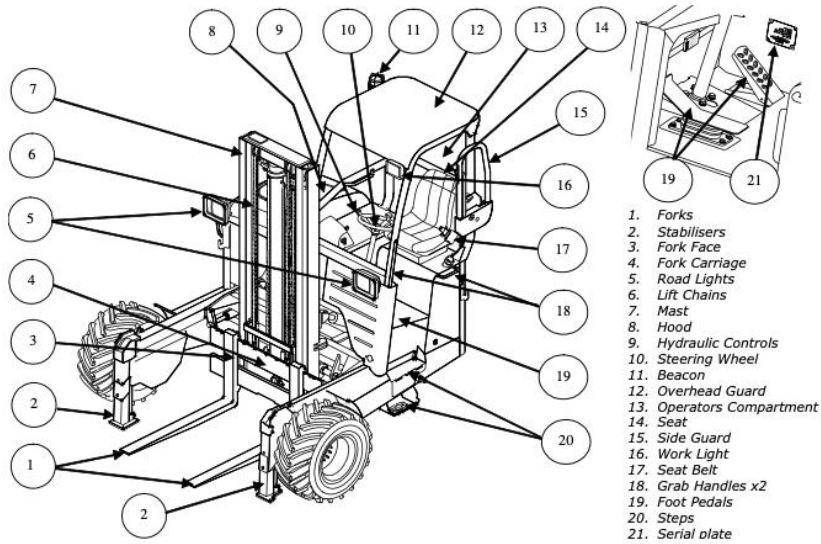
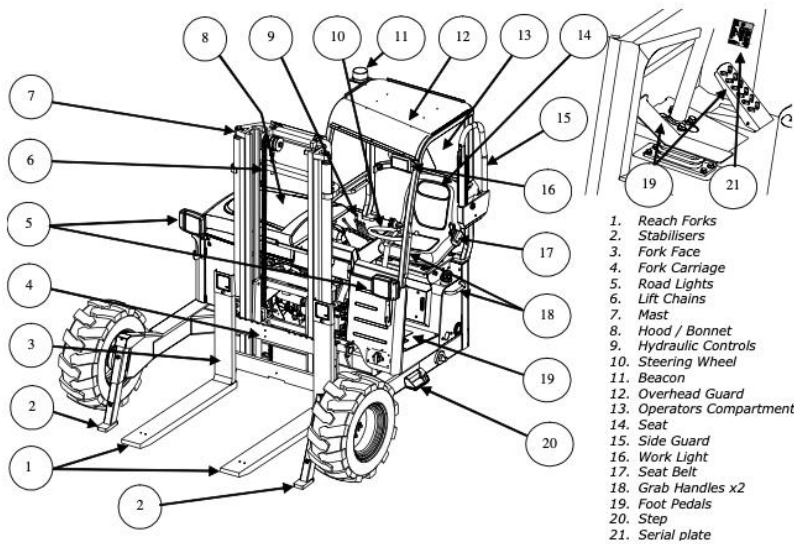


MOVING MAST MAJOR COMPONENTS



5

STATIC MAST MAJOR COMPONENTS



6

4. OPERATING PROCEDURES

Using the Machine

Before Using The Machine

Before you begin to operate the Moffett Forklift you must have completed the Moffett training program, understand and follow all information in this manual. Each day you operate the machine, complete all of the Daily Inspection Checks as detailed in the MAINTENANCE section of this operator manual.

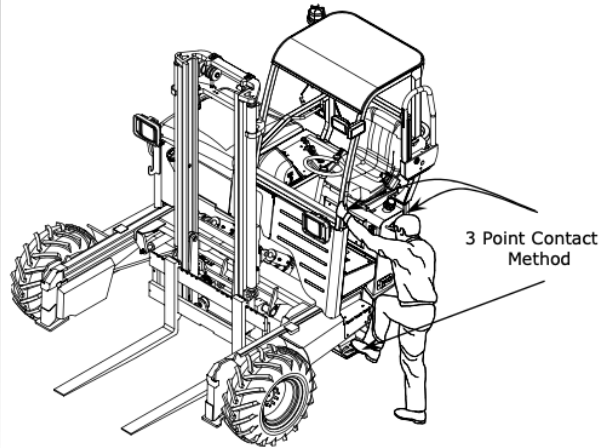
Entering Operator's Compartment

Always climb aboard the vehicle properly. Use "three point contact" method and face the machine when you climb aboard or dismount the Moffett Truck-Mounted Forklift "three point contact" means that 3 out of 4 arms and legs are in contact with the machine at all times during mount and dismount. Clean your shoes and wipe your hands before climbing on. Use the overhead guard, grab-handle and step when climbing on or off. Do not use the side guard as a grab-handle. Make sure the side guard is secured before mounting or dismounting. Never climb aboard or dismount when the engine is running or when the machine is moving. Never use the control levers or the steering wheel as a hand-hold when climbing on or off the Moffett Truck-Mounted Forklift.



WARNING:

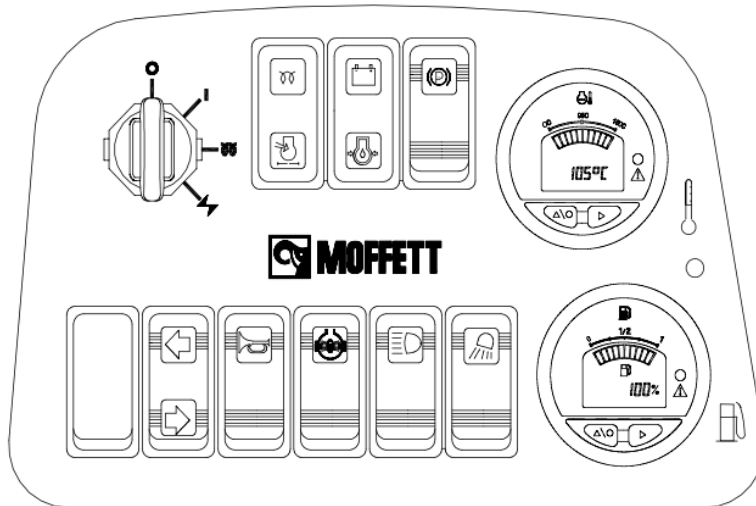
Never climb aboard or dismount the machine with engine running.




3 Point Contact Method

2. INTRODUCTION

Instruments And Controls (continued)



Note: 4-Way dash configuration section C2

-  **Engine Preheater**
-  **Air Filter Blockage**
-  **Battery (No Charge)**
-  **Engine Oil Pressure Low**
-  **Park Brake Engaged**
-  **Indicators**
-  **Horn**
-  **Difflock Engaged**
-  **Main Beam**
-  **Work Lights**

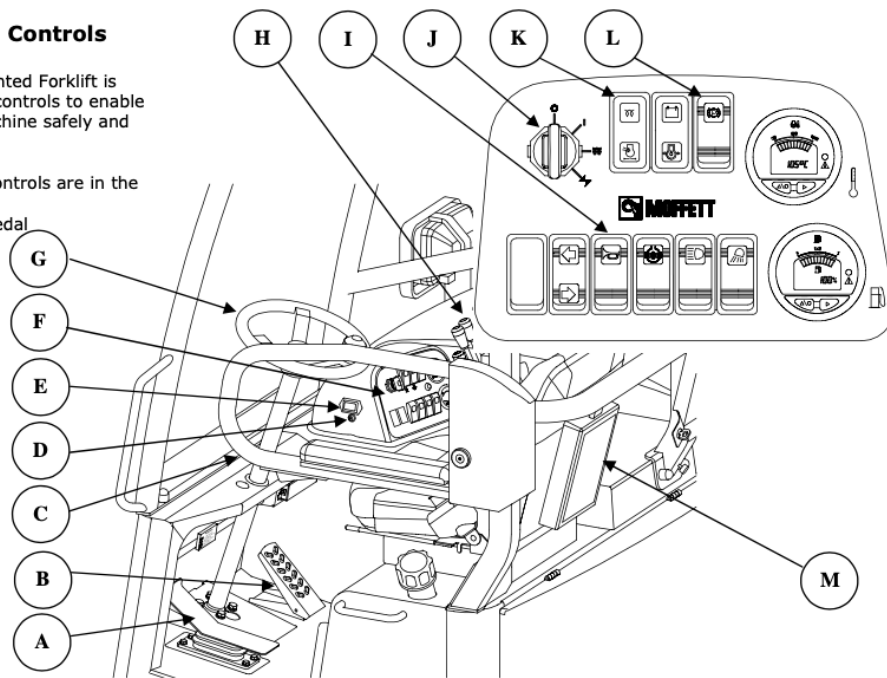
2. INTRODUCTION

Instruments and Controls

The Moffett Truck-Mounted Forklift is provided with a set of controls to enable you to operate the machine safely and efficiently.

The instruments and controls are in the following groups:

- A** Forward/Reverse Pedal
- B** Throttle
- C** Side Guard
- D** Starter Reset
- E** Hour Meter
- F** Dash Panel
- G** Steering Wheel
- H** Hydraulic Controls
- I** Switches
- J** Ignition Switch
- K** Warning Lights
- L** Park Brake
- M** Manual Box

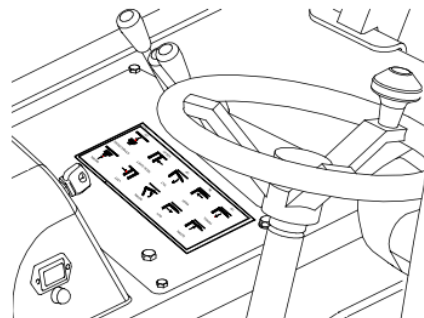
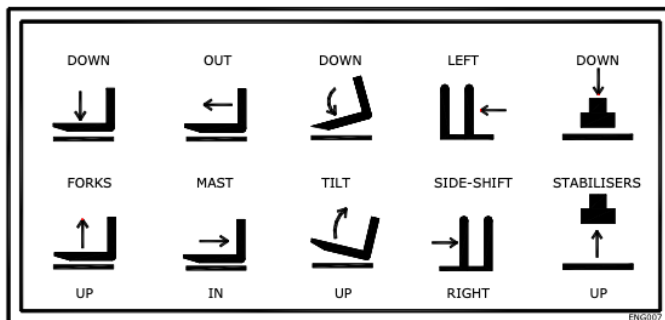


28

2. INTRODUCTION

Safety Decals (continued)

Part No. Eng007

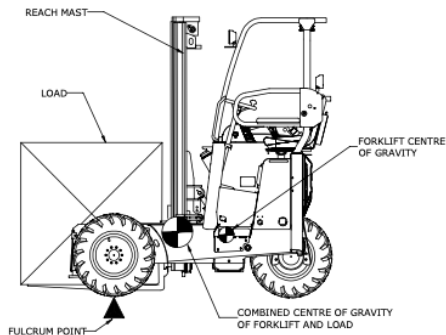


2. INTRODUCTION

The Moffett Truck-Mounted Forklift

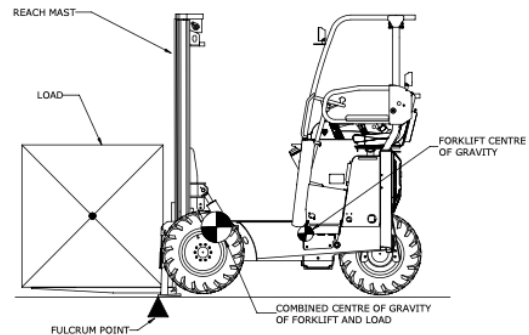
Machine Description.

The Moffett Truck-Mounted Forklift is a three wheeled, non-counterbalanced forklift capable of being transported on the rear of a truck or trailer. Its short turning radius and rear wheel steer make it extremely manoeuvrable in confined spaces. The forklift is equipped with a mast that can move in and out on a mast carriage. The mast is fitted with a double acting lift cylinder which means a load can be lifted on the forks by the full bore side of the cylinder but also that the machine can be lifted for truck mounting using the rod side of the cylinder.



Concept

Unlike a conventional forklift the Truck Mounted Forklift does not have a counterweight at the rear, instead it uses its own weight to counter the load. Normally the front fulcrum for the machine is located under the front tyre. By lowering stabilisers this fulcrum is moved forward and with the mast extended this allows the forklifts weight to counter the capacity to be lifted. Once the load has been picked then the mast is retracted bringing the load into the frame of the forklift. At this stage the stabilisers can be raised and the machine can travel with the load.



2. INTRODUCTION

Identifying Your Machine

Serial Plate: This is located in the driver's compartment and it gives the following information:

Type: This is the machine model. i.e. M5 (example below).

Serial No: This is a unique number given to all machines.

Its 7 digit configuration is also stamped into the machine chassis and is as follows e.g.:

E 24 054 5

E Year of Manufacture.
24 Week Number.
054 Sequential Number.
5 Machine Model.

Rated Capacity: The rated lifting capacity of the machine with the mast carriage fully extended and stabilisers down.

Load Centre: Load centre of rated capacity.

Unladen Weight: The gross weight of the machine.

Date: The date of manufacture of the machine.

266130	
TYPE	<input type="text"/>
SERIAL No.	<input type="text"/>
RATED CAPACITY	<input type="text"/> Kg
LOAD CENTRE	<input type="text"/> mm
UNLADEN WEIGHT	<input type="text"/> Kg
DATE :	<input type="text"/>
MANUFACTURED BY MOFFETT ENGINEERING LTD. ARDEE ROAD, DUNDALK, Co. LOUTH, IRELAND. TEL: + 353 42 59500 FAX: + 353 42 59590	

4. OPERATING PROCEDURES

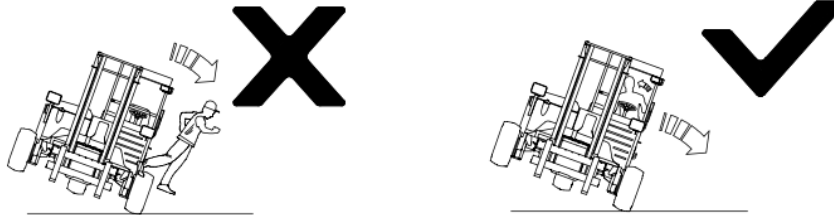
Rollover



DANGER:

Any machine that is used to lift and move loads may tip over if not operated correctly. No matter how experienced the operator is, accidents can still happen if the operator does not remain vigilant. Always be aware of the potential danger involved when using the Moffett Truck-Mounted Forklift. Be aware of what action you MUST take if the machine starts to tip or roll over.

**DO NOT ATTEMPT TO JUMP OUT – STAY IN THE MACHINE
HOLD TIGHTLY ONTO THE STEERING WHEEL – BRACE YOUR FEET
AND LEAN AWAY FROM IMPACT**



WHEN THE MACHINE HAS COME TO REST – EXIT VIA SAFEST ROUTE

4. OPERATING PROCEDURES

Driving Techniques (continued)

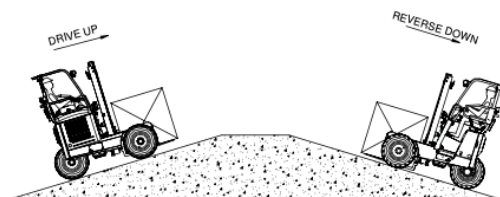
Operating On Inclines

The Moffett Truck-Mounted Forklift is intended for use on firm, flat and stable surfaces. AVOID slopes and uneven or unstable surfaces where possible. However, when job site conditions involve slopes, inclines or rough terrain, you must take additional care when operating the machine.

- Do not travel across an incline.
- ALWAYS APPROACH AN INCLINE STRAIGHT ON AND TRAVEL UP AND DOWN THE INCLINE.
- Keep the forks pointed uphill.
- Always travel in reverse when descending an incline.
- Do not turn on an incline.
- Never stop or start suddenly.
- Operate all controls smoothly.
- Watch out for potholes or other obstacles that could affect the stability of the machine.
- Drive slowly over rough terrain.
- Where necessary, engage the diff-lock and travel slowly for additional traction.
- Do not attempt to reverse down an incline that you think you would have difficulty driving up.

Operating with a load:

- Travel with the load and forks facing uphill.
- Make allowances for a reduction in both stability and lift capacity when operating on inclines.
- Always take great care when transporting wide loads on any incline. Carry the load as low as possible above the frame of the machine.
- Keep the mast fully retracted.



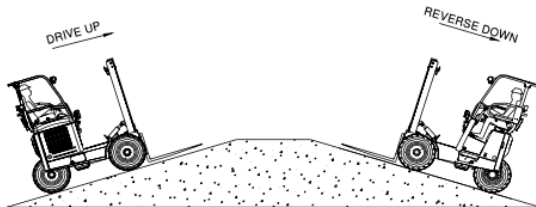
4. OPERATING PROCEDURES

Driving Techniques (continued)

Operating without a load

- Extend the mast fully and point the forks uphill on an incline.
- Keep the forks as low as possible.
- Remember that your safety is most important and should not be compromised. You are the operator and you are in control of your safety. Do not take any chances!

Always wear your seat belt when driving the Moffett Truck-Mounted Forklift. The machine may tip over if operated incorrectly. In the event of a tip over, it is best to be held securely in the seat, to protect you from the risk of serious injury or death.



WARNING:

Always wear your seatbelt when driving the Moffett Truck-Mounted Forklift. The forklift may tip over if operated incorrectly. To protect the operators from the risk of serious injury or death in the event of a tip over, it is best to be held securely in the seat. The seat and seatbelt will help keep you safely within the operators compartment. In the event of a tip over, DO NOT JUMP. Grip the steering wheel, brace your feet, lean away from the direction of tip-over and stay within the operators compartment.

4. OPERATING PROCEDURES

Diff-Lock

Operation of Diff-Lock

Under normal driving conditions the Moffett Truck-Mounted Forklift operates in all-wheel drive. However, in the event of one or more wheels losing grip, the machine may lose traction, stop or skid. By engaging the diff-lock, you will get equal positive drive to all three wheels.

When to use Diff-lock

- If one or more wheels lose traction while travelling through soft or slippery ground conditions.
- To maintain traction while travelling on slopes or inclines.
- To improve braking and traction when reversing downhill.

To avoid damage to the hydraulic system:

- Do not engage the diff-lock when the machine is moving.
- Do not use the diff-lock where traction is good.
- Do not use the diff-lock when turning corners.



CAUTION:

Use the diff-lock only while travelling in a straight line.

How to activate the Diff-lock

1. For Foot-Pedal Control

- a) Return the forward/reverse pedal to neutral position to stop the machine.
- b) Check to see that the rear wheel is in the straight-ahead position.
- c) Press and hold in the diff-lock button.
- d) Increase the engine revs to full RPM.
- e) Depress the forward/reverse pedal lightly in the required direction.
- f) Do not overload the engine.
- g) The diff-lock may be released while the machine is in motion.

2. For Automotive Type Control

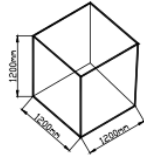
- a) Release the accelerator pedal to stop the machine.
- b) Check to see that the rear wheel is in the straight-ahead position.
- c) Press and hold in the diff-lock button.
- d) Select forward or reverse.
- e) Increase the engine RPM to move the machine.
- f) Drive the machine slowly while the diff-lock is engaged.
- g) The diff-lock may be released while the machine is in motion.

4. OPERATING PROCEDURES

Lifting And Placing Loads

A. CUBED LOADS

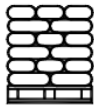
A cubed load is one that fits between the front wheels and the frame of the machine. To achieve maximum machine and load stability, the load should be carried with the mast fully back and as low as possible between the frame of the machine at all times. A common type of cubed load would be bricks, blocks, bagged goods or turf grass.



Brick / Stone



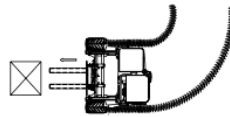
Turf Grass



Bagged Goods

Lifting a cubed load from ground level

Note: Make sure the load to be lifted is stable and secure. Check the weight and load centre of the load to be lifted. If the weight is not marked or shown on the load, check the weight of the load with your supervisor or have it weighed. If it is too heavy, split the load and restack it.



1. Align the forks to suit the load.
2. Approach the load squarely and drive slowly forward until the forks are fully engaged.
3. Check that the surface is strong enough to support the stabilisers. If not, place a metal or wooden support underneath which is strong enough to support the stabilisers.



4. Lower the stabilisers fully.
5. Tilt the mast rearwards slightly to secure the load.
6. Raise the forks to lift the load.



7. Side-shift the mast to the centre position.
8. Retract the mast fully.
9. Raise the stabilisers fully.
10. Slowly drive away looking in the direction of travel.

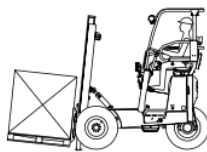
4. OPERATING PROCEDURES

Travelling with a cubed load

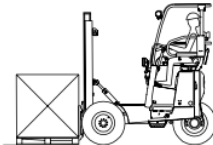


1. Carry the load as low as possible between the frame of the machine.
2. Keep the mast retracted fully.
3. Tilt the mast back.
4. Do not side-shift the load while travelling or turning.
5. Use caution when starting or stopping. Drive slowly and avoid sudden movements.
6. Always look in the direction of travel.

Placing a cubed load at ground level



1. Check the area and be certain that the load can be safely placed.
2. Approach the placement area squarely.
3. Check that the surface is strong enough to support the stabilisers. If not, place a metal or wooden support underneath which is strong enough to support the stabilisers.
4. Lower the stabilisers fully.
5. Extend the mast fully.
6. Lower the forks to the ground.

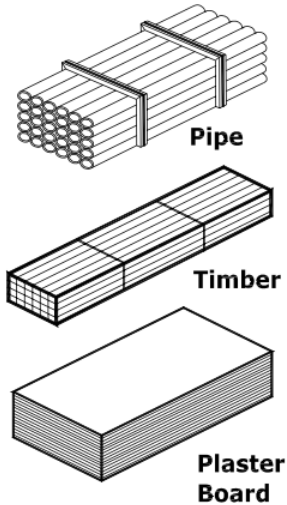


7. Tilt the mast forward slightly to deposit the load.
8. Raise the stabilisers fully.
9. Back up carefully.
10. Drive away slowly looking in the direction of travel, keeping the mast extended fully.

4. OPERATING PROCEDURES

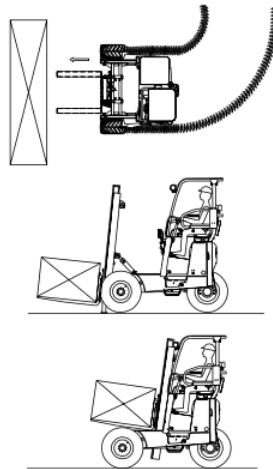
B. WIDE LOADS

A wide load is a load that will not fit between front wheels and frame of the forklift. A common type of wide load is piping or timber products.



Lifting a wide load

Note: Make sure the load to be lifted is stable and secure. Check the weight and load centre of the load to be lifted. If the weight is not marked or shown on the load, check the weight of the load with your supervisor or have it weighed. If it is too heavy, split the load and restack it.

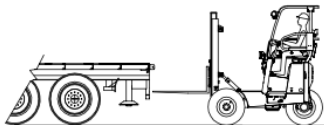


1. Keep the mast extended fully.
2. Space the forks to suit the load.
3. Align the forks to suit the load, approach it squarely until the forks are fully engaged.
4. Check that the surface is strong enough to support the stabilisers. If not, place a metal or wooden support underneath which is strong enough to support the stabilisers.
5. Lower the stabilisers fully.
6. Raise the load to clear the ground.
7. Tilt the mast rearwards to secure the load.
8. Raise the load to clear the frame and wheels of the forklift.
9. Side-shift the mast to the centre position.
10. Retract the mast fully to bring the load above the front wheels.
11. Raise the stabilisers fully.

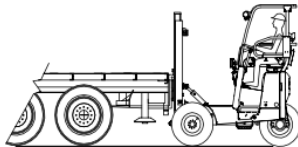
5. MOUNTING PROCEDURES

Mounting Procedure

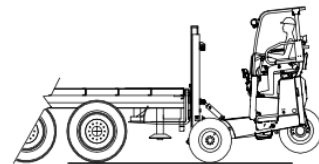
- On trailers, the folding rear bumper should be folded in and pinned on both sides.
- Approach the rear of the truck or trailer slowly and squarely. Extend the mast fully and centre the sideshift.
- Adjust the forks equally on the fork carriage to align them with the fork guides and ensure they are positively locked in place on the forkrail.



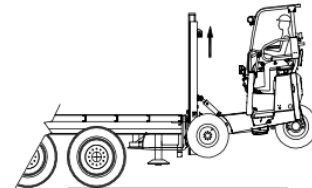
- Raise the forks to align them for entry between the fork guides.



- Drive slowly forward until the forks are fully engaged between the front and rear fork supports in the mounting kit.

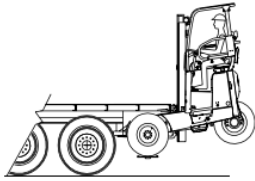


- Tilt the mast fully rearward to raise the rear wheel.

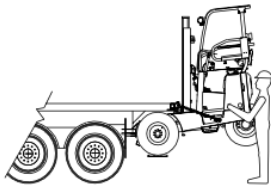


- Lower the forks using the lift lever until the bottom of the front wheel of the forklift is slightly higher than the wheel rests of the mounting kit.
- Retract the mast fully to move the forklift forward "into" the mounting kit until the front wheels contact the wheel stops.

5. MOUNTING PROCEDURES



- Turn the steering wheel to ensure that the rear wheel is pointing straight ahead.
- Turn the engine off.
- Dismount using the three point contact method.
- Attach both transport chains securely to the rear of the truck or trailer and put the lock pins in place.



- Push and hold in the " **Lower & Go**" button.

Note: if the machine is fitted with "Groundstart" press the bottom of the rocker switch to lower the machine.

- Observe that the forklift settles on the mounting kit.
- Connect the suzie cable and check that all lights are functioning properly.



CAUTION:

It is important to ensure the pigtail (suzie socket) connector is fitted correctly and that the lights on the rear of the Moffett Truck Mounted Forklift are functioning properly.

Note: Always ensure the park brake is off when mounting or dismounting the machine. Always wear your seatbelt, failure to do so will cause the park brake to automatically engage and make mounting difficult.



CAUTION:

It is important to release the hydraulic pressure as stated so that the weight of the Moffett Truck-Mounted Forklift is carried by the mounting kit and transport chains and NOT by the mast. Otherwise damage will result from the forklift's weight resting on the mast.



CAUTION:

The rear bumper must be folded back out to full length and the locking pin and linch pin fitted when the forklift is not being transported or removed for the purposes of loading or unloading.

Note: Always remember:

- To lower the forklift you must raise the mast.
- To raise the forklift you must lower the mast.
- To tilt the forklift up you must tilt the mast back.
- To tilt the forklift down you must tilt the mast forward.

5. MOUNTING PROCEDURES

Dismount Procedure

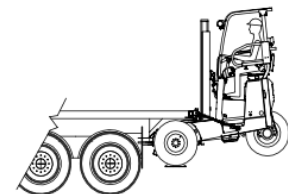
- Disconnect the electrical cable and store in a safe place.

Note: At this point there are 2 options available, depending on the specification of your machine.

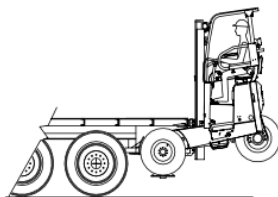
OPTION A;

For machines **not equipped** with "Groundstart".

- Climb aboard using the three point contact method.
- Close the side guard fully.
- Fasten your seatbelt.
- Start the forklift.



- Raise the forklift off the wheel rests by lowering the forks until the wheels slightly clear the wheel rests.
- Tilt the mast fully rearward. The weight of the forklift is now on the forks.



- Turn off the engine.
- Unfasten seatbelt and open side guard fully.
- Dismount using the three point contact method.
- Close the side guard fully.

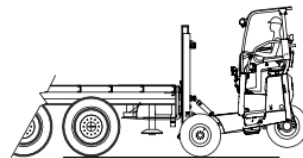
OPTION B;

For machines **equipped** with "Groundstart".

- The red isolator button must be pressed in fully at the same time as the top of the switch to activate the lift function. Observe that the forklift raises on the mounting kit and the chains become slack.

Note: Procedure is now the same for Options A & B

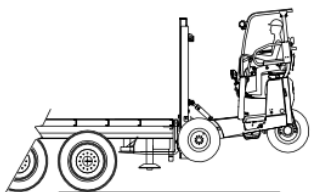
- Remove both slackened transport chains from the rear of the truck or trailer and place them in the hooks provided.



- Replace the pins and locks in the chain brackets.

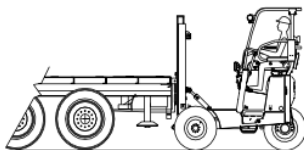
5. MOUNTING PROCEDURES

- Open side guard fully and climb aboard the forklift using the 3-point contact method.
- Close the side guard fully.
- Fasten the seatbelt.
- Start the engine.
- Extend the mast slowly forward to move the forklift backward out of the mounting kit.



- Raise the forks to lower the forklift to the ground.
- Tilt the mast forward until the wheel touches the ground.

- Raise the mast slightly to pressurize the mast lift cylinder and to clear the fork brace. (This may take several seconds.)



- Ensure the rear wheel is pointing straight ahead.
- Back up slowly until the forks are fully clear of the front and rear guides.
- Lower the forks as low as possible, keep the mast extended fully and drive off, looking in the direction of travel.
- On trailers, the folding rear bumper should be extended and pinned on both sides.

- Before load handling it may be necessary to adjust the forks to suit the load or pallet.

Note: Always ensure that all Local and National laws are obeyed at all times. Make sure all operating and directional signal lights are functioning and visible. The rear bumper must be locked at full length when the forklift is not being transported.

Note: Always ensure the park brake is off when mounting or dismounting the machine. Always wear your seatbelt, failure to do so will cause the park brake to automatically engage.