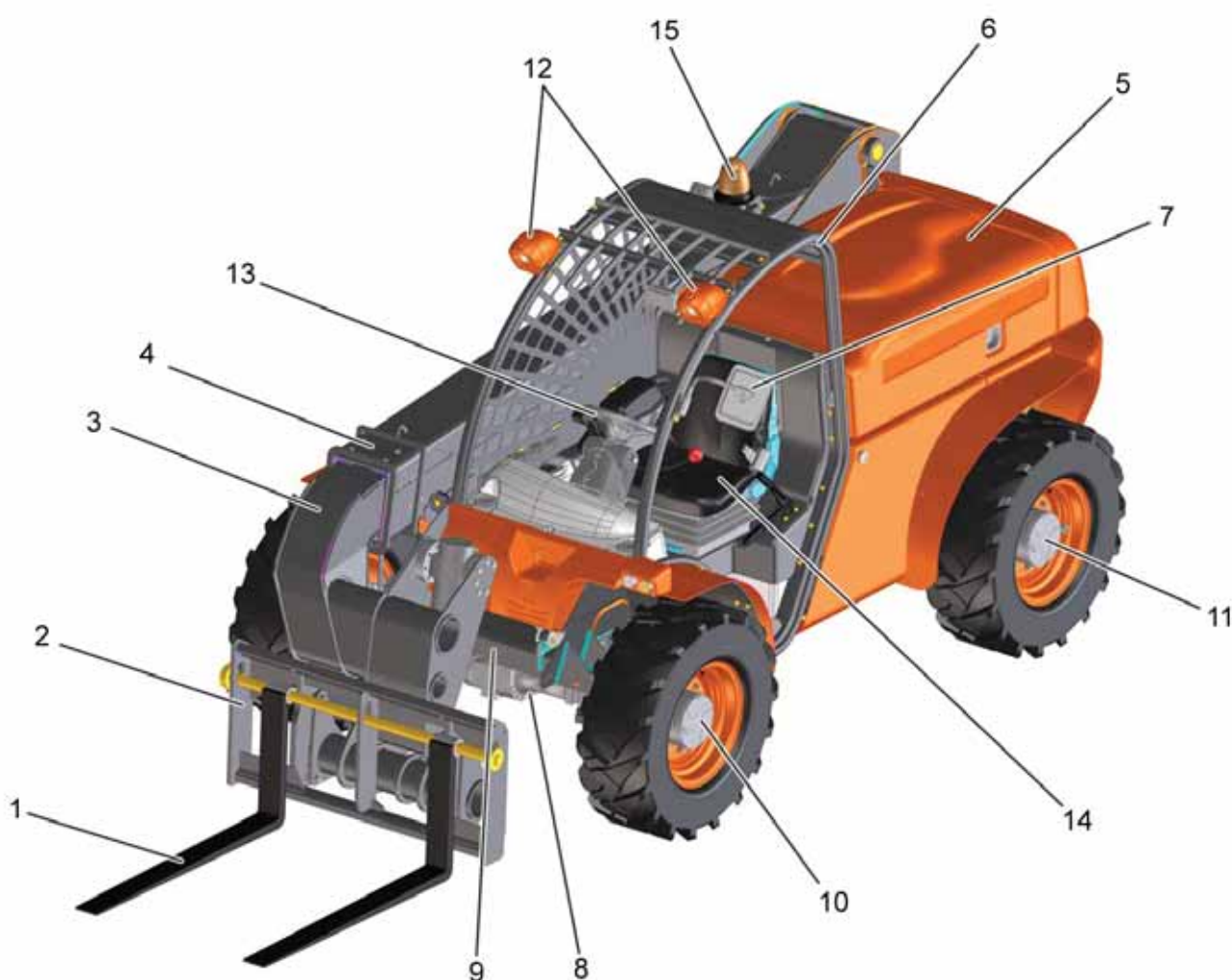




1.4 General description

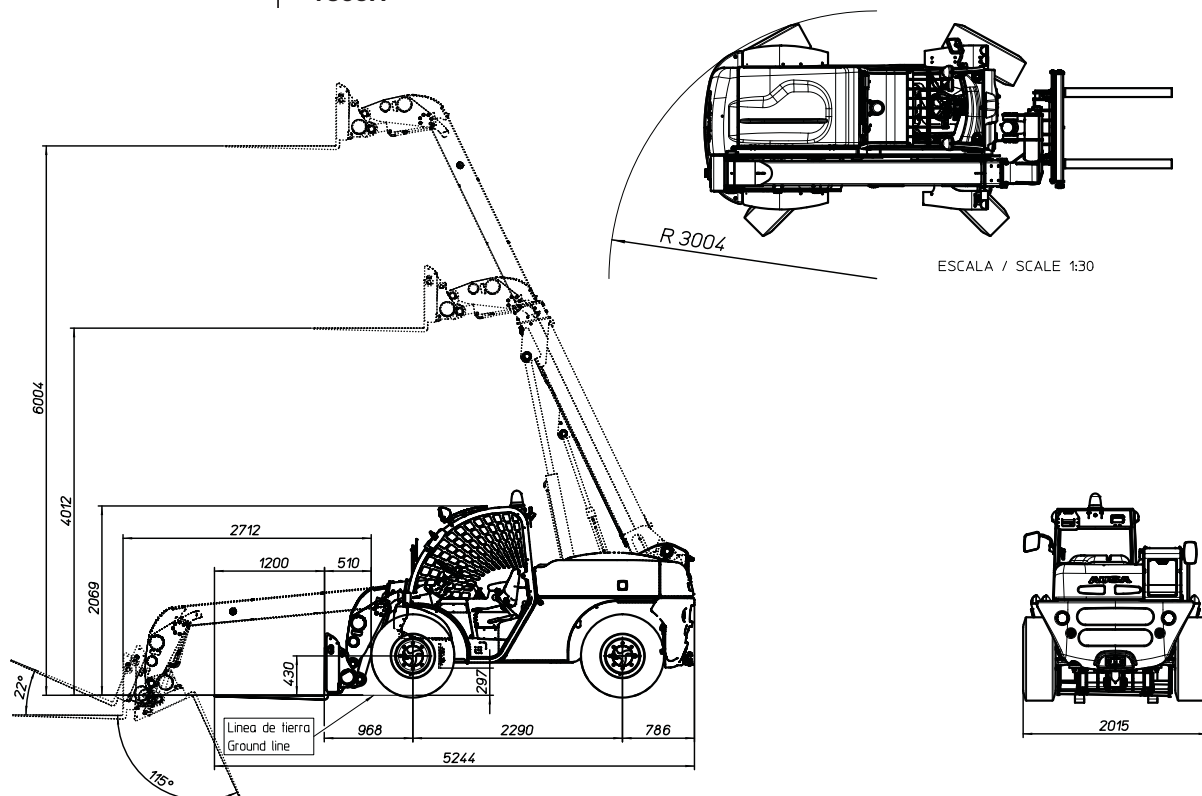
1.4.1 MAIN PARTS

- 1 - Fork
- 2 - Fork carriage for accessories and tools
- 3 - 2nd section of the extending arm
- 4 - 1st section of the extending arm
- 5 - Engine lock cover
- 6 - Driver's cab as per ROPS -FOPS standards
- 7 - Left hand rear view mirror
- 8 - Front axle
- 9 - Chassis
- 10 - Front left reduction gear
- 11 - Rear left reduction gear
- 12 - Headlights and signal lights (if fitted)
- 13 - Steering wheel
- 14 - Driver's seat with seatbelt
- 15 - Rotating / flashing beacon

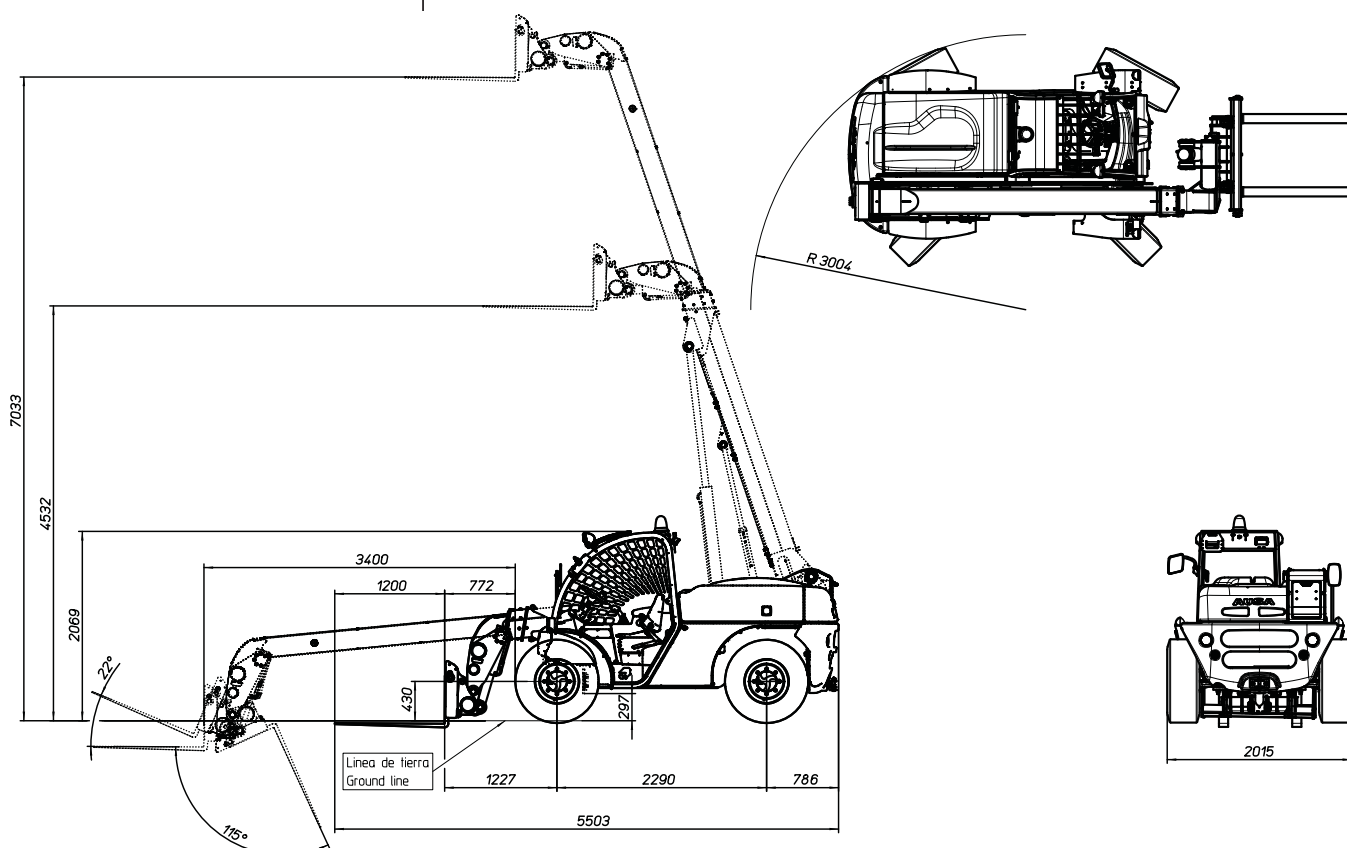


1.5.12 FORKLIFT MEASUREMENTS

T306H



T307H





2.1 General information

AUSA manufactures its forklifts in accordance with the relevant protection requirements defined in current legislation for countries in the European Economic Community, with regard to dangers of any kind, which may present a risk to health or life, providing the machine is used and maintained in accordance with these directives. Any hazard caused by improper use, not complying with these instructions or others specifically provided with the forklift, will be the responsibility of the user and not AUSA.

This section gives instructions on how the forklift must be used as per the provisions of the 98/37/EEC Directive on the Safety of machinery.



WARNING



The instructions mentioned in this manual are those recommended by AUSA. More appropriate methods with equivalent safety levels for the start-up, use and repair of the machine may exist, in view of the area of operation, available resources at all times and the assessment of the risks inherent to the work station in question.

Most accidents occurring with machines, during operation, maintenance or repairs, are due to a lack of attention to basic safety precautions. Therefore, it is necessary to pay constant attention to the reactions which may occur at each interaction with the machine.

This manual uses safety symbols to indicate the potentially most dangerous situations.

IMPORTANT

Identifying potentially dangerous situations before they happen can help to avoid accidents.

Under all circumstances, should it be necessary to proceed in a manner differing from that described in the manual, ensure that:

- the procedures to be applied are not explicitly prohibited;
- the methods are safe, i.e. they satisfy the standards and descriptions mentioned in this section of the manual.
- these methods do not cause direct or indirect damage to the machine, making it unsafe.

IMPORTANT

If in doubt, always ask!. Contact your Official AUSA Representative or Dealer should you have any questions.

2.2 Prerequisites for personnel

You are the vehicle operator, think...

- Before you begin using a forklift that you are not familiar with, you should read this operator manual carefully and consult your superior if you have any doubts. The forklift should only be used by authorized and duly trained personnel.

2.2.1 PREREQUISITES FOR OPERATORS

Operators which use the machine occasionally or regularly (e.g. for transport) must satisfy the following requirements:

Medical requirements

Operators must not consume alcohol, drugs or other substances which may alter the physical or mental state of the person, and consequently their ability to operate the machine, prior to and during work.

Physical requirements

Operators must have normal hearing and visual abilities, satisfactory coordination and the ability to execute the functions required to operate the machine in a safe manner, as specified in this manual.

Intellectual requirements and attitude

Operators must be able to understand and apply current standards and safety instructions, and able to pay attention and take the necessary decisions to ensure their safety and that of others: they must make every effort to execute tasks correctly and in a responsible manner.

Prior learning

Operators must have carefully read and understood this manual and all graphics and diagrams therein, as well as all informative and warning plates and labels displayed both in this manual and on machines. Operators must receive specialist training on all elements of the operation and use of the machine.

2.2.2 PREREQUISITES FOR PERSONNEL IN CHARGE OF MAINTENANCE

Personnel in charge of the maintenance of the machine must be qualified, and have received mechanical training in the maintenance of earth moving machines in general, and must necessarily satisfy the following prerequisites:

Physical requirements

Operators must have normal hearing and visual abilities, satisfactory coordination and the ability to execute the functions required to maintain the machine in a safe manner, as specified in this manual.

Intellectual requirements and attitude

Operators must be able to understand and apply current standards for preventive maintenance and safety instructions, and able to pay attention and take the necessary decisions to ensure their safety and that of others: they must make every effort to execute tasks correctly and in a responsible manner.

Prior learning

Operators must have carefully read and understood this manual and all graphics and diagrams therein, as well as all informative and warning plates and labels displayed both in this manual and on machines. Operators must receive specialist training on all elements of the operation, maintenance and use of the machine.



IMPORTANT

According to the applicable national legislation, operators may be required to validate prior training or aptitude to operate the machine in the form of a permit (or log) issued either by the employer or a government or private body. Operators should obtain information locally.

IMPORTANT

Routine machine maintenance will not involve the execution of complex technical operations. Therefore, most of these operations may be carried out by the operator simply by following the instructions provided in this manual.



(fig. 1)

2.2.3 WORK AND MAINTENANCE CLOTHING

The appropriate equipment and material for the function in question and the prevention of accidents must be used when operating the machine or carrying out maintenance or repair operations. The final equipment will be selected on the basis of the assessment of risk for each work station, however, generally speaking, the following recommendations apply:

- Wear a comfortable close fitting work suit or other clothing which cannot be caught in moving components. Wear reflective clothing if appropriate.
- Protective hard hat.
- Protective gloves.
- Safety boots.
- Ear protection
- Safety goggles, if applicable.

2.2.4 PERSONAL PROTECTION EQUIPMENT

You are the vehicle operator, think...

Make sure that you are issued with all the necessary personal protection equipment (PPE) to carry out your work safely, for instance: hard hat, ear protection, warm clothes, reflective equipment, safety goggles, masks, etc.

The operation of the forklift whilst wearing bracelets, chains, loose clothing, with long hair which is not tied back, etc. is not recommended due to the risk of catching in controls, rotating parts, cracks, etc.

IMPORTANT

Only use approved accident prevention equipment in good condition.

2.3 Safety standards

2.3.1 WORKING AREA

Depending on the work area, remember....

- If there is a risk of fire or explosion in the working area, either because of goods stored or because of possible fluid or gas leaks, check that the forklift is fitted with a sufficient degree of fire protection.
- If you have to work in closed spaces, make sure that the area is well ventilated in order to prevent the excessive build-up of exhaust fumes. Always turn the engine off when it is not needed.
- To drive the forklift on public roads, all necessary approvals and licenses must be obtained in accordance with the current legislation in the country of use, and all signs and safety elements required by legislation must be satisfied.
- In Spain, the forklift may be used without lighting in full daylight or in areas which are sufficiently lit.

Always account for the characteristics of the planned working area. Carefully study the working area: consider the area in view of the dimensions and movements of the machine.

ELECTROMAGNETIC COMPATIBILITY

This machine complies with current legislation on electromagnetic compatibility, however, should the machine be used in areas with devices that are highly sensitive to electromagnetic interference, make sure that they will not be affected.



ELECTRIC HAZARDS



Pay special attention to nearby airborne electric lines. Always maintain the extending arm at a safe distance from these lines to reduce the risk of electric discharges.

MINIMUM DISTANCE TO BE MAINTAINED, DEPENDING ON THE VOLTAGE OF THE ELECTRIC LINE

9m from wood pylons, 15m from metal pylons.

CONTACT WITH LOW VOLTAGE ELECTRIC LINES OR ACCIDENTAL DISCHARGES FROM THE LATTER IMPLY A RISK OF DEATH OR SERIOUS INJURY.

BEFORE STARTING WORK IN AREAS WHICH ARE POTENTIALLY DANGEROUS DUE TO ELECTRIC HAZARDS, CONTACT THE OWNER OF THE ELECTRIC LINE TO CHECK IF DISCONNECTION IS NOT REQUIRED PRIOR TO WORKING NEAR TO THE LINE.



DANGER



It is prohibited to use the machine with electric devices during storms.



WARNING



Check that the ground to be covered by the machine is sufficiently solid to avoid compromising the stability of the machine.

- Assess the best route to reach the working area.
- Do not allow anybody to enter within the radius of action of the machine during operation.
- Keep the working area tidy when operating the machine: do not leave stray objects within the working area as they may imply a risk for machine movements. Keep the driving area clear of all objects or tools that could move about and might obstruct a control, preventing you from using the control when required.

2.3.2 PRIOR PREPARATION

When starting up the forklift



WARNING



Place the machine in the working position and check that the machine is level using the spirit level fitted in the right side of the driver's cab.

Before starting operations:

- Check that maintenance operations are carried out carefully, and that the specified time intervals are applied (see section 4 on "MAINTENANCE").
- Check that enough fuel exists in view of autonomy, to avoid the risk of the engine stopping suddenly during a critical manoeuvre. Always stop the engine before refueling and never smoke during the process. Do not mix gasoline or alcohol with the fuel.
- Carefully clean the instruments, plates and labels, lights, rear view mirrors and wing mirrors (if fitted).
- Check that all safety devices fitted on the machine operate correctly and in the working area.
- Should any difficulties or problems of any type arise, immediately notify your superior. Do not start any job without complying with safety requirements. If you notice any anomaly while using the forklift, inform the maintenance service immediately.
- It is prohibited to make tide over repairs simply to be able to start work.

Before starting work with the forklift, clean up any possible oil or fuel which may have leaked, clean and remove any grease from your hands and the soles of your shoes and remember to check the following items:

- Tyre pressure and tread condition.
- Brake operation.
- Leaks in the hydraulics, fuel and cooling systems, etc.
- All protective devices, covers and safety stops are correctly positioned and properly attached.
- No cracks or other structural defects are visible to the naked eye.
- The correct operation of all controls.
- The levels of fluids and lubricants:
 - fuel.
 - brake fluid.
 - hydraulic fluid.
 - coolant.
 - engine oil
- Seat belts and their mountings: good condition and properly fixed. Carefully inspect the condition of this device paying special attention to:
 - cuts or loose threads on the belt.
 - wear or damage to fittings, including anchor points.
 - incorrect functioning of the seat belt buckle or retracting roller.
 - loose seams or stitching.
- Check that all covers, locks and other safety elements are correctly positioned. The removal of safety devices such as the engine cover is prohibited with the exception of for maintenance purposes. Should it be necessary to remove these devices, stop the engine, and pay close attention during the operation. Replace the devices before starting the engine and operating the machine.
- Check the correct functioning of alarms and signalling devices (for example: acoustic warning, obstruction indicator for the air admission filter, etc.)
- Check that all the information and safety plates on the forklift are clean and in good condition. Danger warning signals must not be removed, covered or unreadable.
- Check that the lighting and signalling system is clean and working properly (if fitted).
- Check the electric battery connections and the level of electrolyte.
- Adjust the seat position so that you are comfortable and can easily reach the controls.
- Do not start the forklift or operate the controls unless you are in the operator's seat.
- For your safety should the machine roll over, do not forget to correctly adjust and fasten the seat belt.



2.2.3 DURING WORK AND MAINTENANCE

When operating the forklift, do not forget to...

- Keep hands, feet and the whole body in general inside the area provided for the operator.
 - Pay special attention to work on slopes, move slowly, avoid being situated crosswise and do not operate on slopes which exceed the recommended gradient. A slope within the recommended gradient does not mean that this slope can be manoeuvred on with absolute safety under any load, terrain or handling conditions. Descend slopes in reverse gear, i.e. with the load in the most stable direction.
 - It is not recommended to operate on slopes greater than 15% under any circumstances.
 - Give way to any pedestrians you might come across while driving.
 - The forklift must not be used to carry people, other than the driver, or to lift people if approved and authorized systems are not fitted for this purpose.
 - Do not overload the forklift or handle loads which displace the centre of gravity of the forklift outside of limits. Carry out manoeuvres gently, especially when changing direction on slippery ground.
 - Do not carry unstable, unfastened or overlarge loads. If very large or wide loads must be handled, take all possible precautions to avoid hitting items in the surrounding area and other potential accidents.
 - Before handling loads from a lorry or trailer, ensure that the latter is appropriately positioned and that the brakes are set.
 - When using an accessory, check acceptable loads for the forklift + accessory configuration (which will differ from figures for the standard configuration) prior to use.
 - Ensure that you have good visibility of the track, if the load obstructs visibility, drive in reverse gear and increase precautions.
 - When approaching a crossroads with poor visibility, slow down, sound your horn and move forwards slowly in accordance with the amount of visibility available.
 - The speed of the forklift should be adjusted to the working conditions and area at all times. Systematically driving the machine at maximum speed may represent a danger to the operator and the surrounding area.
 - Check that the resistance of the ground on which you are driving is sufficient for the loaded forklift, in particular when accessing bridges, embankments, slabbed areas, loading areas, etc.
 - Before reversing the forklift, the operator should check that doing so will not put at risk either the machine itself or nearby people or objects.
 - Do not drive with the extended arm lifted.
 - Do not activate two extending arm movements simultaneously.
 - Keep your mind completely on the job in hand. The safety of both the driver and others depends on the care taken when driving.
 - Depending on the ground, try to raise as little dust as possible while moving.
 - The forklift is not designed to tow other machines. If, for any reason, this operation is indispensable, check that the machine has sufficient pulling power.
 - Drive carefully and slowly. If the trailer is not fitted with an inertia brake, make sure that the brakes are strong enough for both the forklift mass and that of the trailer.
-
- Should the machine roll-over, it is important that the driver avoids being trapped between the machine and the ground. To prevent this we recommend the following:
 - Try to remain within the operator cab.
 - Grasp the steering wheel firmly.
 - Push your feet firmly against the floor plate of the cab.
 - Try to keep as far away from the point of impact as possible.

Take care when loading and unloading the forklift...

- If concrete spills onto the road surface, remove it before it hardens.

While working, carrying out maintenance or repairs, extreme precaution must be taken. Your safety depends on it...

- Never stop carrying out forklift maintenance. Specialized personnel should be assigned to this job, equipped with the necessary tools and appropriate instructions. Only authorized personnel should carry out maintenance and repair work.
- Assess the best route to reach the working area.
- It is prohibited to transit or remain under suspended weights or machine parts which are only supported by hydraulic pistons, chains or cables.
- Keep the handles and footholds used to enter and operate the machine clean and free of oil and grease to avoid slipping or falling.
- Face the machine when entering or exiting the cab or other raised parts. Never face away from the machine.
- It is prohibited to enter or exit the machine during operation.
- It is prohibited to leave the control panel when the machine is operating.
- Unless unavoidable, all interventions on the forklift should be carried out with the engine switched off, without any load and with all blocking and locking devices engaged.
- It is prohibited to stop or undertake any kind of intervention in the area between the wheels of the machine while the engine is running. The engine must be stopped.
- Some operations are easier to carry out with the extending arm lifted. Before doing so, precautions must be taken to prevent the arm from accidentally lowering using the devices designed for this purpose for each specific forklift model.
- Maintenance or repairs may not be carried out without the appropriate lighting.
- Direct the spot light beams to ensure that personnel are not blinded.
- Before handling cables or electric devices, check that connections are correct and that the devices are operational.
- It is prohibited to connect wet plugs.
- When carrying out any repair work, make especially sure that the battery terminals are protected, so that they cannot accidentally be shorted out by a tool, part, etc.
- Before carrying out any electrical welding on the forklift, disconnect the battery to avoid possible damage to electric and electronic equipment.
- It is prohibited to lubricate, clean or adjust mechanical components while moving.
- Operations which require the use of specific tools may not be carried out without these tools.
- Do not use tools in an unsatisfactory condition or in an improper manner (e.g. use a clip instead of a fixed clamp).
- Regular checks should also be carried out on all those elements whose excessive wear or ageing could lead to a risk of accident, for example: hydraulic pipes, brake lining, tyre tread, etc.
- Should the operator protection suffer an impact that induces a crack or permanent deformity, as this is a safety element, it must be replaced with a new item.
- Any modification which affects the capacity and safety of the forklift must be authorized by the manufacturer or by an official industrial actor, with an update to instruction manuals and plates if necessary.
- The manufacturer will not be held liable for any incident or accident caused by the use of non-original spare parts or by repairs carried out by unauthorized workshops.



- When replacing tyres, ensure that they are the correct replacements and follow the tyre manufacturer's safety instructions. For safety reasons, split rim wheels must not be used (wheels consisting of two rims bolted together).
- The forklift should be lifted for handling or inspection purposes using the points on the machine designed for this purpose, as indicated in this manual, and using devices with an adequate capacity.
- If the forklift needs to be towed, use a tow bar whenever possible, or if none is available, a cable that is strong enough for the job. In either case, it should be fixed onto the point indicated by the manufacturer and the manoeuvre should be carried out at a speed of no more than 10 Km/h (6,2 MPH). When driving a towed forklift, pay attention to the position of your hands on the steering wheel, to ensure that an unexpected turn of the wheel does not cause you injury.
- Make sure that the towing forklift has adequate towing and braking capacities to be able to perform this operation.
- If the forklift needs to be transported on a lorry platform:
 - Ensure that only a minimum amount of fuel remains in the tank.
 - Apply the forklift brakes.
 - Apply chocks to the wheels and fix them to the platform.
 - Fasten the machine firmly to the platform using slings or other methods to prevent any kind of movement.
- This forklift is hydrostatically controlled, should it be necessary to tow the machine, before doing so, follow the instructions indicated in this manual for the disconnection of the hydrostatic unit, therefore facilitating towing and eliminating any risk for the hydrostatic unit.
- When changing a tyre, make sure that it is fitted with the tread pattern facing the right way.
- Before carrying out any work on the engine cooling system, wait for the temperature of the coolant to drop enough for the coolant reservoir cap to be removed safely.
- In order to avoid allergic reactions and other hazards affecting the skin, replenishing of fuel or other fluids should be carried out wearing protective gloves.
- Before disconnecting fluid systems, make sure there is no pressure in them, that they no longer contain hot fluid, and take steps to avoid unexpected spills.
- Regular checks should be carried out on the hydraulic system to detect any possible leaks or misalignment on the safety valves which could lead to a risk situation.



DANGER



Only authorized personnel may carry out interventions on the hydraulic system.

- It is prohibited to smoke or use flames in locations with a risk of fire or in the presence of fuel, oil or batteries.
- Avoid leaving containers or tanks containing fuel in areas which are not designed for the storage of fuel.
- Handle inflammable or dangerous substances with care.
- After maintenance or repair operations, before starting up the machine, check that no tools, gates or other materials remain between moving parts, in the suction air ducts or in the cooling air circuit.



- When executing manoeuvres with guidance from a person outside the forklift, only one person must transmit signals and indications.
- All orders issued by managers must be complied with.
- Avoid interference during complex operations or manoeuvres,
- Avoid distracting or frightening operators without reason.
- After completing an operation, do not leave the machine in a potentially dangerous configuration.
- Protect the environment. Be environmentally friendly. When changing oil, fluids, tyres, batteries, etc., take the used materials to the corresponding recycling centres. If you handle or scrap silencers or catalytic silencers which contain mineral fiber-based absorbent materials, protect your skin with the appropriate gloves and clothing and take the materials to approved disposal sites for this class of materials.
- Similarly, transmit this vehicle to an authorized scrap centre at the end of its useful life.

2.3.4 PARKING THE FORKLIFT AND STOPPING THE ENGINE

When leaving the forklift...

- Turn the engine off and switch off the ignition. Set the extending arm to horizontal and fully retracted.
- Place all controls in the neutral standby position.
- Put the parking brake on.
- Lock all mechanisms which impede use of the forklift by unauthorized persons; the starter circuit in particular, by removing the ignition key.
If you must leave the forklift on a slope, block the wheels with suitable chocks in addition to putting the parking brake on.
- Leave the forklift parked in areas specifically designated for this purpose, and not in locations where it prevents people from passing or blocks exits or access to stairways or emergency equipment.

2.4 Safety devices

| | | |
|--|---------------|---|
|  | DANGER |  |
| <p>Various safety devices are fitted on the machine and must never be modified or removed (see chap. 4.3.15). Regularly check the effectiveness of these devices. Should these devices not be in perfect operating order, stop work immediately and repair or replace. For information on how to check safety devices (see chap. 4.3.16)</p> | | |

2.5 Overload system

The overload system assists operators in using the machine safely via the use of visual and back-up alarm if the machine is reaching roll-over limits and the situation is therefore dangerous. Del mismo modo, dispone de un bloqueo automatico de la extensión del brazo al llegar a la zona límite.

This device only indicates the forwards roll-over point; other factors play a role in the stability and safety of the machine, therefore, under no circumstances should the overload system be used as a guide when assessing the load to be handled. Acceptable loads are indicated on the load charts shown on the machine and in this manual.

Under no circumstances may this device replace the operator's judgment. Operators are responsible for working in safe conditions and complying with the safety standards defined.

3.5.1 USE OF THE LOAD CHART

The chart showing the loads which can be carried per arm extension is displayed in the cab window and/or in the quick guide.

The chart indicates load limits for the machine.

Always consult these charts to ensure safe operations.



WARNING



The charts shown here are for information only. Only use the charts in the forklift to determine load limits.

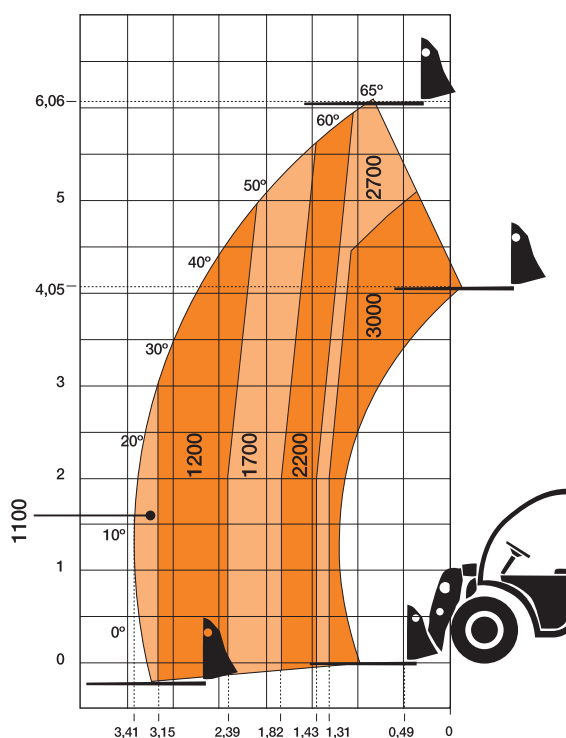


WARNING

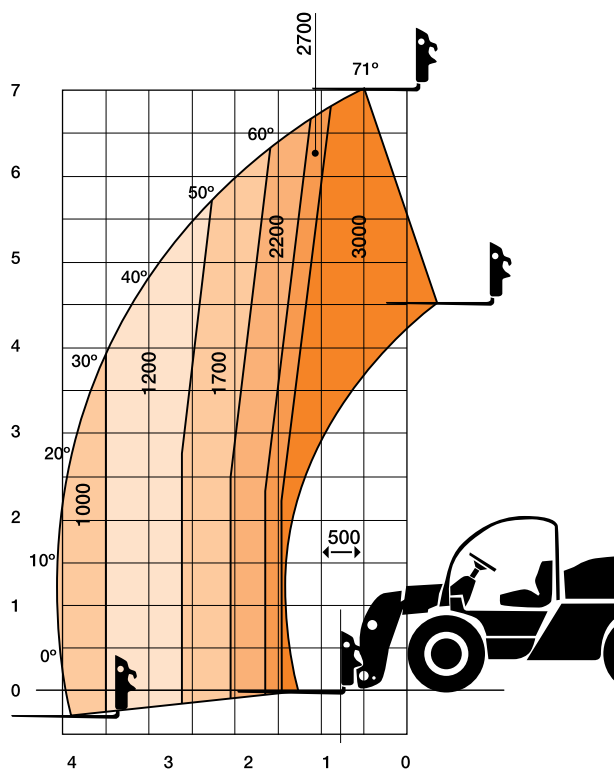


The charts displayed in the forklift apply when the machine is stopped on solid level ground.

Lift loads a few centimetres and check stability before lifting entirely.



(fig. 1) T306H



(fig. 2) T307H