Electric forklift operating instructions



Introduction

This manual should be placed in the data storage area inside the cab or behind the seat.
Includes safety, operation, transportation, lubrication, and maintenance information.

Details and accessories shown in the photographs or illustrations in the manual may differ from your forklift and sometimes covers and caps are removed for illustration purposes.

This manual does not cover changes in forklift products due to continuous design improvements and enhancements. Please read, study and carry this manual in your vehicle.

If you have any questions about forklifts and manuals, please contact our dealer to get the latest information

Safety

The safety section lists basic safety protection knowledge. In addition, it also lists the content and location of warning signs and warning signs on the forklift. Before operating the forklift or lubricating, maintaining, or repairing the forklift, please read and understand the basic safety precautions in the safety section.

Driver safety system (if equipped)

This manual contains safety, operation and maintenance information for the NEWRICK forklift operator safety system. Please study and research carefully and keep it at hand.

NEWRICK forklifts according to the correct procedures , improving the driving safety of operators.

The safe and efficient operation of a forklift depends largely on the skill and vigilance of the operator. To improve this skill, the operator should read and understand the "Safe Driving Practices" section of this manual.

Forklifts rarely roll over, but when they do, the driver may be pinned to the ground by the forklift or the roof guard. This can result in serious injury or death. Driver training and safety alerts are effective ways to avoid accidents.

This manual contains information for safe operation. Before operating the forklift, be sure to obtain the necessary instructions and understand them.

operate

The operation section is both a reference for novice drivers and a review for experienced drivers. This section includes descriptions of the following:

Gauges, switches, forklift and attachment controls, transportation.

Pictures and illustrations are used to guide the operator in the correct way to inspect, start, operate and stop the forklift.

The operating methods listed in the manual are the most basic. Once the forklift functions and their knowledge are mastered, the driver's skills and abilities will improve.

maintain

The Maintenance section is a guide to equipment maintenance. The maintenance cycle consists of maintenance details for each step shown in the illustrations. Items that do not have a specified deadline are listed under the heading "Maintenance as Needed". Maintenance items in the "Maintenance Cycle" are detailed below.

Maintenance cycle

Use a maintenance hour meter to determine maintenance cycles. If a scheduled cycle display (day, week, month, etc.) can more conveniently show maintenance dates and estimate maintenance hours, it can be used instead of a maintenance hour meter and regular maintenance must be performed.

Operation in heavy, dusty, wet environments may require shorter lubrication intervals than those specified in "Maintenance Intervals".

Previous maintenance items should be repeated. For example, "maintenance every 500 hours or 3 months" should be performed at the same time as "maintenance every 250 hours or monthly" and "maintenance every 10 hours or daily".

Environmental Management

Note: The company has passed the CE certification and complies with the ISO9001 standard. Domestic and foreign assessment agencies regularly conduct environmental reviews and environmental performance assessments. Life cycle analysis is also performed throughout the product life cycle. The design of the environmental management system fully considers environmental factors.

The environmental management system involves environmental laws and regulations, energy conservation, environmentally friendly product design, recycling, low-consumption materials and employee environmental education.

Product Introduction

Forklifts play a very important role in the enterprise logistics system. They are the main force of

material handling equipment and are widely used in national economic sectors such as stations, ports, airports, factories, warehouses, etc. They are efficient equipment for mechanized loading and unloading, stacking and short-distance transportation.

my country began to manufacture forklifts in the early 1950s. Especially with the rapid development of my country's economy, material handling in most companies has moved away from the original manual handling and replaced it with mechanized handling mainly using forklifts.

Important Safety Information

Most accidents associated with product operation, maintenance and repair are caused by ignorance of basic safety rules and protection knowledge. Accidents can often be avoided by being aware of potential hazards before they occur. Drivers must be alert to potential hazards and must be technically trained and fully aware of the functions of the tools they use.

Improper operation, lubrication, maintenance or repair of this product may be dangerous and result in injury or death.

Do not operate the machine or perform lubrication, maintenance, or repair work until you have read and understood the operating, lubrication, maintenance, or repair information.

Safety warnings are mentioned on the device and in the manual, which, if not heeded, could result in injury or death to you and others.

Hazards are indicated by the “Safety Alert Symbol” and the word “WARNING” shown below.

warn
The meanings of the safety warning signs are as follows:

Attention! Warning! Danger!

Hazard warning messages may be written or illustrated on the machine and in this manual.
Actions that could result in damage to the machine are indicated by warning labels on the machine and in this manual.

It is impossible for our company to list all possible dangerous situations, so the warnings on the machine and in this manual do not cover all dangers. If the tools, work processes, work methods and operating techniques are not specified by our company, you must operate them under conditions that can ensure the safety of you and others, and make sure to use the operation, lubrication, maintenance and repair methods you choose to avoid damage to the machine or unsafe conditions.

Safety

The information, specifications, and illustrations in this manual are those available at the time this manual was written. Specifications, torques, pressures, measurements, adjustments, illustrations, and other items are subject to change. These changes affect the maintenance of the machine. Before performing any work, obtain complete and current information. This agent can provide the latest information. Some of the safety rules and regulations in this manual are representative portions of the Occupational Safety and Health Regulations (OSHA), but are not taken in their entirety and are paraphrased rather than verbatim.
Refer to all OSHA codes and regulations for safe operation of powered industrial forklifts, including 1910.178 Federal Register 37 No. 202, National Fire Protection Association No. 505 (NFPA), American National Standard ANSI B56.1 “Safety Standard for Low-Lift and High-Lift Forklifts” and all subsequent revisions. Because regulations vary in countries outside the United States, forklift operation should be conducted in accordance with local regulations.

Electric forklifts are manufactured in accordance with the rules and standards of EU Directives 98/37/EC and EMC89/336/EC. For the safe use of NEWRICK forklifts, please refer to Directives 89/655/EC and 89/391/EC and their amendments.

Do not operate the forklift if it requires repair, is faulty or in any unsafe condition. Report faults and unsafe conditions immediately. Do not allow any adjustments or repairs to be performed by untrained and unauthorized personnel.

Warning signs and warning labels

There are several special safety signs on your forklift. This section again describes their exact location and hazard warnings. Please take the time to familiarize yourself with these safety signs.

Make sure you can see all safety signs. If you cannot see them clearly, clean or replace them. Wash with cloth, water and soap. Do not use solvents, gasoline, etc.

If the logo is damaged, missing or illegible, it must be replaced. When replacing, be sure to leave the original logo in place and request a new one from your dealer.

Improper operation or maintenance may result in injury or death. Do not operate or operate a forklift without training,

Read and understand the Operation and Maintenance Manual. Supplemental manuals are available from your electric forklift dealer.
Information about forklift trucks with a certain load capacity is also provided here.

General warning to drivers

Only trained and authorized personnel may operate this vehicle. For safety reasons, please read and operate this forklift in accordance with the operation and maintenance manual and pay

attention to the following warnings:
1. Before starting, check all controls and alarms.
2. Refer to the machine's load curve plate, do not overload, operate the forklift equipped with attachments, when not loaded, the attachment should be considered part of the load.
3. Before turning on the key switch, the tip change handle should be in the neutral position.
4. Starting, steering, and braking should be smooth. Slow down on slippery roads and when turning. Avoid loose objects and potholes on the road. Be especially careful when turning on slopes. When driving under load, keep the cargo as low as possible and tilt it back. If the cargo blocks the view, the vehicle can be driven backwards.
5. When operating on a slope, the load should face the top of the slope.

6. Pay attention to pedestrians and obstacles and ensure good forward visibility.
7. Riding on forks or forklifts is not permitted at any time.
8. No one should stand or pass under the lifting part of the forklift.
9. Confirm that the surface of the operating area can safely support the forklift.
10. Operate the forklift and its attachments only from the driver's seat.
11. Do not carry unstable or loose cargo.
12. Use minimum tilt angles when picking up and placing loads.
13. Special care must be taken when handling long, wide or high loads.
14. The forks should be fully extended under the cargo, and the fork spacing should be increased as much as possible within the range allowed by the cargo.
15. The forklift should be equipped with an overhead guard or
Proper protective equipment. If necessary, racks should also be equipped. Be especially careful when you don't have these equipment.
16. Lower the lifting device to the ground when parking. The reverse handle is in the neutral position. Set the parking/secondary brake. Turn off the "ON-OFF" switch. If the machine is on a slope, secure it with a wedge.

When storing an electric forklift, disconnect the battery.

When replacing an electric forklift battery, safety regulations must be followed.

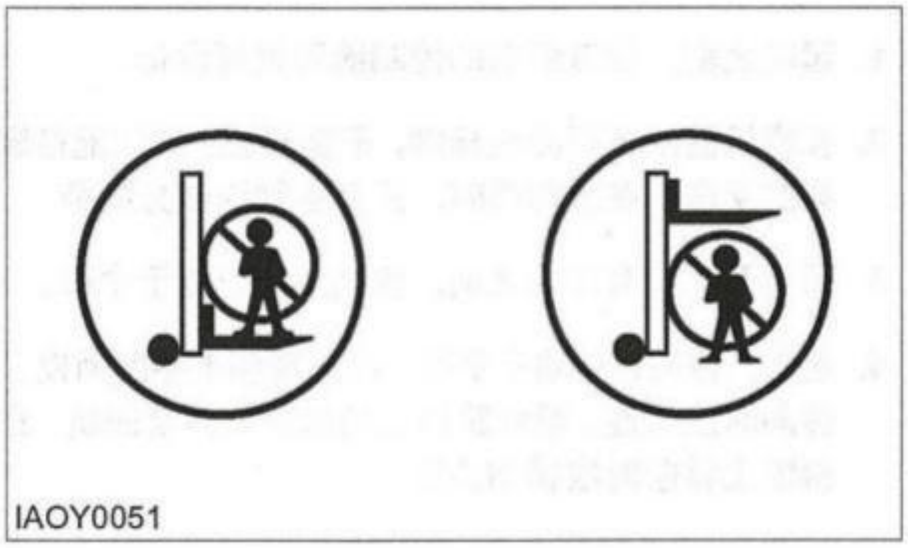
Do not touch, lean against, or reach through door frames, and do not allow others to do so.

Do not stand on the fork warning

Do not stand under the fork warning

Do not stand or sit on the forks.

Do not stand or sit on the pallet or cargo on the forks. Do not stand or walk under the forks.



! warn

When servicing or repairing a forklift, place a "DO NOT OPERATE" or similar warning label on the start switch or lever.

Do not start or service a forklift with a "DO NOT OPERATE" or similar label on the start switch or lever.

Wear helmets, safety glasses or other protective equipment according to working conditions.

The driver should be aware of the width of the forklift attachment so that proper clearance can be maintained when working close to fences or around obstacles.

Do not wear loose clothing or jewelry that could get caught on the controls or other parts of

the forklift.

The forklift, especially the floor and pedals, must be free of debris, oil, tools and other foreign objects that do not belong to the forklift.

Secure all loose items such as lunch boxes, tools and other items that do not belong on the forklift.

The driver should understand the hand gesture language at the scene, know who is making the gesture, and only receive signals from one person.

Always use overhead guards to protect the driver from overhead obstacles and falling objects.

When a forklift is transporting small items or uneven loads, racks must be used to secure the goods.

If you cannot use an overhead guard due to limited headroom, use caution.

Confirm that there is no possibility of falling objects in any work area or nearby storage areas. Make sure the load is stable and fully supported by the forklift or rack (if equipped).

The lifting load should not exceed the required height.

With the overhead guard removed, do not lift the load above 1830mm (72in).

A cargo rack is used when the forks or attachments cannot fully support the load. A cargo rack is used to prevent any part of the load from falling backwards over the operator's position.

When operating a forklift, do not rely on flashing lights or a backup alarm (if present) to alert passersby.

Always be aware of pedestrians and only operate the forklift when they are aware of the forklift and keeping a safe distance from the forklift or load.

Do not drive the forklift towards people standing in front of objects. Obey traffic regulations and warning signs.

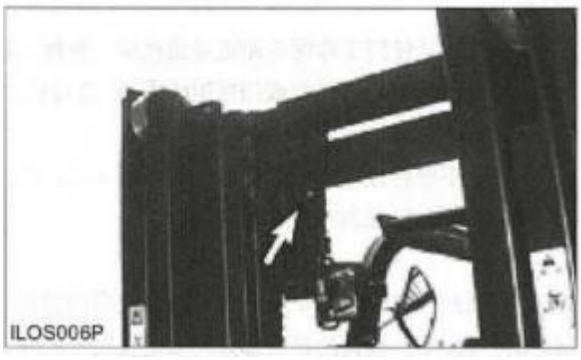
When operating a forklift, the operator's hands, feet and head should be in the operator's position and do not hold onto the overhead guard. Do not climb on any part of the mast and overhead guard, and do not allow others to do so.

Unauthorized persons are not allowed to ride on the forks or in any position on the forklift at any time.

When vehicles are operating inside buildings or docks, attention should be paid to the load-bearing capacity of the ground and the overhead clearance.

Do not place curing fluid in glassware. Use all cleaning solvents with caution.

Do not use steam, solvents, or high-pressure gases to clean electronic equipment. Report all items requiring repair.



Inspect the portion of the chain that passes over the crosshead sprocket during normal operation.

As the chain passes over the sprocket, the movement of the components against each other causes wear.

Check to make sure the chain pin does not protrude from the pin hole.

If either pin sticks out of the chain, it may have broken in the hole. Inspect the chain and pins for wear.

Do not change the factory-set adjustment parameters (including the drive motor speed setting) if you are not authorized and specially trained. In particular, safety devices and switches must not be removed or incorrectly adjusted. Improper repairs, adjustments and maintenance can lead to dangerous factors in operation.

For inspection, repair, adjustment, maintenance and any other work on your forklift, please contact our dealer. We must remind you that we are not responsible for any damage caused by improper operation, insufficient maintenance, faulty

We are not responsible for any secondary damage caused by repair or use of parts other than this spare part.

Operation data on and off

Be careful when getting on and off the bus.

Please clean your shoes and hands before getting on the bus.

Keep both hands firmly facing the forklift when getting on or off the vehicle. Hold onto the handrails when getting on or off the vehicle.

Do not get in or out of the vehicle with tools or other objects in your hands.

Do not use any handlebars or similar when entering or exiting the driver's seat.

Never get on or off a forklift while it is in motion. Never jump off a forklift.

Keep slippery substances away from your hands and the steering wheel.

Before using the forklift

Perform a “walk-around” inspection each day and at the start of each shift. Refer to the “walk-around” section of this manual under “Every 10 hours of operation or routine maintenance”.

Adjust the seat so the driver always rests against the seatback when pressing the pedals.

Verify that the forklift is equipped with a lighting system for the required conditions.

Verify that all hydraulic control handles are in the locked position. Verify that the reverse lever is

in the neutral position.

Verify that the parking brake is applied.

Before starting or driving the forklift, make sure that no one is standing and/or working on, near or under the forklift.

The truck may only be operated and controlled from the driver's seat.

Confirm that the forklift horn, lights, reversing warning lights (if equipped) and other facilities are working properly.

Check that the gantry and accessories are in working order. Pay special attention to unusual noises and movements that could indicate a problem.

Check that the service and parking brakes, steering and reverse handles are in working order.

Keep all personnel away from the forklift and its path.

Refer to the “Forklift Operation” instructions in the “Operation Section” of this manual for detailed startup instructions.

Start the forklift

Do not start the truck or move any levers when a "DO NOT OPERATE" or similar label is attached to the start switch or levers.

Before operating a forklift

Check the brakes, steering handle, horn and other equipment for proper operation. Report any malfunctioning items and do not operate the truck until repairs are complete.

Understand the working principle of the forklift, the safety equipment and the functions of the accessories. Before operating the forklift, you should conduct an inspection. Keep it stable when starting, turning and braking.

The driver must always check that the forklift is working properly.

Operate a forklift

Always control the forklift. Obey traffic regulations and warning signs.

Never leave the truck with the drive motor running or without the parking brake applied.

Whether loaded or not, you need to lower the mast before turning or driving, otherwise it will cause a rollover. Be aware of obstacles above the overhead guard.

Pay attention to the ground bearing capacity and

Roof clearance height.

Starting, steering and braking should be smooth, and speed should be reduced when turning, going uphill, or on flat or uneven roads.



Be especially careful when driving on a slope. Do not turn or cross diagonally on a slope. Do not use a forklift on a slippery slope. When driving without a load, the forks should point downhill, and when loaded, the forks should point uphill.

Do not overload or carry offset, unstable and loosely stacked loads. Refer to the load curve plate on the forklift. Be especially careful when carrying overhanging "extra long, extra wide" tall loads.



Only in the unloading area, when the cargo is lifted, may the cargo be tipped forward and the load reduced as much as possible. Stunt driving and playing are not allowed.

Always observe and maintain a clear view of your driving route.

If the goods or accessories

If your view is blocked, you can drive in the opposite direction. Use extreme caution if your view is blocked.

Forklifts should be parked on designated travel routes, away from dock edges, ditches, steep slopes, and roads that cannot safely support the forklift.

Slow down and use extreme caution when passing through doorways, intersections, and other areas of poor visibility.

Slow down to avoid lanes, corners, ramp "pits", uneven or slippery roads, and areas of heavy traffic.

Pedestrians, other vehicles, obstacles, potholes, or other dangerous objects on your route.

Overhead guards should always be used unless operating conditions do not permit. Do not operate a forklift without overhead guards and with a load piled high.

Watch out for falling objects when stacking and use rack and overhead guarding.

Refer to the “Operational Specifications” item in the “Operation Section” of this manual.

Loading and unloading on vehicle/trailer

It is strictly forbidden to operate a forklift on a vehicle or trailer that is not allowed to operate a

forklift. Before entering a vehicle or trailer, confirm that the vehicle or trailer is braked and the wheels are blocked (or the equipment is secured to the loading dock).

If the trailer is not connected to the tractor, verify that the trailer anchors are in place. Some trailers require additional support to prevent tipping or partial sinking.

Verify that the deck is in good condition, in the correct position, and securely fastened. Do not exceed the load rating of the deck or bridge.

capacity.

Forklift parking

When leaving the driver's seat, park the forklift in a designated location and do not obstruct traffic.

Park the forklift horizontally with the forks lowered, the mast tilted forward and the forks placed on the ground.

The reverse control handle is in the middle. Use the parking brake.

Turn off the key switch and remove the key.

Place the emergency stop switch in the "OFF" position (if equipped). When the forklift is parked

on a slope, chock the drive wheels. If there are no other issues, follow these steps to maintain the vehicle:

Forklifts may only be parked in designated areas.

Park the forklift horizontally, with all forks lowered, the mast tilted forward, and the forks touching the ground.

Reverse handle in mid-range. Apply handbrake.

- Turn off the key switch.

Remove the key and turn the emergency stop switch to the "OFF" position (if installed).

When the truck is parked on a slope, wedge the drive wheels. Compressed air

Compressed air can cause injury. Wear a protective mask, protective clothing, and protective shoes when cleaning with compressed air.

The maximum pressure of compressed air used for cleaning must be less than 205kPa.

Liquid Leakage

Use a board or cardboard to check for leaks. Liquid leaking from even a small hole can enter the body under pressure and cause serious injury or even death. If liquid enters your body, it must be

treated immediately by a doctor familiar with this type of injury.

Prevention of crush or cut injuries

Properly support the equipment and its attachments when working on or below them. Do not rely on the hydraulic cylinders for support. Any attachment could fall if a lever moves or a hydraulic hose ruptures.

Unless otherwise specified, no adjustments are permitted while the truck is moving or the motor is running.

In areas with moving equipment, clearance in the moving area will increase or decrease as the equipment moves. Maintain distance from all rotating and moving equipment.

Do not use knotted or frayed cables, and wear gloves when unplugging cables. When the dowel pin is hit hard, fragments and iron filings may fly out and injure people nearby. Before hitting the dowel pin, make sure there are no other people around.

Wear protective glasses to avoid eye injury when hitting the dowel pins hard.

When you hit an object, splinters and shavings may fly. Before you hit anything, make sure no one will be injured by the flying debris. Fall Object Protective Structure (FOPS)

Overhead guards are attachments located above the cab to protect the forklift.

To avoid compromising the functionality of the Fall Object Protective Structure (FOPS), consult your dealer before adding weight, welding, cutting, or drilling holes in the overhead guard.

An overhead guard does not protect against all possible impacts. It will not protect against objects that penetrate the operator's position from the side or end of the truck.

Forklifts are typically equipped with standard overhead guards and any modifications not expressly authorized by this document are not covered by this document.

Do not weld brackets or drill holes in the overhead guard (for mounting fire extinguishers, first aid kits, lights, etc.). Consult your dealer for installation instructions.

Preventing burns

Hydraulic oil

Hot oil and hot parts can cause personal injury. Do not allow hot oil or parts to come into contact with your skin.

The hydraulic oil tank is hot and pressurized at operating temperature. Slowly unscrew the hydraulic oil tank filler cap to relieve pressure.

Relieve air "oil pressure" or cooling system pressure before disconnecting or removing any lines, components or related parts.

Battery

Batteries can release flammable gases which can cause an explosion. Do not smoke when checking the battery electrolyte level.

The electrolyte is acidic and can cause personal injury if it comes in contact with skin or eyes.

Wear safety goggles when handling batteries. To prevent fire or explosion

Most lubricants, coolants and batteries are flammable.

Never smoke in areas where batteries are being changed or flammable materials are stored.

The batteries in the battery pack can be placed individually. When using jumper cables, connect the positive (+)

Connect the positive (+) wire from the starter relay terminal to the starter relay. And connect the negative (-) wire pulled from the outside to the negative (-) terminal of the starter.

Refer to the Operation section of this manual for special startup instructions.

Clean and tighten all electrical connections. Check wires daily for loose and frayed wires. Repair or replace all loose, frayed, and worn wires before operating the forklift.

Store all lubricants in labeled containers out of reach of unauthorized personnel.

Keep any tarps or other flammable items in your protective gear in a safe place.

Do not weld or torch cut pipes containing flammable liquids. Before welding or torch cutting, clean with a flame retardant solvent.

Remove fuel, oil and other flammable debris before it accumulates on your forklift.

Try not to place the forklift in an environment with smoke or burning.

Do not operate a forklift in areas where explosive gases are present or may be present

Pipes and hoses

Do not bend or hit the high-pressure lines. Do not use bent or damaged high-pressure line hoses

and rubber tubes.

Repair loose or damaged fuel line hoses and rubber hoses. Leaks can cause fire. Contact your dealer for repair or replacement.

Carefully check pipes, hoses and rubber hoses. Do not check for leaks with your bare hands, but use a piece of wood or cardboard to check for leaks. Refer to the "Liquid Leaks" instructions in the Safety section for more information.

Tighten all fittings to the specified torque.

Please replace the joint in time if it is damaged or leaking.

The outer layer is worn and cut, and the metal layer is exposed. The outer layer is partially raised.

Hose is visibly kinked or pinched.

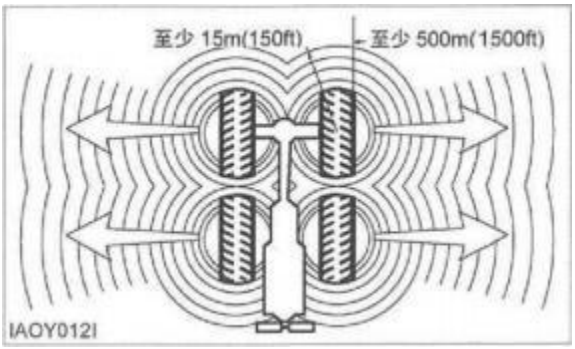
The protective layer is built into the outer layer of the hose. The connector has been displaced.

Check that any clips, guards or insulation are properly installed to prevent vibration during operation and overheating caused by wear and tear with other parts.

Tire information

The heat from burning gases inside the tire can cause the tire to explode. Heat from welding or cutting rim parts, external flames, and excessive use of brakes can all cause overheated gases to burn.

A tire blowout is much more severe than a tire puncture. The explosion could destroy tires, rims, and drive components up to 500 meters (1500 feet) from the forklift. The force of the explosion and flying debris could cause personal injury and property damage.



Do not enter the area around the tires as shown above

It is recommended to use dry nitrogen (N2) to inflate tires.

Initially filled with air, preferably nitrogen for convenience

Adjust the pressure. Nitrogen and air can be properly mixed. Since nitrogen is not flammable, filling tires with nitrogen will reduce the risk of tire explosion. At the same time, nitrogen helps prevent

Oxidation and the resulting aging of the rubber and corrosion of the rims. To avoid overinflation, use appropriate nitrogen inflation equipment and receive the necessary training in its use. Improper use or abuse of equipment can result in a flat tire or rim damage.

To inflate the tire, stand behind the tire and use the self-locking deck. Tire and rim repair and replacement can be dangerous and should only be performed by trained personnel using the proper tools and correct procedures. If proper procedures are not followed when repairing tires and rims, parts may suddenly explode and

could result in serious injury or death. Carefully follow the detailed information provided by your tire or rim servicer or dealer.

Operator safety system (if equipped)

Seat adjustment





Move the handle to adjust the seat to the desired position and release the handle.

Adjust the seat before operating the forklift. After adjustment, shake the seat to see if it is properly positioned. Do not adjust the seat while the forklift is in operation.

Notice

Do not place your hands or fingers under the seat as the seat may severely injure your hands when it swings up and down.

Before entering the forklift, adjust the seat's suspension height using the clamps on the rear of the seat (if equipped).

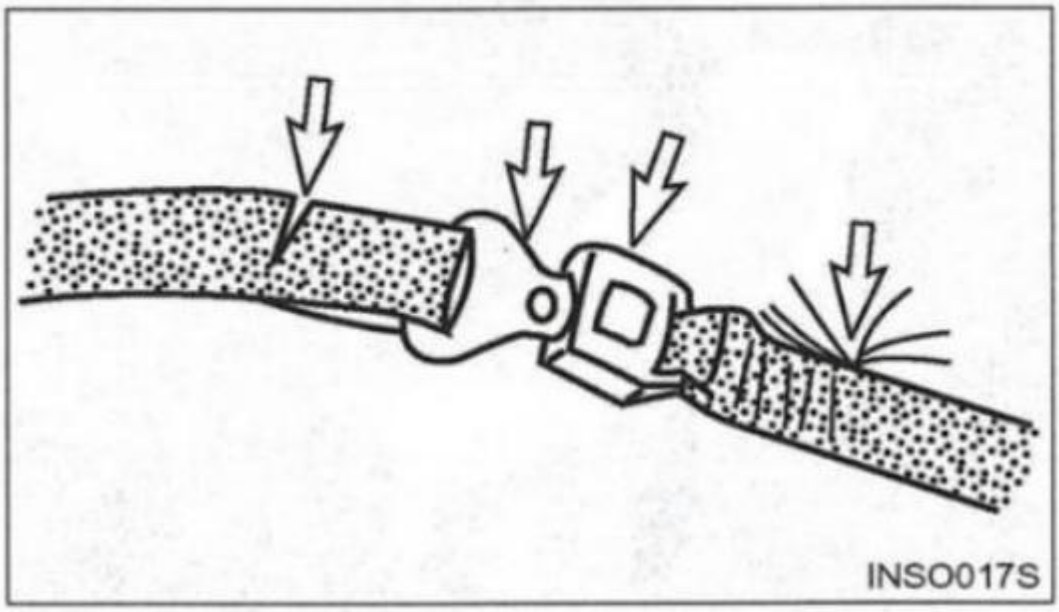


seat belt

The operator safety system prevents the operator from being ejected from the cab if the truck is tilted forward or sideways.

Backrest tilt

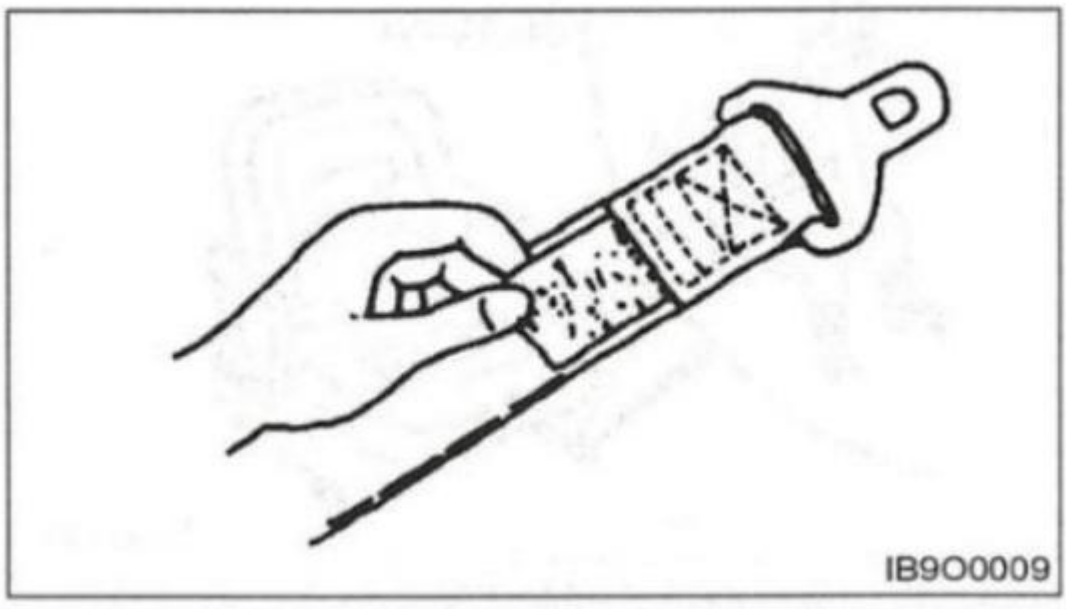
The system is designed to secure the driver in the operator seat in the event of a rollover.



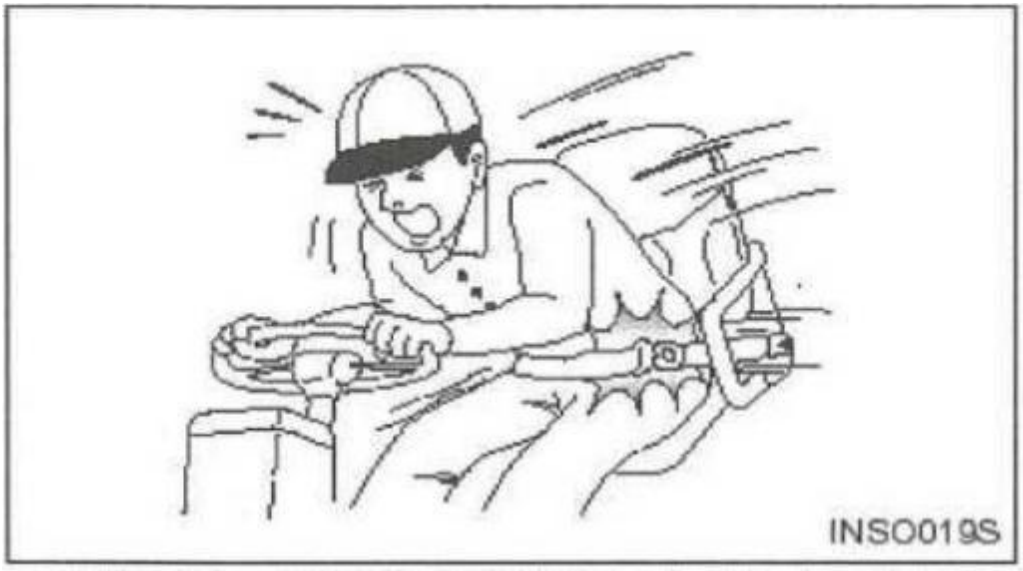
1. If the seat belt tears, or becomes stuck during extension, or the seat belt cannot be inserted

into the buckle properly,

Please replace the entire seat belt.



2. Seat belt maintenance - Every 500 hours. Check that the seat belt buckle is intact and the coiled part is not twisted when pulled. Check that the seat belt is properly fastened to the seat. Check that the seat is firmly between the hood and the chassis. When performing a visual inspection, confirm that the buckle must be intact, otherwise contact the safety manager.



3. If the vehicle rolls over, check the seats and safety systems for damage and replace if necessary.

Note: The driver safety system inspection should be included in the forklift daily maintenance

plan. If the following conditions are found, it is recommended to replace the safety system.

Seat belt cracks or wear parts are worn or damaged, including worn or damaged retaining pins,

buckles or housing failures , loose stitching .

warn

Seat belts may cause the driver to hunch over. If you are pregnant or have abdominal disease,

consult your physician before operating a forklift.

Fasten your seat belts



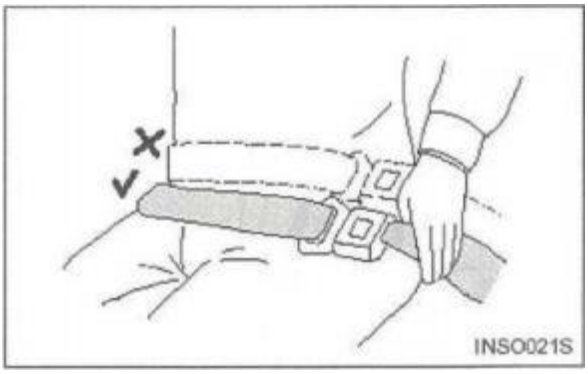
1. Hold the seat belt by the buckle (joint) and pull the seat belt out of the housing. Then insert

the clip into the buckle until you hear a click. Pull on the seat belt to make sure it is fastened.

2. Make sure the seat belt is not twisted.

warn

If the seat belt is worn across the abdomen, this may cause abdominal injury in the event of an accident.

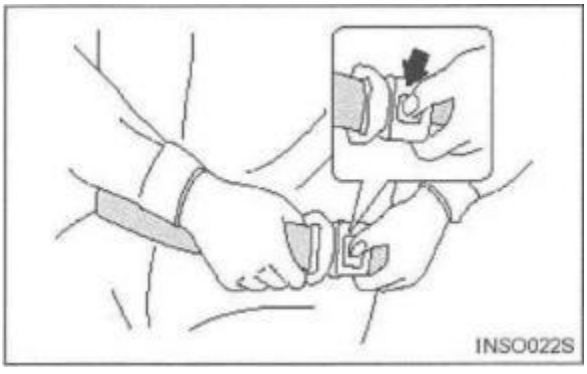


Make sure the seat belt is worn across the hips, not the abdomen.

Note: The seat belt automatically adjusts to your size and handling. In an accident, when the seat belt is suddenly tightened,

The automatic adjuster will pull the seat belt back.

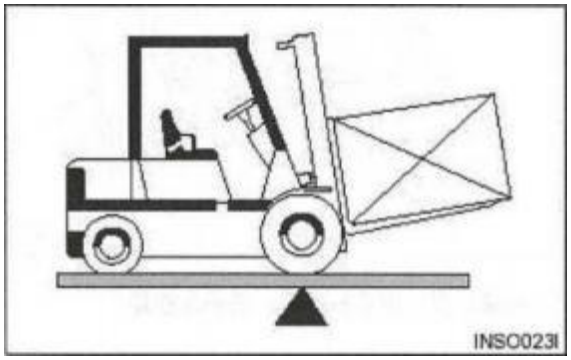
Unfasten your seat belt



Release the seat belt by pressing the button on the buckle. The seat belt should retract automatically when released.

Grasp the seat belt connector to allow the seat belt to retract automatically to prevent the forklift from tipping over

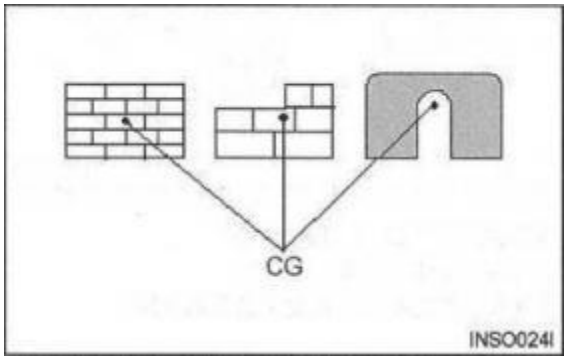
Forklift stability



The balance design principle of a forklift is to keep the weight on both sides of the fulcrum (front axle) in the opposite direction balanced. The weight of the load on the forks must be balanced with the weight of the forklift.

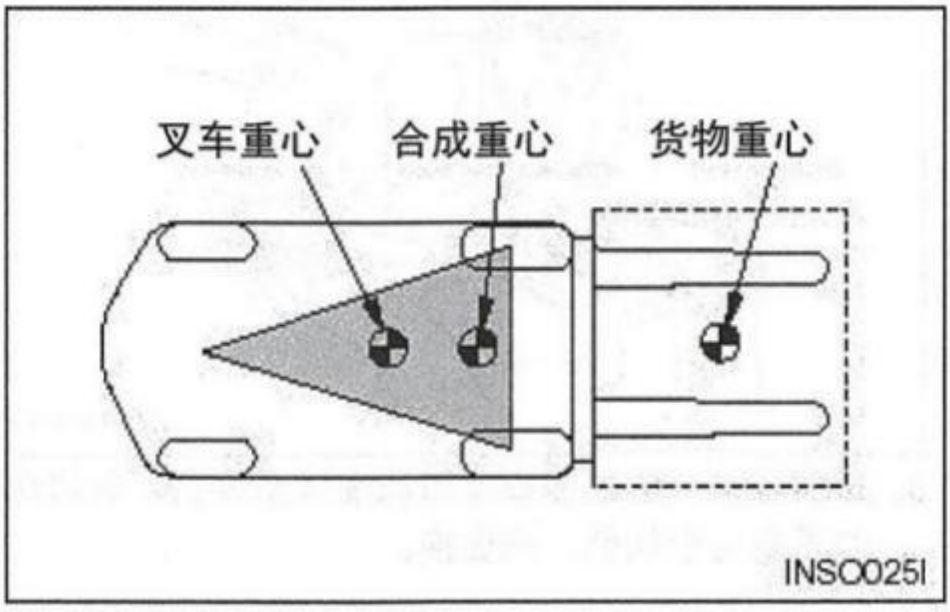
The center position of the forklift and the load is an important factor. This is the basic principle of lifting loads. The lifting capacity of the forklift depends on the center of gravity and the front as well as the lateral and longitudinal balance of the forklift.

Center of Gravity (CG)



The point inside an object that can be considered the point where the weight of the entire object is concentrated is called the center of gravity or CG. If the object is regular in shape, its geometric center coincides with the center of gravity. If the shape is irregular, the center of gravity may be outside the object. When a forklift lifts a load, the forklift and the load have a new composite center of gravity.

Stability and center of gravity



The stability of a forklift is determined by the position of its center of gravity; if the forklift is

lifting a load, it is determined by the combined center of gravity of the forklift and the load. A forklift has moving parts, so its center of gravity moves. When the mast tilts forward or backward, the forklift's center of gravity moves forward or backward. When the mast moves up or down, the vehicle's center of gravity moves up or down. Therefore, when a forklift is lifting a load, its center of gravity and stability are affected by the following factors:

●The size, weight, shape and location of the cargo

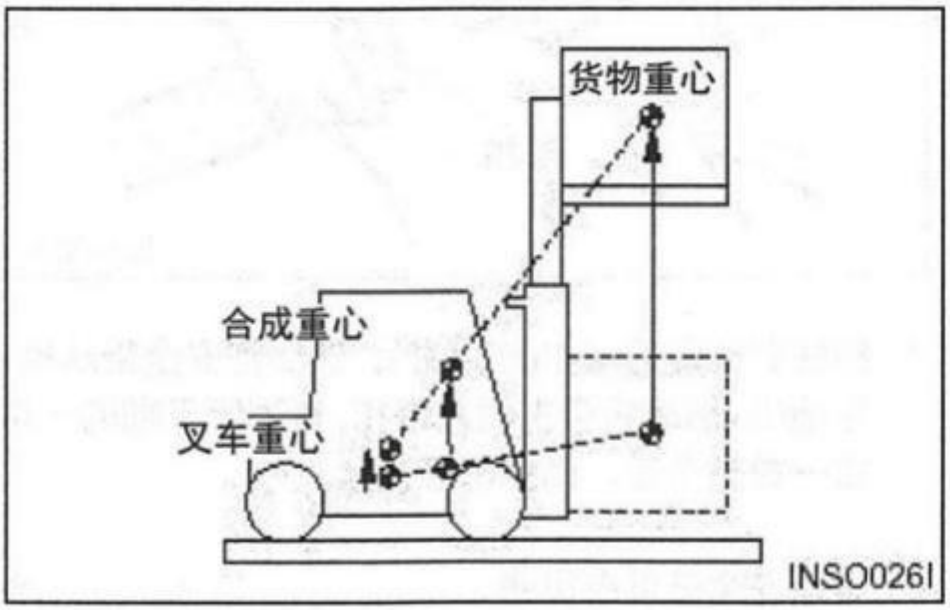
●Cargo lifting height

● Angle of tilt forward or backward

Tire pressure

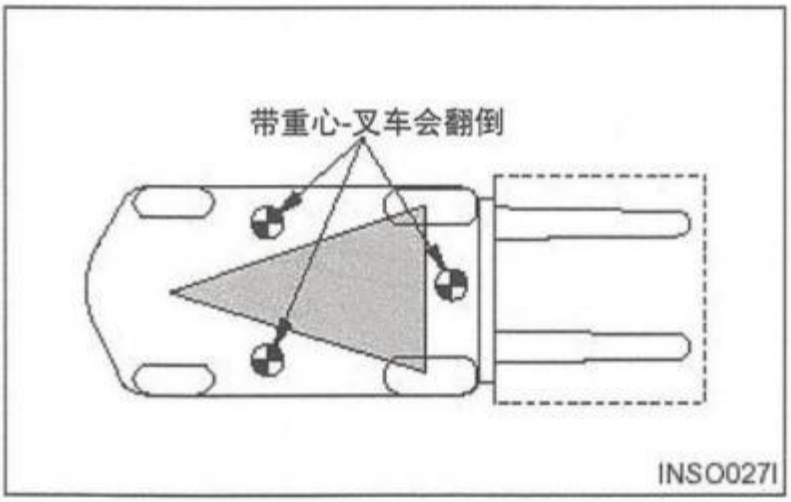
●The power generated when the forklift accelerates, brakes or turns

●Road conditions and slopes when operating a forklift



These factors are equally important for unladen forklifts, which are more likely to tip over sideways than forklifts with low loads.

Stable base for forklifts



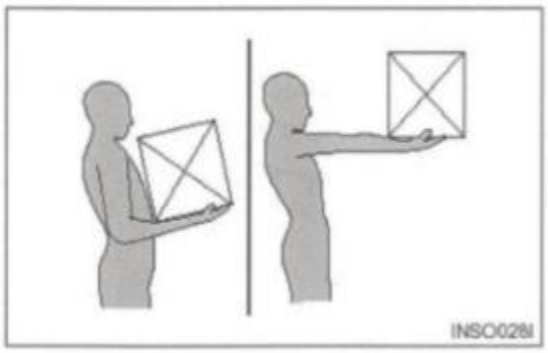
In order for the forklift to remain stable (not tipping forward or to the sides), the center of gravity

must be kept within the forklift's basic stable area - the triangular area between the forklift's front wheels and the steering wheel pivot. If the center of gravity moves in front of the front axle, the forklift will tip forward. If the center of gravity moves outside the stable area on either side, the forklift will tip over to the side.

Small warning

The dynamics of the forklift (braking, accelerating, turning) can also affect stability and may cause a rollover even if the center of gravity is within the stability triangle.

Rated load (weight and load center distance)



The rated capacity of a forklift is written on the forklift's capacity curve plate. It is related to weight and load center distance. The load center of the load is determined by the position of the load's center of gravity. Remember that the capacity rating shown on the nameplate applies to a standard forklift with a standard backrest, forks and mast and no special accessories, unless otherwise stated. In addition, the rated capacity is met only if the distance between the load

center and the top of the forks cannot be greater than the distance between it and the backrest surface. If these conditions are not met, the driver must reduce the safe operating load because the forklift's stability may be reduced. If the rated capacity is not marked on the forklift's capacity curve plate, it cannot be operated.

Note: If the load is irregular in shape, the heaviest end should be placed at a right angle on the side close to the backrest and centered on the forks.

Precautions

The load curve plate attached to the NEWRICK forklift shall not be removed, altered or replaced without the permission of our company .

does not assume any responsibility for forklifts that are put into use without the NEWRICK logo.

3. If you need to replace your manual, please contact your NEWRICK forklift dealer.

The load center shown on the nameplate is the horizontal distance between the vertical part of the forks or the attachment bearing surface and the center of the load. Vertical and horizontal position of the center of gravity

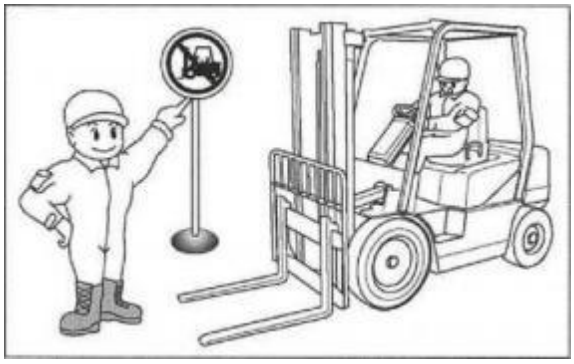
Safety Rules



Forklifts should only be operated by properly trained and authorized personnel. Wear a hard hat and protective shoes when operating a forklift. Do not wear loose clothing.

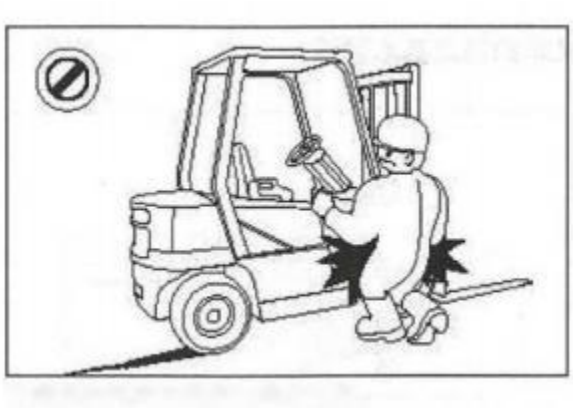


Before operating the forklift, refer to the operator's inspection checklist to inspect and test the forklift. If any malfunction or need for service is apparent, report it immediately to qualified personnel.



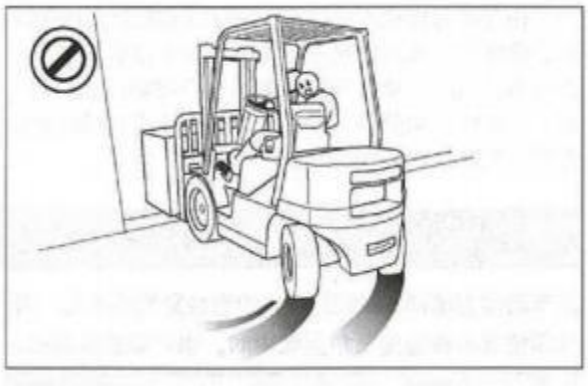
Only operate your forklift in designated areas. Know your forklift and be safety conscious. Do not ignore safety issues.

Follow all safety rules and understand all warning symbols



The forklift can be operated from the driver's seat.

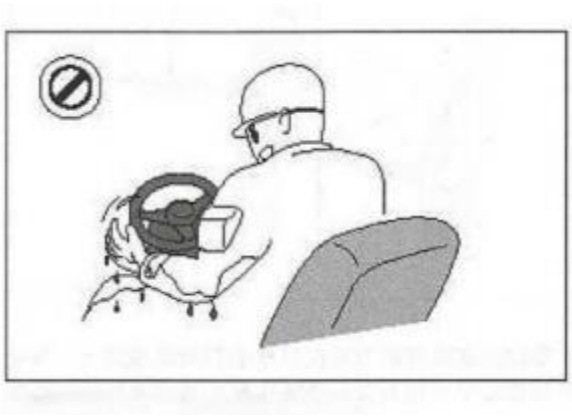
Keep all body parts within the operator's reach. Keep hands and feet away from gantry components.



The forklift can be operated from the driver's seat.

Keep all body parts within the operator's reach. Keep hands and feet away from gantry components.

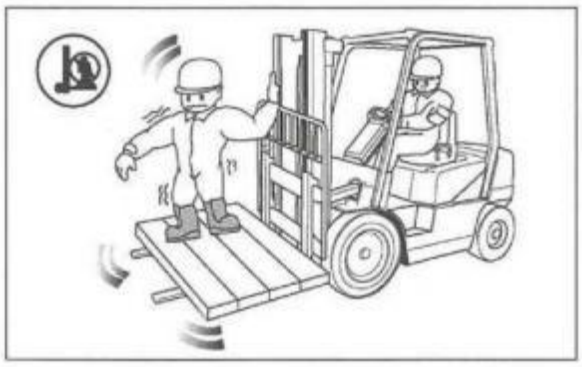
If the forklift is equipped with a steering knob, do not operate the knob violently to avoid accidents due to rapid rotation.



Never operate a forklift with wet hands or shoes.

Never operate the handle if your hands are greasy.

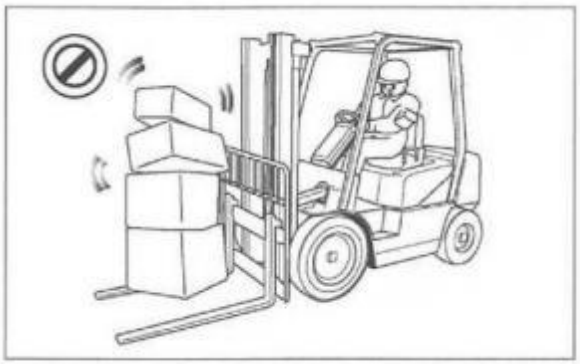
This will prevent your hands or feet from slipping from the operating position and avoid accidents.



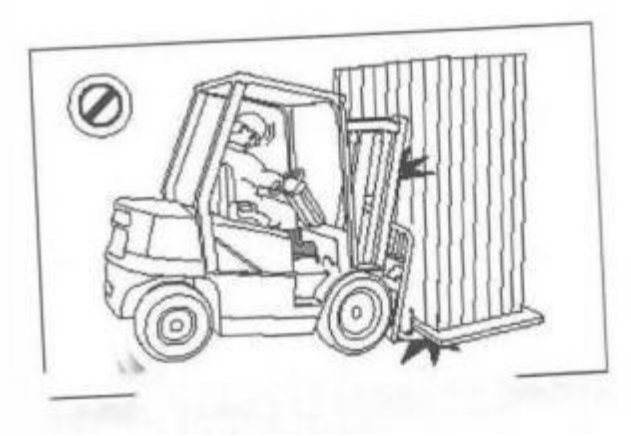
Do not lift people with forks unless using an approved safety lift. Do not allow other people to stand on a forklift. Forklifts are used to transport goods, not people.



Do not operate the truck without the rack and overhead guard installed. Tilt the mast back so the load rests against the guardrail.

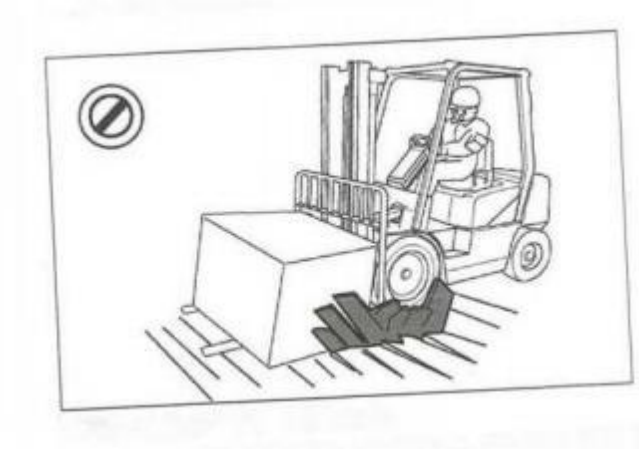


Do not lift or move unsecured loads. Do not pick up irregular loads that could tip the forklift over. Make sure the load is stacked evenly on both forks. Always use a pallet that is the right size. The forks should be as wide as possible. Lift the load evenly and keep it balanced. Do not pick up the load with one fork.



Do not overload. Do not exceed the load curve plate on the forklift. Do not attach additional counterweight to the forklift.

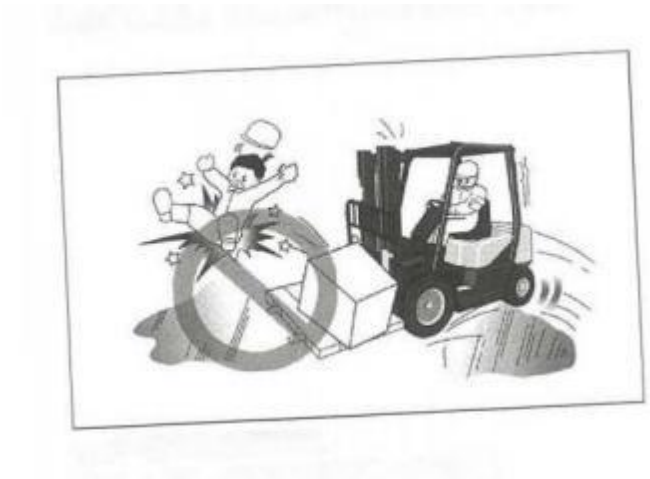
Overloading can cause the forklift to roll over, resulting in personal injury and damage to the forklift.



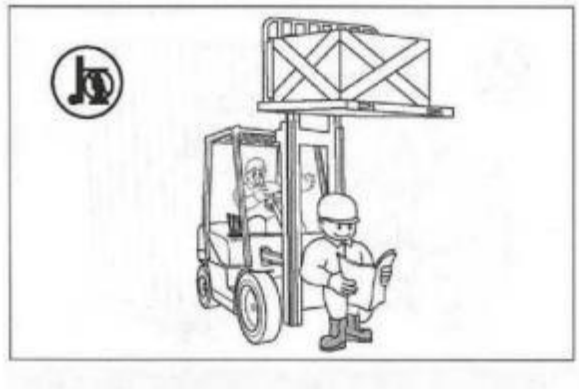
Do not operate the forklift on soft surfaces.

Observe the regulations, especially those regarding maximum load-bearing capacity of floors, lifting capacities and clearance heights. Handle loads with care and check their stability and

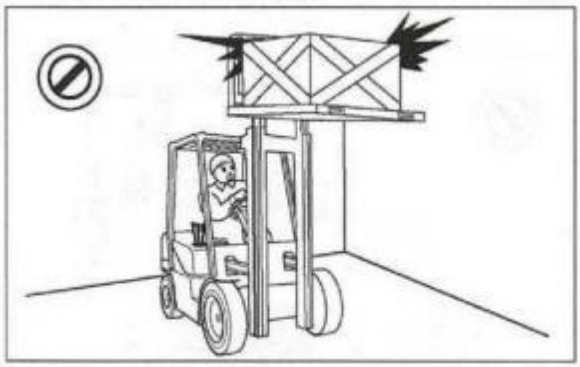
balance carefully.



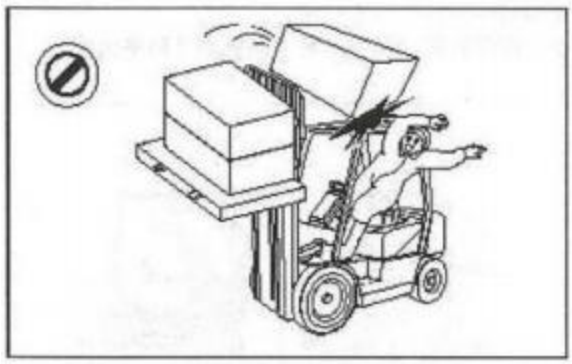
Do not drive on slippery surfaces. Sand, gravel, ice or mud can cause the forklift to overturn. If this is unavoidable, reduce speed.



Do not allow anyone to stand or pass under the load or lifting gear. The load could fall and cause injury to anyone standing under it.



When lifting or stacking loads, be aware of overhead obstructions. Do not operate a forklift with loads raised. Do not operate a forklift with the mast raised. The forklift could roll over, causing injury or death to the operator or others.

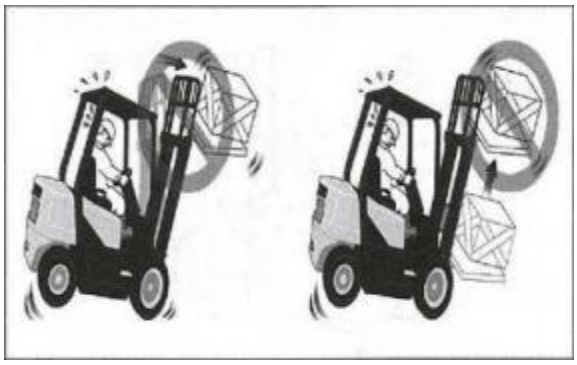


Do not move loose cargo over the tailgate.

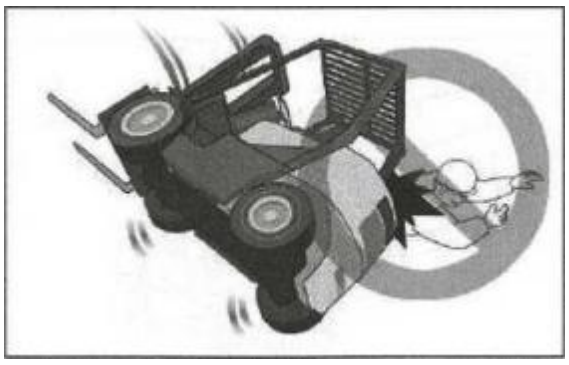
Be careful when stacking goods so that they do not fall.

Tilt the load back so the forks are as low as possible.

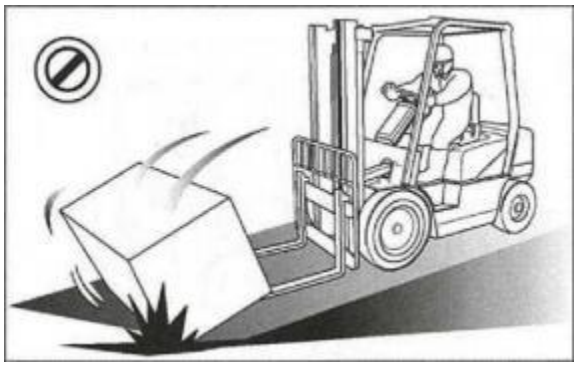
This will increase the stability of the forklift and the cargo, and provide a clearer view.



Do not lift a load while the mast is tilted forward. Do not tilt a raised load forward. This may cause the truck to tip forward.



If the forklift begins to tip over, do not jump out. Stay seated to escape.



When the forklift is driving on a slope, the load should face the top of the slope. Do not lift the load on a slope. Drive in a straight line. Use auxiliary tools when moving heavy loads up and down slopes.

