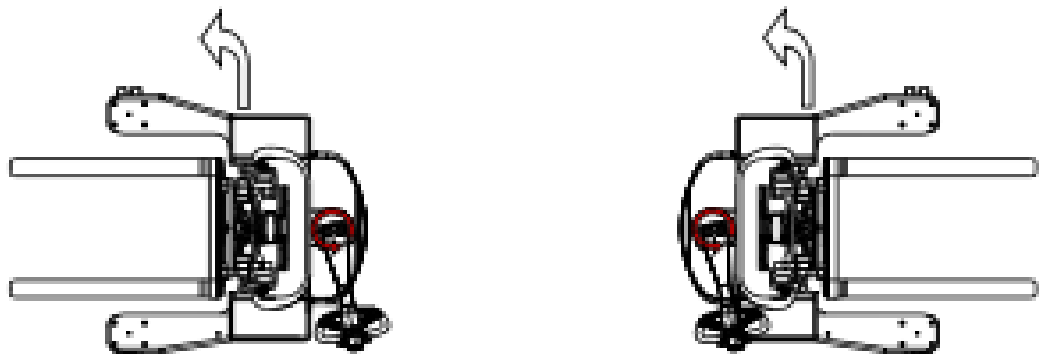


Steering in lateral mode travelling with truck leading

- Swing the tiller arm clockwise to turn the truck clockwise.
- The truck follows in the direction the tiller is pointed.



- Swing the tiller arm anticlockwise to turn the truck anticlockwise.
- The truck follows in the direction the tiller is pointed.

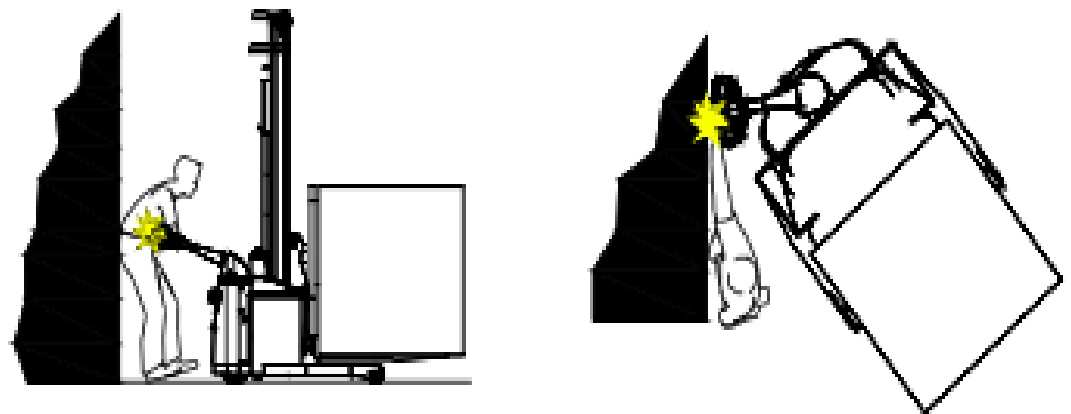


Section 3: Safe Operation

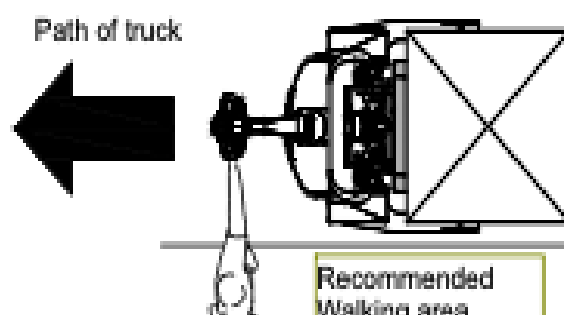
Lift trucks are designed for the purpose of lifting and moving heavy loads in confined spaces. For this reason it is essential that operators are trained to operate the machines correctly and to ensure that they always operate the machine in a safe and controlled manner. Combilift trucks are equipped with certain safety mechanisms that must not be removed or bypassed. Combilift will not assume liability for accidents caused by the removal or bypassing of any inbuilt safety mechanisms. This section looks at how the machine should be operated.

3.1: Using your truck safely

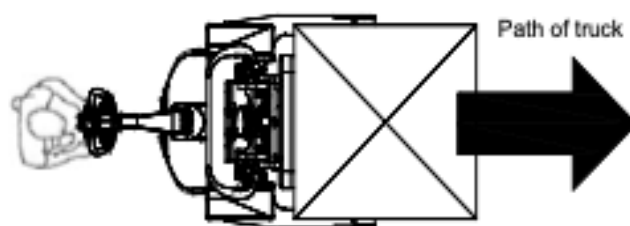
Always be aware of your surroundings and look where you are driving. Do not allow yourself to get into a situation where you could get crushed between the truck and a fixed object such as a wall or racking posts.



- Watch your hands and feet. A foot or hand caught between the truck and a fixed object will get crushed or even cut off.
- Keep to the side of the truck while travelling battery first. Keep completely clear of the truck so that it cannot hit the back of your leg or foot.
- When travelling forks first, keep both hands on the control handle and be careful when changing direction of travel. Keep your feet completely clear of the truck
- Keep your truck under control at all times, operate at a speed that allows you to stop safely and will give you time to react in an emergency.



Travelling With Truck Trailing
Stay to one side and slightly in front. Use the hand nearest to the truck to operate the control handle. Keep feet clear.



Travelling with Truck Leading
Keep both hands on the control handle.
Watch your feet when changing direction.

3.2: Before you begin

- Check to make sure the battery is charged, water level is OK and vent caps are in place. Do not use an open flame to check the battery.
- See that all wheels are in good condition.
- Check that both forks are secure and not bent, cracked or badly worn.
- Inspect lift chains for damage.
- Clean the safety shield and keep it clear. Clean the tiller controls.
- See that the load backrest is in place and secure (if fitted).
- Look under the truck for signs of hydraulic leaks.
- Try the horn.
- Make sure the battery isolator works.
- Check that all controls work smoothly.

3.3: Starting Procedure

In order to start the Combilift first ensure the tiller is in the upright position, insert the key into the key switch and turn the key to the on position.

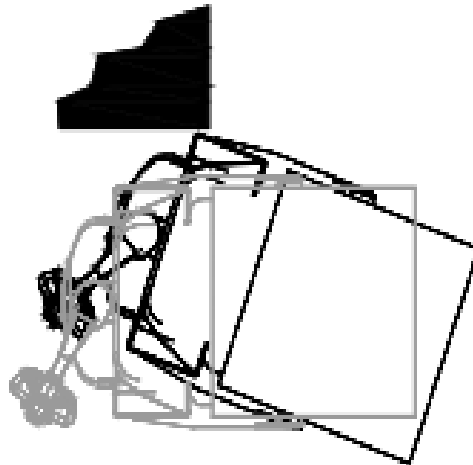
Note

The Combilift will not power up if any of the following conditions exist:

- The tiller is not in the upright position
- The battery isolator switch is in the closed or 'Off' position.
- The battery plug is not properly connected.

3.4: Moving

- Ensure that the forks are as low as possible. Fully retract the pantograph and tilt the forks back.
- Check that the drive wheel is in the normal operating mode.
- Decide on the desired direction in which to travel. Travel in a direction that gives you the best view.
- Ensure feet and body are completely clear of truck.
- Look around and when all is clear press the throttle switch until the truck begins to move in the desired direction.
- Press the throttle switch further to increase truck speed.
- Slow down when making turns. Watch out for the truck swing when turning.
- Do not ride on the truck
- Do not allow passengers to ride on the truck



Truck swing

Take care when turning when travelling forks first. The truck will swing wide in the opposite direction. Make sure you have adequate clearance and you or others are not in the area of swing.

Note

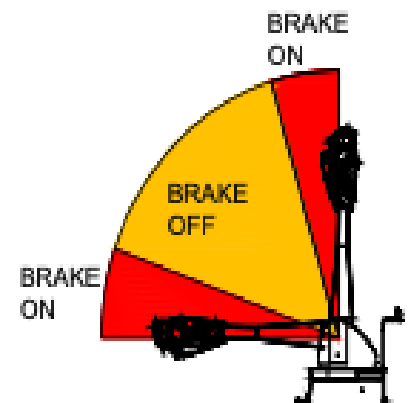
The Combilift has a maximum ground speed of 6km/h (4mph). Always adhere to all speed limits in the area which the truck is operating.

As the tiller arm is turned at an angle to steer the truck - as shown in the above diagram - the travel speed is automatically reduced. The more the tiller arm is turned the greater the reduction in travel speed.

3.5: Braking

The brake is applied when the tiller is in the fully up or down position.

When the tiller is released it will automatically go to the upper position thus braking the truck. Check that the tiller is returning to the upright position and that the brakes are operating correctly, before you start working with the truck.



3.6: Stopping

- Release the throttle switch to bring the machine to a controlled stop.
- The parking brake is automatically applied as soon as the truck comes to a halt.
- When you let go of the tiller it will automatically go to the upright (braked) position
- If leaving the truck ensure the forks are tilted forward and lowered to the ground. Turn off the truck and press the battery isolator button.



Warning



Never attempt to use your body to slow or stop the truck.

3.7: Changing Direction

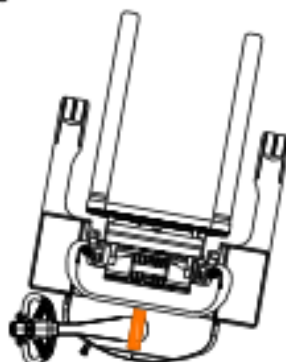
- Release the throttle switch.
- The truck will come to a smooth controlled halt.
- Gradually press on the throttle switch in the opposite direction to that previously pressed until the truck is travelling at the desired speed.

3.8: Drive wheel alignment

In normal driving mode the drive wheel is aligned parallel with the tiller. It is possible to change the alignment so that the wheel is parallel with the forks. This feature is useful when operating in a tight aisle as it allows the truck to be driven in a straight line with the tiller arm turned to either side. Steering also remains possible after the wheel has aligned with the forks.



Wheel aligned with Tiller



Wheel aligned with Forks

Changing the drive wheel alignment to parallel with forks

- Release the throttle and allow the truck to come to a smooth controlled halt.
- Press the drive wheel alignment button and the drive wheel will change alignment to become parallel with the forks.
- The wheel symbol in the centre of the display console screen will turn red and will rotate on the screen to approximately parallel with the forks to indicate that the drive wheel is now aligned parallel with the forks.
- Press the throttle in the direction of travel required.
- The truck will continue to be steered by the turning movement of the tiller arm.

Note

The drive wheel will revert back to being aligned with the tiller arm if the tiller arm is turned past the centre of the machine.

To change back to align with forks the alignment button will need to be pressed again.

Changing the drive wheel alignment to parallel with the tiller

- Release the throttle and allow the truck to come to a smooth controlled halt.
- Press the drive wheel alignment button and the wheel will change alignment to become parallel with the tiller.
- The wheel symbol in the centre of the display console screen will rotate on the screen to parallel with the tiller arm to indicate that the drive wheel is now aligned parallel with the tiller arm.
- Press the throttle in the direction of travel required.
- The truck will be steered by the turning movement of the tiller arm.

3.9: Changing Modes (WR4 Only)

Changing Into Lateral Mode

- Bring the truck slowly to a halt by releasing the throttle switch.
- Ensure all observers stand clear of the truck.
- Turn the tiller arm at 90° to the central position to either side.
- Press the lateral mode selection button to travel right/left.
- The front left hand wheels will align perpendicular to the forks.
- Wait until the front left hand wheels have finished aligning before moving.

Note

When in lateral mode the truck continues to be steered by the turning movement of the tiller arm.

Changing Back to Normal Mode

- Bring the truck slowly to a halt by releasing the throttle switch.
- Ensure all observers stand clear of truck.
- Press the normal mode selection button to travel in normal mode.
- The front left hand wheels will align parallel to the forks.
- Wait until the front left hand wheels have finished aligning before moving.

3.10: Loading & Unloading the Truck

This section provides information on the correct way to pick up a load and set down a load. There are a number of safety guidelines that should be adhered to at all times when lifting or placing loads.

- NEVER try to lift a load of which the weight is unknown.
- Ensure that the centre of gravity of the load is centred with the mast.
- ALWAYS consult the capacity chart for your truck before lifting a load and never exceed the rated capacity of the truck.
- Before picking up a load adjust the forks to ensure that they are equally spaced about the centre line of the fork carriage and as widely spaced as possible to take the weight of the load evenly.
- Check that the forks are of sufficient length. The length of the forks should be at least two thirds of the depth of the load being lifted.
- Avoid erratic movements that could cause damage to the truck or product being handled.

Loading the Truck in Normal/Lateral Mode

- Retract the pantograph fully.
- Adjust the spacing of the forks to suit the load to be lifted (See section 3.12: Adjusting the Load Forks)
- Manoeuvre the machine until its COG is aligned with the COG of the load and the front of the machine is as close to the load as possible.
- Raise/Lower the forks to the required height.
- Extend the pantograph to enter the load centrally.
- Lift the load

- Double fork load if necessary until load is tight against face of forks. (See section 3.13: Double Forking a Load)
- Tilt the forks back and fully retract the pantograph to secure the load.
- Lower the load until it is just above platform height. Rest the load on the platforms where possible.

Placing a Load in Normal/Lateral Mode

- Manoeuvre the machine until the load is aligned with the placing area.
- Raise/Lower the forks to the required height.
- Extend the pantograph.
- Lower the load until it is fully supported.
- Tilt the forks forward.
- Retract the pantograph fully.

Loading the Truck Using the Drive wheel Alignment Feature

- Retract the pantograph fully.
- Drive the truck forks first until the front wheels are approximately parallel to the centre of the load.
- Standing to the side, turn the tiller and allow the truck to turn towards the load, standing clear of the truck swing. The truck will slow down according to how sharply it is turned.
- When the forks are roughly lined up and centred with the load, press the wheel alignment switch to allow the drive wheel to rotate parallel with the forks.
- Lower/raise forks to the required height.
- Still standing to the side, drive forward and steer the truck to align it perfectly with the load.
- Enter the centre of the load.
- Extend pantograph to secure load if not already extended.
- Lift load.
- Double fork load if necessary until load is tight against face of forks. (See section 3.13: Double Forking a Load)
- Tilt the forks back to secure the load.
- Retract pantograph fully
- Standing to the side reverse clear of racking and lower load as low as possible.
- When clear of racking press the wheel alignment switch to allow the drive wheel to rotate parallel with the tiller.
Alternatively turn the tiller to the other side of the truck and wheel alignment will change automatically once you pass the centre of the truck.
- Walking to the side and slightly in front, reverse the truck while steering until the truck is centred in the aisle. Decide the direction of travel and continue whilst standing clear of the truck.

Note

The drive wheel will revert back to being aligned with the tiller if the tiller is turned past the centre of the machine. To change back to align with forks the alignment button will need to be pressed again.

Stacking

- Slowly approach the stack with the load retracted and tilted backwards.
- Stop at the face of stack by releasing the throttle switch.
- Elevate the load until it is clear of top of the stack.
- Drive as close as possible to the front stack then extend the pantograph until the load is directly above the stack.
- Tilt the load to the vertical position and lower the load onto the stack.
- Retract the pantograph fully and lower forks to 150mm (6") above ground before moving off.

De-Stacking

- Approach the stack with mast retracted and the forks parallel with the floor.
- Stop at the face of stack by releasing the throttle switch.
- Raise/lower forks to permit entry into the load.
- Drive as close as possible to the front stack then extend the pantograph to position the forks under the load.
- Lift the load until clear of the stack and tilt the forks backward to stabilise the load.
- Retract the pantograph fully.
- Lower the load until it is just above platform height. Rest the load on the platforms where possible.

3.11: Parking

When parking the Combilift always park clear of aisles, doorways, stairways, fire exits and fire points and ensure that the truck will not obstruct other traffic. Where possible avoid parking on inclines

- Bring the truck to a complete stop. The parking brake is automatically applied.
- Lower the forks until they are on the ground and tilt the mast forward.
- Turn the machine off.
- Press the battery isolator switch.
- Chock wheels if on an incline.

3.12: Adjusting the Load Forks

Forks should be spaced as far apart as the load being moved will allow. Forks should always be spaced equidistant from the centre of the fork carriage.

To adjust standard forks:

- Raise forks approximately 25mm (1") off the floor.
- Switch the truck off.
- Lift up the keeper pin and slide the forks along the carriage.
- When the forks are set to the desired position ensure that the keeper pin is engaged in a slot on the top of the fork carriage bar.

Note

The information above does not apply if the truck is fitted with hydraulic fork positioning. In this case operate the hydraulic fork positioning function until the forks are set to the desired width apart.

3.13: Double Forking a Load

If it is not possible to engage forks fully when lifting a load it will be necessary to move the load closer to the front of the machine before lifting.

Note

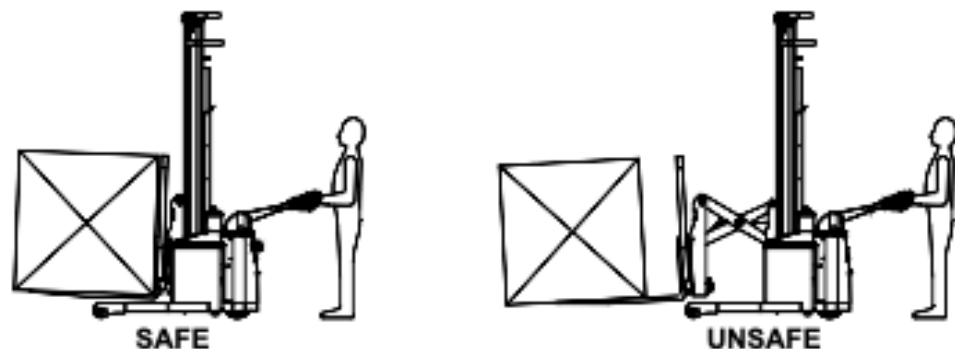
The lift capacity of the Combilift is reduced if the forks are not fully engaged

To Double Fork a Load:

- Raise the load slightly and retract the pantograph sufficiently to bring the load closer to the machine.
- Lower the load ensuring that it is still properly supported.
- Extend the mast again until the load is against the fork face.
- The load is now ready to be lifted.

3.14: Travelling Safely with a Load

- Have the pantograph fully retracted, keep the load as low as possible and the forks tilted back.
- Ensure that the centre of gravity of the load is centred with the mast.
- Ensure the load is tight against the face of forks.
- Try to avoid sudden and erratic movements with the machine. Accelerate and decelerate as smoothly as possible.
- When approaching a junction or corner, slow down, sound the horn and proceed only when you are sure that your path is unobstructed.
- When approaching crossings and areas where driving vision is restricted or obscured, reduce speed to a minimum and sound the horn - a series of short blasts is more effective than one long blast.
- Cross railway lines slowly, only at authorised points and diagonally whenever possible.
- Be conscious of height and width restrictions and watch for sudden appearance of pedestrians from behind obstacles.
- Do not carry unsafe or insecure loads. Never carry loads stacked higher than the top of the fork carriage or backrest.
- If the load obstructs visibility drive in reverse (or lateral mode with WR4).
- Do not drive across, turn or stack on gradients.
- Correct gradient procedure should be followed at all times.
- Always approach an incline straight on, and keep forks and /or load facing uphill at all times.
- Ensure feet and body are completely clear of the truck.



STACKING & DE-STACKING WITH RIDER AND PEDESTRIAN REACH TRUCKS

DIAGRAMS SHOW A RIDER REACH TRUCK THE OPERATION IS THE SAME FOR PEDESTRIAN REACH TRUCKS

Reach trucks should not be driven, whether loaded or not, with the reach mechanism extended except when inching at the face of the load, stack or rack. The parking brake should be applied and the vehicle should be engaged in neutral before operating the reach mechanism. No one should step over the reach legs or put any part of their body between the mast and power unit if the reach truck is capable of being operated. The reach movement should not be used for pushing or dragging loads and the load should be carried on the fork arms and not resting on the reach legs unless the reach truck is specifically designed for the purpose.

STACKING

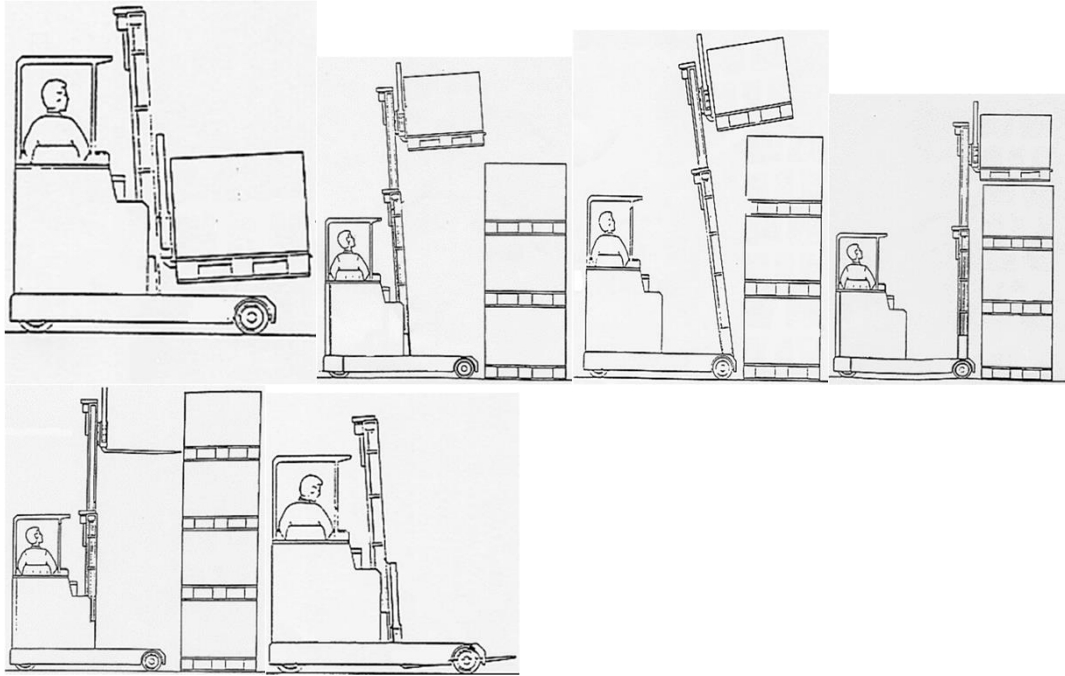
- Approach the load in the correct travel position, to within 6" to 12" so as to:
 1. a) Prevent pedestrians from walking between the stack and the truck.
 2. b) Increase accuracy of adjustments
 3. c) Reduce risk of making contact with the stack

Slow down and stop at the face of the stack, apply the parking brake and reduce backward tilt to an amount just sufficient to maintain the load stability

Look up and check for obstructions, then raise the load to the desired stacking height.

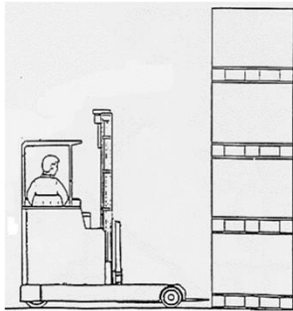
When the load is clear of the top of the stack, move forward if

- necessary, to bring the reach truck close to the stack ensuring that the truck is square onto the stack, and re-apply the parking brake.
- Reach out smoothly, taking care not to dislodge loads in adjacent stacks.
- When the load is squarely over the stack, bring the mast to the vertical position and lower the load onto the stack gently and smoothly. Note: Modern reach trucks have fixed masts. This means tilt is achieved by pivoting the carriage plate. We still need to ensure the load is level before we lower the load onto the stack.
- When the load is securely stacked, lower the fork arms until free of the pallet or dunnage strips and reach in. When freeing the fork arms, slight forward tilt may be of assistance; otherwise it should seldom be necessary to use a forward tilt. (If the fork arms are not fully clear of the stack, the reach truck should be moved back a short distance, after ensuring the way is clear). Beware! Failure to ensure clearance of your forks within the load could result in you dislodging the load or even pull the stack over.



When the fork arms are clear of the stack, re-apply the parking brake, engage neutral if the reach truck has been moved. Lower the forks into the travel setting and check the way is clear before moving off.

DE-STACKING



Halt approximately 6" to 12" from the stack and apply the parking brake and engage neutral. Bring the mast to the vertical position or ensure the forks are level. If necessary adjust the fork arm spread to suit the width of the load and ensure that the weight of the load is within the capacity of the reach truck.

Look up and check for obstructions, then raise the fork arms to a

position permitting clear entry into the pallet or dunnage strips. The forks should be nearer to the top of the entry point in order to compensate for the taper of the forks.

TIPS:

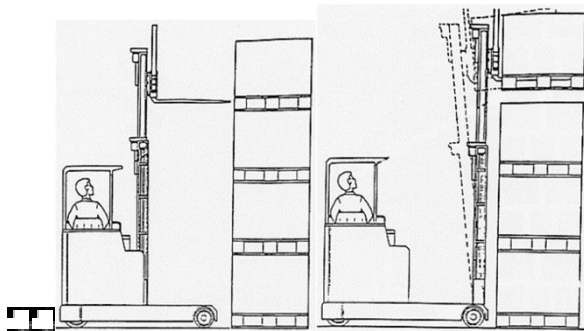
At height, your forks will look higher than they actually are.

By ensuring that your forks are level before entering your load, the task will be made safer and easier.

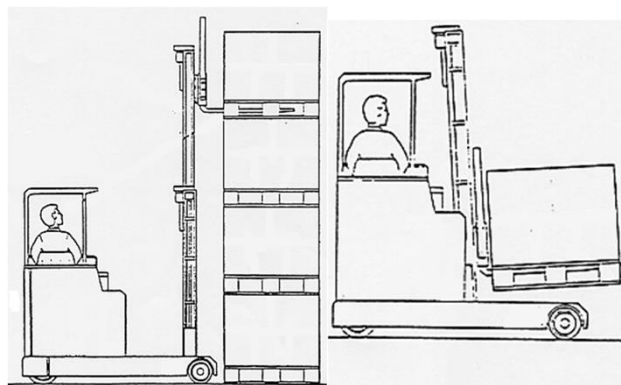
Move forward if necessary, to bring the reach truck square on and close to the stack and re-apply the parking brake, ensuring the vehicle is in neutral. Fully insert the fork arms by reaching out until the load guard gently touches the load or pallet base.

Lift the load until it is clear of the stack and carefully apply backward tilt just sufficient to stabilise the load.

When the load is clear of the top of the stack, reach in. When necessary, move the reach truck slightly backwards away from the stack, ensuring that the way is clear and taking care not to dislodge loads in adjacent stacks. Re-apply the parking brake if the reach truck is moved.



Lower the load carefully and smoothly to the correct travelling position. Apply sufficient back tilt to stabilise the load before checking the way is clear and moving off.



It is important that the forks are horizontal when they are run in under the pallet. They must not be forced in, but must run freely. Carrying the pallet, after an incorrect insertion results in the entire weight of load being borne by a single board, which might then break.