



#### IMPORTANT

#### Carefully read and understand this supplementary operator's manual before using this platform.

It contains all the information relating to operation, handling and equipment of the platform, as well as important recommendations to be followed.

This document also contains precautions for use, as well as information on the service and routine maintenance required to ensure the platform's continued reliability and safety of use.

WHENEVER YOU SEE THIS SYMBOL IT MEANS:



#### WARNING! BE CAREFUL! YOUR SAFETY, THAT OF OTHERS, OR THE SAFETY OF THE PLATFORM IS AT RISK.

- This manual has been produced on the basis of the equipment list and the technical characteristics given at the time of its design.
- The platform's equipment level depends on the options chosen and the country of sale.
- Depending on the platform's options and the date of sale, certain equipment/functions described in this manual may not be present on this platform.
- Descriptions and figures are non-binding.
- MANITOU reserves the right to change its models and their equipment without being required to update this manual.
- The MANITOU network, consisting exclusively of qualified professionals, is available to answer all your questions.
- This manual is an integral part of the platform.
- It is to be kept in its storage space at all times for ease of reference.
- Give this manual to the new owner if the platform is resold.

1st EDITION		27/02/2012
UPDATE	01/02/2015	EN280 UPDATE
	29/06/2016	1-22; 1-23; 1-28 2-3; 2-22; 2-23; 2-27; 2-34 – 2-42 3-3; 3-9; 3-14 – 3-26
	03/11/2016	1-23; 1-28 3-4; 3-9; 3-16; 3-17
	10/04/2017	1-20 2-3 – 2-7; 2-10 – 2-15
	25/10/2019	2-4; 2-5 3-9
	26/11/2020	+ 150 AETJ 3D 2-1 – 2-66; 3-1 – 3-46

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- any use of means to bypass technical protection measures for databases or software source code embedded in the boxes, in keeping with Article L.331-5 of the Intellectual Property Code.

**1 - OPERATING AND SAFETY INSTRUCTIONS** 

#### **2 - DESCRIPTION**

#### **3 - MAINTENANCE**



## 1 - OPERATING AND SAFETY INSTRUCTIONS

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#### **INSTRUCTIONS TO THE COMPANY MANAGER**

#### THE SITE

Proper management of the personnel lifting platform's area of travel will reduce the risk of accidents:

- Ground not unnecessarily uneven or obstructed.
- No excessive slopes.
- Pedestrian traffic controlled, etc.

#### **THE OPERATOR**

- Only qualified, authorised personnel can use the platform. This authorisation is given in writing by the appropriate person in the establishment where the platform is to be used and must be carried permanently by the operator.

#### A IMPORTANT A

On the basis of experience, there are a number of possible situations in which operating the platform is contra-indicated.

Such foreseeable abnormal uses, the main ones being listed below, are strictly forbidden:

- The foreseeable abnormal behaviour resulting from ordinary negligence, but which does not result from any wish to put the machinery to any improper use.

- The reflex reactions of a person in the event of a malfunction, incident, fault, etc. during operation of the platform.

- Behaviour resulting from application of the "principle of least effort" when performing a task.

- For certain machines, the foreseeable behaviour of such persons as: apprentices, teenagers, handicapped persons, trainees tempted to drive a platform, operators tempted to operate a truck to win a bet, in competition or for their own personal experience.

The person in charge of the equipment must take these criteria into account when assessing the suitability of a person to drive.

#### A IMPORTANT A

**OBTAIN INFORMATION ON:** 

- How to behave when there is a fire.

- The location of the nearest first aid kit and fire extinguisher.

- The emergency telephone numbers for calling (the doctors, ambulance, hospital and fire brigade).

#### PLATFORM

#### A – SUITABILITY OF THE PLATFORM FOR THE TASK

- MANITOU has ensured that this platform is suitable for use under the standard operating conditions defined in this operator's manual, with an **OVERLOAD test coefficient of 1.25** and an **OPERATIONAL test coefficient of 1.1**, as stipulated in harmonised standard **EN 280** for **MPLP** (Mobile Personnel Lifting Platforms). Before putting the platform into operation, the company manager must check that the platform is suitable for the work to be carried out and conduct certain tests (in accordance with current legislation).

#### **B - ADAPTING THE PLATFORM TO USUAL ENVIRONMENTAL CONDITIONS**

- In addition to standard equipment mounted on your platform, many options are available, such as: rotating beacon light, working light, etc. Contact your dealer.

- Take into account climatic and atmospheric conditions of the site of utilisation.

- Protection against frost (</ 3 MAINTENANCE: LUBRICANTS AND FUEL).
- Adaptation of lubricants (ask your dealer for information).
- Engine filtration (≪ 3 MAINTENANCE: FILTER CARTRIDGES AND BELTS).

#### A IMPORTANT A

For operation under average climatic conditions, i.e.: between -15°C and +35°C, lubricants are topped up in the factory.

For operation under more severe climatic conditions, before starting up, it is necessary to drain all the circuits, then ensure correct levels of lubricants using lubricants properly suited to the relevant ambient temperatures. The same applies to coolant.

- Preventing fire risks associated with use in dusty and flammable conditions.
- A platform operating in an area without fire extinguishing equipment must be equipped with an individual extinguisher.
- Solutions are available, consult your dealer.

#### A IMPORTANT A

Diesel platforms are designed for outdoor use under normal atmospheric conditions and indoor use in suitably aerated and ventilated premises.

Electric platforms are designed for outdoor use under normal atmospheric conditions and for indoor use.

It is prohibited to use the platform in areas where there is a risk of fire or which are potentially explosive (e.g. refineries, fuel or gas depots, stores of inflammable products, etc.). For use in these areas, specific equipment is available (ask your dealer for information).

#### A IMPORTANT A

It is strictly prohibited to replace platform components with components not approved by Manitou (batteries, wheels, basket, etc.).

#### A IMPORTANT A

It is strictly forbidden to change the structure and settings of the various components of your platform (hydraulic pressure, calibrating limiters, engine speed, sensors, addition of extra equipment, addition of counterweight, unapproved attachments, alarm systems, etc.) yourself.

#### In this event, the manufacturer cannot be held responsible.

#### A IMPORTANT A

Risk of the access platform becoming unstable:

- Depending on the model, your platform may be supplied with standard wheels or all-terrain wheels. It is PROHIBITED to change from one type of wheel to the other. - ELECTRIC PLATFORM: it is PROHIBITED to replace the batteries with lighter batteries.

#### **INSTRUCTIONS**

- The operator's manual must always be in good condition and kept in the place provided on the platform and in the language used by the operator.
- You must replace the instructions manual, as well as any plates or stickers, if they are no longer legible or are missing or damaged.

#### MAINTENANCE

#### 

#### Refer to chapter: PLATFORM MAINTENANCE INSTRUCTIONS.

- Maintenance or repairs other than those detailed in chapter 3 - MAINTENANCE must be carried out by qualified personnel (consult your dealer) and under the necessary safety conditions to maintain the health of the operator and any third party.

#### A IMPORTANT A

#### Your platform must be periodically inspected to ensure its continued compliance.

#### The inspection frequency is defined by the legislation applying in the country in which the platform is used.

- Example for France: The manager in charge of the establishment using an access platform must open and maintain a maintenance log for each machine (order of 2 March 2004).

#### **INSTRUCTIONS FOR THE OPERATOR**

#### INTRODUCTION

#### A IMPORTANT A

The risk of accident while using, servicing or repairing your platform can be reduced if you follow the safety instructions and preventive measures detailed in these instructions.

Failure to respect the safety and operating instructions, or the instructions for repairing or servicing your platform may lead to serious, even fatal accidents.

- Only the operations and manoeuvres described in this operator's manual must be performed. The manufacturer cannot predict all possible risky situations. Consequently, the safety instructions given in the operator's manual and on the platform itself are not exhaustive.
- As an operator, you must at all times give reasonable consideration to the possible risks to yourself, to others or to the platform itself when you use it.

#### **GENERAL INSTRUCTIONS**

#### **A - INSTRUCTION MANUAL**

- Carefully read and understand the operator's manual.
- The operator's manual must always be in good condition and kept in the place provided on the platform and in the language used by the operator.
- You must replace the instructions manual, as well as any plates or stickers, if they are no longer legible or are missing or damaged.
- Any operations or manoeuvres not described in the operator's manual are categorically forbidden.
- Follow the safety advice and the instructions on the platform.
- A second operator must be present on the ground as a safety measure when using the platform.
- Familiarise yourself with the platform on the terrain where it will be used.
- The machine must also be used in accordance with good engineering practice.
- Do not use the platform if there is a wind speed of over 45 km/h. The platform's arms must not be subjected to a side force of more than 400 N (40 kg).
- Platforms intended exclusively for indoor use must not be used outside the buildings.

#### **B - AUTHORISATION FOR USE IN FRANCE**

(or see current legislation in other countries).

- Only qualified, authorised personnel can use the platform. This authorisation is given in writing by the appropriate person in the establishment where the platform is to be used and must be carried permanently by the operator.
- The operator is not empowered to authorise the driving of the platform by another person.

#### **C - MAINTENANCE**

- The operator must carry out the daily maintenance (< 3 MAINTENANCE) before using the platform in his place of work.
- The operator must immediately advise his superior if his platform is not in good working order or does not comply with the safety notice.
- The operator is prohibited from carrying out any repairs or adjustments himself, unless he has been trained for this purpose. He must keep the platform properly cleaned if this is among his responsibilities.
- The operator is responsible for deciding and adjusting the frequency of cleaning needed to prevent the risk of fire ensuing from the build-up of flammable material. The operator should pay special attention to all the areas of the platform where these risk materials are likely to accumulate.
- The operator must ensure that the wheels are appropriate for the type of ground (see the ground contact area of the wheels (
  2 DESCRIPTION: SPECIFICATIONS). Optional solutions are available, consult your dealer.

#### A IMPORTANT A

Do not use the platform if the wheels are damaged or excessively worn, because this could put your own safety or that of others at risk,

or cause damage to the platform itself.

#### A IMPORTANT A

In the case of electric platforms, the operator must ensure that:

- Safety goggles are always worn when charging the batteries.

- The batteries are not charged in an explosive environment.

- There is no smoking and no naked flame directed towards the batteries when they are being handled (removal/installation) and when monitoring filling levels. Do not leave the battery charger connected during a lightning storm.

#### **D - MODIFYING THE PLATFORM**

◄ INSTRUCTIONS TO SITE MANAGER: C - MODIFYING THE PLATFORM.

#### **E - DIESEL PLATFORM AXLES**

NON-OSCILLATING AXLE (ACCORDING TO MODEL)

#### A IMPORTANT A

The chassis is rigid, so the platform can be load bearing on only three wheels.

OSCILLATING AXLE (ACCORDING TO MODEL)

#### A IMPORTANT A

An oscillating axle enables the platform to have a ground reach on four wheels when in transport position.

When moving in the working position over uneven terrain, the oscillating axle is locked (the frame is stiff) so the platform may be bearing on only three wheels.

#### **F - SAFETY DEVICES**

- This machine is fitted with special safety devices that are able to limit its operation as circumstances require (
  - Overload in the basket.
  - Tilting of the platform beyond the authorised limits.
  - Blocking of the oscillating axle (according to model).
  - Slack or broken telescope cable (according to model).

#### **OPERATING INSTRUCTIONS**

#### **A - BEFORE STARTING-UP THE PLATFORM**

- Perform the daily maintenance operations (</ 3 - MAINTENANCE).

#### **B - DRIVER'S OPERATING INSTRUCTIONS**

- Whatever their experience, operators are advised to familiarise themselves with the position and operation of the control panels before putting the platform into operation.
- The platform's arms must be fully lowered (down position for scissor platforms) before getting into or out of the basket; always get in and out facing the inside of the basket.
- If the platform is equipped with steps, the basket must be positioned vertically with these before getting in or out.
- Always use both hands and one foot or both feet and one hand to get in and out.
- Ensure that the guard rail and/or the access gate (according to model) is fully in the locked position before operating the platform from the basket.
- MANITOU recommends a safety harness in the operator's size be provided when the platform is in use (for the harness attachment in the basket,
- Safety helmets must be worn.
- Wear suitable clothing for driving the platform; do not wear baggy clothes.
- Never operate the platform when hands or feet are wet or soiled with greasy substances.
- Make sure you have the appropriate protective equipment for the job to be done.
- Prolonged exposure to high noise levels may cause hearing problems. It is recommended to wear ear muffs to protect against excessive noise.
- Remain alert at all times when using the platform. Do not listen to the radio or music using headphones or earphones.
- The operator must always be in the normal operator's position. It is prohibited to have arms or legs, or generally any part of the body, protruding from the basket.
- The control units must never in any event be used for any other than their intended purposes (e.g. getting in or out of the basket, portmanteau, etc.).
- The platform must not be fitted with unauthorised attachments that increase the unit's wind load.
- Do not use a ladder or any improvised constructions in the basket to reach greater heights.
- Do not climb on the basket frame to reach greater heights.

#### **C - ENVIRONMENT**

- Comply with site safety regulations.
- The platform can be operated from the ground: ensure that you forbid access.
- If you have to use the platform in a dark area or at night, make sure it is equipped with working lights.
- The platforms may not be used as cranes or elevators for the permanent transport of people or materials, nor as jacks or supports.
- Suspending a load under the basket or on any part of the lifting apparatus is strictly forbidden.
- When operating, ensure that there is no one or anything impeding the platform's progress and operation.
- When raising the platform, ensure that no one or anything impedes the platform's operation and do not perform any inappropriate manoeuvres.
- Do not allow anybody to come near the working area of the platform or pass beneath an elevated load. To ensure this, mark out your working area.
- Driving on a longitudinal slope:
  - Adjust the platform speed with the proportional control handle.
- Take into account the platform's dimensions and its load before trying to negotiate a narrow or low passageway.
- Never move onto a loading bridge without having first checked:
  - That it is suitably positioned and made fast.
  - That the unit to which it is connected (wagon, lorry, etc.) will not shift.
  - That this bridge is prescribed for the size and mass of the platform (< 2 DESCRIPTION).
- That the slope of the bridge is not greater than the platform's maximum authorised slope (< 2 DESCRIPTION).
- Never move onto a foot bridge, floor or freight lift, without being certain that they are prescribed for the mass and size of the platform to be loaded and without having checked that they are in sound working order.
- Be careful in the area of loading bays, trenches, scaffolding, soft ground, manholes, etc.
- Make sure the ground is stable and firm under the wheels and/or stabilisers before lifting the basket. If necessary, add sufficient wedging under the stabilisers. Do not attempt to carry out operations that exceed the platform's capabilities.
- Ensure that any materials loaded onto the platform (pipes, cables, containers, etc.) cannot fall out. Do not pile these materials to the point where it is necessary to step over them.

#### A IMPORTANT A

If the basket must remain stationary over a structure for a long period, there is a risk that the basket will descend and rest on this structure

- because of the oil cooling in the cylinders or a minor leak in the cylinder locking system. To eliminate this risk:
  - Regularly check the distance between the basket and the structure and re-adjust if necessary.

#### - If possible use the platform at an oil temperature as close as possible to ambient temperature.

- In the case of work near aerial lines, ensure that the safety distance is sufficient between the working area of the platform and the aerial line.

#### A IMPORTANT A

You must consult your local electrical agency.

You could be electrocuted or seriously injured if you operate or park the platform too close to power cables.

#### A IMPORTANT A

If the platform comes into contact with electric wires, press the Emergency Stop button.

Call for help, warn people on the ground not to touch the basket, and ask them to switch off the power supply to the wires or have it switched off.

#### A IMPORTANT A

#### It is forbidden to use the platform close to electricity cables. Maintain the specified safe distances.

RATED VOLTAGE (VOLTS)	SAFETY DISTANCE (METRES)	
50 < U < 1000	2.30 M	
1000 < U < 30000	2.50 M	
30,000 < U < 45,000	2.60 M	
45,000 < U < 63,000	2.80 M	<sup>*</sup>
63,000 < U < 90,000	3.00 M	
90,000 < U < 150,000	3.40 M	
150,000 < U < 225,000	4.00 M	
225,000 < U < 400,000	5.30 M	]  i
400,000 < U < 750,000	7.90 M	

#### A IMPORTANT A

Do not use this machine during lightning storms, snow storms, during frosty periods or in hazardous weather conditions. In case of strong wind exceeding 45 km/h, do no
make any movement that may endanger the platform's stability.

- To visually recognise this wind speed, refer to the empirical wind evaluation scale below:

BEAUFORT scale (wind speed at a height of 10 m on a flat site)						
Force	Type of wind	Speed (knots)	Speed (km/h)	Speed (m/s)	Effects on Land	Sea conditions
0	Calm	0 - 1	0-1	<0.3	Smoke rises vertically.	Sea is like a mirror.
1	Light air	1-3	1-5	0.3 - 1.5	Smoke indicates direction of wind.	Ripples with appearance of scale, no foam crests.
2	Light breeze	4 - 6	6-11	1.6 - 3.3	Wind felt on face, leaves rustle.	Short wavelets, but pronounced.
3	Gentle breeze	7 - 10	12 - 19	3.4 - 5.4	Leaves and small twigs in constant motion.	Very small waves, crests begin to break.
4	Moderate breeze	11 - 16	20 - 28	5.5 - 7.9	Wind raises dust and loose pieces of paper; small branches are moved.	Small waves, becoming longer, numerous whitecaps.
5	Fresh breeze	17 - 21	29 - 38	8 - 10.7	Small tees in leaf begin to sway.	Wavelets form on inland waters; moderate waves, taking longer form.
6	Strong breeze	22 - 27	39 - 49	10.8 - 13.8	Large branches in motion, whistling heard in overhead wires, umbrella use becomes difficult.	Larger waves forming, whitecaps everywhere, some spray.
7	Near gale	28 - 33	50 - 61	13.9 - 17.1	Whole trees in motion, inconvenience felt when walking against the wind.	Sea heaps up; white foam from breaking waves begins to be blown in streaks along the direction of the wind.
8	Gale	34 - 40	62 - 74	17.2 - 20.7	Wind breaks twigs off trees; impedes progress.	Moderately high waves of greater length; edges of crests begin to break into spindrift.
9	Strong gale	41 - 47	75 - 88	20.8 - 24.4	Wind damages roofs (chimneys, slates, etc.).	High waves, crests of waves begin to topple, streaks of foam; reduced visibility.
10	Storm	48 - 55	89 - 102	24 5 - 28 4	Seldom experienced inland; trees uprooted;	Very high waves; white streaks of foam; reduced
	5.0111	- JJ	07-102	27.3-20.7	considerable structural damage occurs.	visibility.
11	Violent storm	56 - 63	103 - 117	28.5 - 32.6	Very rare, widespread damage.	Exceptionally high waves able to hide medium sized ships from view, reduced visibility.
12	Hurricane	64 +	118+	32.7+	Devastating damage.	Sea completely white; air filled with foam and spray, very reduced visibility.

#### D - VISIBILITY

- Ensure good visibility on your route at all times. To increase your visibility, you can move forwards with the jib arm slightly raised (beware of the risk of falls in the basket from knocking into a low doorway, overhead electric wires, travelling cranes, highway bridges, rail tracks or any obstacle in the area in front of the platform). In reverse, look directly behind you. At all events, avoid reversing long distances.
- If visibility of your road is inadequate, ask someone to help, standing outside the area in which the platform will be moving, and make sure you always have a good view of this person.

#### **E - STARTING-UP THE ENGINE-POWERED PLATFORM**

SAFETY INSTRUCTIONS

- If using an emergency battery for start-up, use a battery with the same characteristics and respect battery polarity when connecting it. Connect the positive terminal first, and then the negative terminal.

#### A IMPORTANT A

Failure to respect polarity between batteries can cause serious damage to the electrical circuit.

#### The electrolyte in the battery may produce an explosive gas.

Avoid flames and generation of sparks close to the batteries. Never disconnect a battery while it is being charged.

INSTRUCTIONS: < 2 - DESCRIPTION.

#### **E - STARTING UP THE ELECTRIC-POWERED PLATFORM**

SAFETY INSTRUCTIONS

- Do not use the platform if the battery is discharged to the point that movements are slowed down. In certain cases, the platform may stop (< 2 - DESCRIPTION for the charge level not to be exceeded).

INSTRUCTIONS: </

#### **F** - OPERATING THE PLATFORM

SAFETY INSTRUCTIONS

#### A IMPORTANT A

Operators should be aware of the risks connected with using the platform, notably:

#### - Risk of losing control.

#### - Risk of losing lateral and frontal stability of the platform.

#### The operator must remain in control of the platform.

- Do not carry out operations which exceed the capacities of your platform.
- Familiarise yourself with the platform on the terrain where it will be used.
- Ensure that the brakes work efficiently when stopping a travelling movement, taking into account the braking distances.
- Drive smoothly and adapt the platform speed to the operating conditions (site configuration, load in the basket).
- In all circumstances make sure you are in control of your speed.
- Take extreme care when manoeuvring the platform with the basket in the high position. Ensure that there is sufficient visibility.
- Take bends slowly.
- Look where you are going and always make sure you have good visibility along the route.
- Drive round obstacles.
- Never drive on the edge of a ditch or steep slope.
- Travel slowly on damp, slippery or uneven terrain or on truck ramps.
- Always remember that the hydraulic steering is very sensitive to movements.
- Never leave the I.C. engine on when the platform is unattended.
- Whatever your travelling speed, you must reduce the speed as much as possible before stopping.
- The platform should be operated in an area free of any obstructions or danger when it is lowered to the ground.
- Pay attention to structures, objects and people when manoeuvring.
- The operator using the platform must be aided on the ground by a person with adequate training.
- Remain within the limits of the platform's diagram (< 2 DESCRIPTION).
- Do not load the basket if the platform needs to travel on a steep slope.

#### **INSTRUCTIONS**

- When moving the platform a long distance, always travel in transport position or with the scissors in the low position (< 2 DESCRIPTION).
- DIESEL PLATFORM: Engage the appropriate gear (< 2 DESCRIPTION).

#### **G** - STOPPING THE PLATFORM

#### SAFETY INSTRUCTIONS

- Never leave the ignition key in the platform during the operator's absence.
- Make sure that the platform is not stopped in any position that will interfere with the traffic flow and in particular the platform should not be less than one metre from a railway track.
- In the event of prolonged parking on a site, protect the platform from bad weather, particularly from frost (DIESEL PLATFORM: Check the level of antifreeze), and close and lock all the platform cowlings (if applicable).
   Park the platform on level ground.

#### INSTRUCTIONS: ≪ 2 - DESCRIPTION.

DIESEL PLATFORM

- Before stopping the platform after a long working period, leave the I.C. engine idling for a few moments, to allow the coolant and oil to lower the temperature of the I.C. engine and transmission.

#### A IMPORTANT A

Do not forget this precaution, in the event of frequent stops or warm stalling of the engine, or else the temperature of certain parts will rise significantly due to the stopping of the cooling system, with the risk of badly damaging such parts.

#### A IMPORTANT A

#### Ensure that there are no hydraulic or electrolyte leaks on the platform.

#### A IMPORTANT A

#### When welding, work in the opposite direction from the control console to avoid sparks damaging it.

Any welding and cutting (blow torch) work from the basket on a building's metallic structures requires the following precautions to be taken:

#### A - WITH AN ELECTRICAL WELDING SET

- It is essential that the machine has a discharge braid connecting the chassis of the platform to the ground.
- The external structure to be welded must, without fail, be grounded. If the above conditions are observed, the platform can, in this case, be in contact with the structure or the elements to be welded without damaging the electronic components.
- The power supply to the welding equipment must be via a grounded socked, including the extension lead if required.
- In all cases, make sure that there are no electric arcs in the basket or on the platform (contact between the rod or torch and ground plug of the welding equipment). For this the ground plug of the welding equipment must never be placed on the platform's basket; it must only be placed as close as possible to the part to be welded.
- Switch off the welding equipment before disconnecting the ground clamp from the element or elements to be welded.

#### **B - WITH A BLOW TORCH**

- Attach the blow torch's bottles to the basket's frame.
- Sparks and clippings must not be directed towards the batteries.
- Do not set the blow torch down on the floor of the basket while it is still operating or point it towards the control panel or its power supply harness.

#### PLATFORM MAINTENANCE INSTRUCTIONS

#### **GENERAL INSTRUCTIONS**

- Read the operator's manual carefully.
- Wear clothes suitable for the maintenance of the lift truck, avoid wearing jewellery and loose clothes. Tie and protect your hair, if necessary.
- DIESEL PLATFORM:
  - Make sure the area is adequately ventilated before starting up the platform.
  - Stop the engine before conducting any work on the platform, switch off the platform and turn the battery cut-off to the OFF position (according to model).
- ELECTRIC PLATFORM: Switch off the platform before carrying out any work on the platform and turn the battery cut-off to the OFF position.
- Carry out all repairs immediately, even if the repairs concerned are minor.
- Repair all leaks immediately, even if the leak concerned is minor.
- Ensure that process materials and of spare parts are disposed in all safely and in an ecological manner.
- Be careful of the risk of burning and splashing (exhaust, radiator, engine, etc.).

#### MAINTENANCE

- Perform the periodic service (< 3 - MAINTENANCE) to keep your platform in good working condition. Failure to perform the periodic service may void the contractual guarantee.

#### MAINTENANCE LOGBOOK

- The maintenance operations carried out in accordance with the recommendations given in chapter 3 - MAINTENANCE and the other inspection, servicing or repair operations or modifications performed on platform shall be recorded in a maintenance logbook. The entry for each operation shall include details of the date of the works, the names of the individuals or companies having performed them, the type of operation and its frequency, if applicable. The part numbers of any platform items replaced shall also be indicated.

#### LUBRICANT AND FUEL LEVELS

- Use the recommended lubricants (never use contaminated lubricants).

DIESEL PLATFORM

- Do not fill the fuel tank when the engine is running.
- Only fill up the fuel tank in areas specified for this purpose.
- Do not smoke or approach the platform with a flame, when the fuel tank is open or is being filled.

#### BATTERY ELECTROLYTE LEVEL (ELECTRIC PLATFORM)

- Check the electrolyte level of the battery or batteries.

A IMPORTANT A

Ensure you take all the safety precautions when performing this operation (<>> 3 - MAINTENANCE).

#### **HYDRAULICS**

- Any work on the hydraulic circuit is forbidden except for the operations described in chapter 3 MAINTENANCE.
- Do not attempt to loosen connections, hoses or any hydraulic component with the circuit under pressure.

#### A IMPORTANT A

COUNTERBALANCE VALVE: It is dangerous to change the setting or remove the counterbalance valves or safety valves which may be fitted to your platform cylinders. These operations must only be performed by approved personnel (consult your dealer).

HYDRAULIC ACCUMULATOR (according to model): dismantling hydraulic accumulators and their pipes that may be fitted on your platform is dangerous. These operations must only be performed by approved personnel (consult your dealer).

#### **ELECTRICITY**

- Do not drop metallic items on the battery (between the positive and negative terminal(s)).
- Disconnect the battery or batteries before working on the electrical circuit.
- The control panels on the ground and in the basket and all other electrical control boxes must only be opened by authorised personnel.

#### TILT SENSOR

#### A IMPORTANT A

Some platforms are fitted with a tilt sensor attached to the turn table (<</li>
 2 - DESCRIPTION: CONTROL PANEL AND SAFETY DEVICES AT GROUND LEVEL); always carry out an initialisation after dismounting/refitting the tilt sensor. Refer to the platform repair manual.
 Some platforms are fitted with a tilt sensor that is integrated in the ground level control panel (<</li>
 2 - DESCRIPTION: CONTROL PANEL AND SAFETY DEVICES AT GROUND LEVEL); LEVEL); always carry out a calibration of the tilt sensor after dismounting/refitting or loosening/tightening the ground level control panel, its mounting plates or fixing screws. Refer to the platform repair manual.

#### WELDING ON THE ACCESS PLATFORM

- Disconnect the battery or batteries before welding on the platform.
- When carrying out electric welding work on the platform, connect the negative cable from the welding equipment directly to the part being welded, so as to avoid high tension current passing through the alternator or the ring gear.
- If the platform is equipped with electronic controls, disconnect them before starting to weld, to avoid the risk of causing irreparable damage to electronic components.

#### A IMPORTANT A

Welding operations for the purposes of maintenance or repairs must only be carried out by persons authorised by MANITOU.

#### WASHING THE PLATFORM

- Clean the platform or at least the area concerned before any intervention.
- Remember to close and lock (if applicable) all the platform's cowlings.
- When cleaning with a high pressure cleaner, avoid air from entering the engine, the piston rod wiper seals, the hinges, the structural components and the electrical connections, etc.
- If necessary, protect components likely to be damaged, and in particular the electrical components (variable speed drive, charger) and electrical connections and the injection pump from penetration by water, steam or cleaning products.
- Dry the electrical components.
- Clean the platform of any fuel, oil or grease trace.
- Grease the axles, pins, ring gear, etc.

#### IF THE PLATFORM IS NOT TO BE USED FOR A LONG TIME

#### INTRODUCTION

The following recommendations are intended to prevent the platform from being damaged when it is withdrawn from service for an extended period.

#### A IMPORTANT A

Procedures to follow if the platform is not to be used for a long time and for starting it up again afterwards must be performed by your dealership. This period of long-term stoppage must not exceed 12 months.

#### **PREPARING THE PLATFORM**

- Clean the platform thoroughly.
- Check and repair any leaks of fuel, oil, water, etc.
- Replace or repair any worn or damaged parts.
- Touch up the paintwork if necessary.
- Make sure the cylinder rods are in the retracted position (if applicable).
- Shut down the platform.
- Release the pressure in the hydraulic circuits.

#### **PROTECTING THE ENGINE (DIESEL PLATFORM)**

- Fill the tank with fuel (≪ 3 MAINTENANCE).
- Replace the engine oil and oil filter (</ 3 MAINTENANCE).
- Drain and replace the coolant (< 3 MAINTENANCE).
- Disconnect the battery and store it in a safe place away from the cold, after charging it to a maximum.
- Block the outlet with waterproof adhesive tape.
- Remove the belts and store them in a safe place.
- Disconnect the engine cut-off solenoid on the injection pump and carefully insulate the connection.

#### **BATTERY CHARGING (ELECTRIC PLATFORM)**

- In order to preserve battery life and capacity, check them periodically and keep the charge level constant (<2 DESCRIPTION).
- Do not leave the battery charger connected during a lightning storm.

#### **PROTECTING THE PLATFORM**

- Protect cylinder rods which are not be retracted from corrosion.

- Wrap the wheels.

NOTE: If the platform is to be stored outdoors, cover it with a waterproof tarpaulin.

#### **BRINGING THE PLATFORM BACK INTO SERVICE**

DIESEL PLATFORM

- Remove the protection from the cylinder rods and wheels.
- Refit and reconnect the battery.
- Remove the waterproof adhesive tape from the exhaust outlet.
- Empty and replace the fuel and replace the fuel filter (</ 3 MAINTENANCE).
- Refit the belts and adjust their tension (</ 3 MAINTENANCE).
- Reconnect the engine cut-off solenoid.

#### A IMPORTANT A

#### Make sure the area is adequately ventilated before starting up the platform.

- Start up the platform, following the safety instructions and regulations.

- Perform the daily maintenance operations (< 3 - MAINTENANCE).

#### DIESEL AND ELECTRIC PLATFORM

- Lubricate the platform completely (< 3 MAINTENANCE).
- Carry out all the lifting system's hydraulic movements right up to the limit switches for each cylinder.

#### A IMPORTANT A

Consult your dealer before disposing of your platform.

#### **RECYCLING OF MATERIALS**

#### **METALS**

• Metals are 100 % recoverable and recyclable.

#### PLASTICS

- Plastic parts are identified with a marking in accordance with current regulations.
- A limited range of materials is used to simplify the recycling process.
- The majority of plastic components are made of "thermoplastic" plastics, which are easily recycled by melting, granulating or grinding.

#### RUBBER

• Tyres and seals can be ground for use in cement manufacture or to obtain reusable granules.

#### GLASS

• Glass items can be removed and collected for processing by glaziers.

#### **ENVIRONMENTAL PROTECTION**

By entrusting the maintenance of your platform to the MANITOU network, the risk of pollution is limited and the contribution to environmental protection is made.

#### WORN OR DAMAGED PARTS

- Do not dump them in the countryside.
- MANITOU and its network have signed-up to a scheme of environmental protection through recycling.

#### **USED OIL**

- The MANITOU network organises the collection and processing of used oil.
- By handing over your waste oil to MANITOU, the risk of pollution is limited.

#### **USED BATTERIES**

- Do not throw away batteries, as they contain metals that are harmful for the environment.
- Return them to the MANITOU network or any other approved collection point.

NOTE: MANITOU aims to manufacture platforms that provide the best performance and limit polluting emissions.

### **2 - DESCRIPTION**

### **2 - DESCRIPTION**

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"CE" DE	CLARAT	ION OF	CONFORMI	TY —∀C	)2/2017
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#### "CE" DECLARATION OF CONFORMITY → 03/2017



bg : (1) <u>.EC' доласеция за съотоптствие (оригнол)</u>, (2) Производитея, (3) Адрес, (4) Притежател на технического досне, (5) Производителят декларира, че описаната по-допу машина, (6) Е а съотавтствие със следните директиви и техното транспониране в ивщесналното законодателство (ако в грипозизмо), (7) Приложение (У относно мацините, (8) Номер на сертификат, (9) Нотифициран орган, (10) Припожена процедура, (11) Ниво на силата на звука, (12) Измерено, (13) Гарентирано, (14) Изоолзвани хараконскирано стандарти, (15) Иаползвани стандарти вли технически разпоредби, (16) Изработено в, (17) Дата, (18) Име на подписаното лице, (19) Длъжност, (20) Фирма, (21) Подпис

 $\cdots$ 

cs ; (1) E5 prohlátení o shodé (původní). (2) Výrobce . (3) Adresa, (4) Držiel lechnické dokumeniace, (5) Výrobce prohlátení o spíšení popsané niže, (6) Ja v souladu s následujícími směrnicemi transponovanými do vnikrostátního práva (e-ii relevantní), (7) Pro stroje v přísze IV(8) Číslo certificátu, (9) Nottificační orgán, (16) Použitý postup, (11) Groveň hluku (12) Naměřená, (13) Zaručená, (14) Použité harmonizované normy , (15) Použité normy nebo technické předpisy(16) Místo (17) Datum (18) Jméno podepsaného, (19) Funkce, (20) Společnost, (21) Podpia

da : (1) EF Overensstermelsæreklæring (original). (2) Producent, (3) Adresse, (4) Indehaver af det tekniske dossier, (5) Producenten erklærer, at maskinen, der er beskrevet nedemfor, (5) overholder nedennævnle direktiver og disses gennemførelse 81 national ret (hvis det er relevant), (7) For maskiner under blag IV, (8) Certilikat nummer, (9) Bemyndigede organ, (10) Anvendt procedure, (11) Lydeflekthivesu, (12) Målt (13) Garanti, (14) Anvendte harmoniserede standerder, (15) Standarder eller tekniske regier, (16) Udfandiget I. (17) Dato, (18) Underskrivers navn, (19) Furnktion, (20) Firma, (21) Underskrift.

de : (1) EG-Konformfählenkläning (original). (2) Hensteller, (3) Adresse, (4) Inhaber des technischen Dossiers. (5) Der Hensteller erklärt, dass die nachstehend baschriebene Maschine (6) den folgenden Richtlinien und deren Umsetzung in die nationale Gesetzgebung entspricht (falls anwendbar). (7) Für die Maschinen taut Anhang IV. (8) Bescheinigungsnummer, (9) Benannte Stelle, (10) Angewandtes Verfahren, (11) Schalleistungspegel, (12) Gemessen, (13) Gewährleistet, (14) angewandte harmonisierte Normen, (15) angewandte sonstige technische Normen und Beslimmungen, (16) Ausgestellt in, (17) Datum, (18) Name des Unterzeicheers, (19) Funktion, (20) Gesellschaft, (21) Unterschrift.

el : (1) Δήλιστη στωράρφωσης CE (πρωτότυπα), (2) Κατασκευαστής, (3) Δεύθυνση, (4) Κάτοχος του τεχνικού φακέλου, (5) Ο κατασκευαστής δηλώντι ότι το μηχάνημα που περηράφεται παρακάτω, (6) Συμμορφώνεται με τις εξής οδηγίες και τις προσαρμογίς τους στο είννικό δίκαιο (κατά περίπτωση), (7) Για το μηχανήματο του παροριτήματος IV. (8) Αριθμός πατοιποιητικού, (9) Διακοινωμένος φορίας, (10) Εφορμοζόμενο διαδικαιοί, (11) Στάθηι η ηχιτικής ισχύος, (12) Καταμετριμένη, (14) Εναιρευοιαμένη του παρομοίματος IV. (8) Αριθμός πατοιποιητικού, (9) Διακοινωμένος φορίας, (10) Εφορμοζόμενο διαδικαιοί, (11) Στάθηι η ηχιτικής ισχύος, (12) Καταμετριμένης (13) Εγναμαίνης του παρομογματία που χρησιμοποιούνται, (16) Πρόπυτο ή τεχνικοί κανόνες που χρησιμοποιούνται, (16) Τόπος, (17) Ημεραμηνία, (18) Όνομα του υπογράφοντος, (19) Ιδιάτητα, (20) Επαιρεία, (21) Υπογραφή

B8 : [1] Declaración CE de conformidad (onginal), (2) Fabricante, (3) Dirección, (4) Titular del expediente técnico, (5) El tebricante declara que la mitquina que se describe a continuación, (6) Cumple con las siguientes directivas y sus transposiciones a la legislación nacional (en caso oportuno), (7) Para las máquinas enexo IV, (6) Número de certificación, (9) Organismo notificado, (10) Procedimiente aplicación, (14) de potencia aciastica, (12) Medido, (13) Garantizado, (14) Normas armonizadas utilizadas, (15) Otras normas o especificaciones técnicas utilizadas, (16) Hecho en, (17) Fecha, (18) Nombre del signatario, (19) Cargo, (20) Empresa, (21) Firma.

et : [1] EÜ vestavusdeklanshioon (alguplinano), (2) Toolja, (3) Aadress, (4) Tehnilise dokumentistiooni valdaja, (5) Toolja kinnitab, et alipool kidjeldatud seade, (6) On vasiavuses järgmiste direktiivide ja nende nigisissesse õgusesse üevõtmiseks vasiuvõetud õigusakidaga (asi on kohaidatuv), (7) (V lisas loetlistud seadmete pahal, (8) Tunnistuse number, (9) Sertittiseominisasuku, (10) Kohaidatuv menetlus, (11) Akustlise võimuse tisse, (12) Mõõdetud, (13) Togalaku, (14) Vasiab kehtivatele ühtustatud standandislee, (15) Vasiab muudele kehtivatele standarditele ja tehnilistele normidele, (15) Väljaandmise koht, (17) Väljaandmise aeg, (18) Alikirjastaja nimi, (19) Amet, (20) Ettevõte, (21) Alikirj

fl : (1) EY-vsefemulseomukasulevés direktivien seké náliti vastavien kansalisten salanosset (10) Käytelyt texnisol standardit tai sálannökset, (16) Paideka, (17) Alkelýpistulavásulevés Aliset et véssion (12) Militelit véssion salaksi (15) Käytelyt texnisoi standardit tai sálannökset, (16) Paideka, (17) Alisétyt texnisoi salavésulev (20) Yrópv. (21) Alisétytelitevésselevésulevésulevésulevésselevéselevéselevésselevéselevéselevéselevéselevéselevéselevéselevéselevéselevés

ga : (1) Dearbhú comhterachta s (2E s (buraidh), (2) Déantóir, (3) Seolach, (4) Sealbhóir an chomhaid theicniúil, (5) Dearbhaionn an déantóir go ndéanann an t-innealt ar a bhúil cur síos thíos, (5) Ciolonn sé le na treoracha seo a leanas agus iona d'rasul isteach i ndí náisúnte (más cui), (7) Le haghaidh innit an agus in 17, (8) Uimhir teastais, (9) Comhtacht a cuigtar fógra dó, (10) Nós imeachta a cuireadh i bhleidhm, (11) Leibhéal cumhachta na fuaime, (12) Tomhasta, (13) Ráthaithe, (14) Caighdeáin chomhchubhithe a úsáideadh, (15) Caighdeáin nó fortálacha teicniúlta a úsáideadh, (16) Arna dhéanamh ag, (17) Dáta, (18) Ainm an tsinitheora, (19) Feidhmeannas, (20) Comhlacht (21) Síniú.

hr : (1) EK deklaracija o ukkadenosti (vicipinal), (2) Proizvođač, (3) Adresa. (4) Nositelj tehničke dokumentacije. (5) Proizvođač izjavljuje de stroj opran u nestavku, (5) Ispunjava sijedeće dinektive in ljekvom prijenosu u nadomalno zakonodavstvo (ako je primjenjivo), (7) Za dodatak IV o strojavima, (8) Broj odrstituta, (9) Ovlašteno tijelo, (10) Primjenjeni postupak, (11) Razina snage zvika, (12) Izmjøreno, (13) Zajamčeso, (14) Primjenjeni standardi o harmoniziranju, (15) Primjenjeni standardi ili tehničke pričave, (16) Urađeno u, (17) Datum, (18) Ime potpisnika, (19) Funkcija, (20) Tvrtka, (21) Potpis.

hu : [1] CE megfelelőség nyisztezet (medel). (2) Gyártó, (3) Cim, (4) A műszaki dokumentáció birtokosa, (5) A gyártó kijalanti, hogy az alábbi termék, (6) Megfelel az alábbi trányelvelknek valamínt azok honosíhott előírásainak (he vannak éyenek). (7) A IV. melékiet gépelhez (adott esetben), (8) Bizonytai szám, (8) Ertestleti szervezet, (10) Akatmazott eljírás, (11) Akusztitus hang azini, (12) Márt, (13) Garanták, (14) felhasznált hannonizált szervezet, (15) egyéb felhasznált műszaki szervezet, iszervezet, (10) Akatmazott eljírás, (11) Akusztitus neve, (19) Funkció, (20) Váltalat, (21) Aláírás

Is : (1) Sanzuerengorvotoró ESB (sopturaveg), (2) Framielóandi, (3) Aðstur, (4) Handhali takviskrár, (5) Framfelóandi staðlestir að vélin sem lýst er hér, (6) Samrannist eftirfarandi stöðlum og staðfærsku þeirra með hidejón af þjóðamétti (ef við 8), (7) Fyrir takjabúnað í IV. viðauka, (8) Númer vottorða, (9) Tilkyrant til, (10) Aðfurð beitt, (11) Hijdestyrkur, (12) Masdist, (13) Ábyrgð, (14) Samhalfóir staðlar sem notaðir voru, (15) Aðer staðlar eða takkelegar forskriftir, (16) Slaður, (17) Dagsetning, (18) Naln undimtaðs, (19) Slaða, (20) Fyrirlæk, (21) Underskrift.

It : (1) Dichanapone CE di contomittà (originale), (2) Costruttore, (3) Indirizzo, (4) Titolare del fascicolo tecnico, (5) Il costruttore dichiara che la macchina desortta di seguito, (6) È conforme alle direttive seguenti e al relativo raccimento nella normativa nazionale (se applicabile), (7) Per le macchine Alegato IV, (8) Numero di Attestazione, (5) Organismo destinatario della notifica, (10) Procedura applicate, (11) Unello di potenza acustica, (12) Misurato, (12) Garantito, (14) Nome armonizzate applicate, (15) Nome e specifiche tecniche applicate, (16) Luogo, (17) Data. (16) Nome del firmatario, (19) Fanziane, (20) Società, (21) Firma,

It : (1) FC ametrice cestaracija (entension), (2) Gamentojas, (3) Adresas, (4) Techninės bylos turėtojas, (5) Gamentojas nurodo, kad mašina, epralyta žemiau. (6) ašlinka tolau nurodytas direktyvas ir į nacionalinaus laisės aktus perkeltas jų nuostatas (jei taikytina), (7) IV priedas dėl mašinų, (8) Sentilikato Nr., (9) Notifikuotoji jataiga, (10) Taikyta procedūra, (11) Garso atiprumo Jygis, (12) Išmatuotas, (13) Garantuojamas, (14) Naudoti damieji standartai. (15) Kiš naudoti standartai ir techninės specifikacijos, (16) Paairašyte, (17) Data, (18) Paairašiusio asmena vardea ir pavardė, (19) Parelgos, (20) Bendrovė, (21) Pamilas

Iv: (1) EK atblatiste (originalis), (2) Rsztotaja, (3) Adrese, (4) Tehniskäs dokumentäcijas turistäja, (5) Ražotaja apliecina, ka turpmäk aprakstitiä meäina, (8) Atbliet täiäk noräditajäm direktiviim on to leidsudanai nacionalaja tikumdokana (ja piemärojame), (7) IV pieläuma inkärtäm, (8) Sortifikata numum, (8) Pienverote iastidos, (10) Piemärote procedora, (11) Skapas laudas limenia, (12) timärita, (13) Garantitta, (14) Piemärojamia aaskapotie standarti, (15) Piemärotaine tehniskie standarti un notelikumi, (16) Sestädita, (17) Dehuma, (18) Parakstitaja värda, (19) Amata, (20) Uzpimuma, (21) Paraksta

mt : (1) Okjanazeni lai Konformitik lai-KE (crignat); (2) Manifattur, (3) Indirizz, (4) Detentur tal-faji lekniku, (5) II-manifattur jeditigiana II-magna deskrista haven taht, (6) Hija konformi hija konformi mai-Durettivi segverni u Hegijet II-jemplementavhom III-tigi nazzionali (jekk applikatoli), (7) Ghal-magni II-Anness IV. (8) Numu tab-deritikut, (9) Enthä nooffikata, (10) Pročedura applikata, (11) Livell ta' gewen alvuska, (12) Imkejel, (13) Garantit, (14) Hatandarda armonizzati udali, (15) standarda teknici u specifikazzionijiet ohna uzeri, (16) Maghmul IV. (17) Data, (16) Sem iI-firmatarju, (19) Kariga, (20) Kompaniju (21) Firma.

nl : (1) EG-vervaring van overeenstemming (comprochulture), (2) Fabrikant, (3) Adres, (4) Houder van het technisch dossier, (5) De tabrikant verklaart dat de hieronder beschreven machine (6) in overeenstemming is met de volgende richtijven en hun omzettingen in het nationale recht (indien van toepassing), (7) Voor de machines in bijlage (M, (8) Certificautnammer, (9) Aangemelde instantie, (10) Toegepaste procedure, (11) Geluidsvermogensviveu, (12) Geneten, (13) Geganndeerd, (14) gehanteerde geharmoniseerde normen, (16) andere gehanteerde technische normen en specificaties, (16) Opgemaakt te, (17) Datum, (16) Naam van ondergetekende, (19) Functie, (20) Onderneming, (21) Handtekening,

no : (1) CE-sumwarsenklaning (original), (2) Produsent, (3) Adresse, (4) Ionehaveren av den lekniske dokumentasjonen, (5) Produsenten sier at maskinen beskrevet nedentor, (6) Opphyter kravene i falgende direktiver og med nasjonale gjennornferingsbestemmelser (hvis aktuelt), (7) For maskinene i blag IV, (8) Attestnummer, (9) Teknisk kontrollergan, (10) Anvendt procedyre, (11) Akustisk stav, (12) MBI, (13) Garaniert, (14) harmoniserte standarder som brukes, (15) Andre standarder og spesifikasjoner som brukes, (16) Utstadt, (17) Dato, (18) Undertegnedes navn (19) Stilling, (20) Firma (21) Underskrift

pl : (1) Deklaracja zgodnobo CE (oryginal). (2) Producent, (3) Adres, (4) Posladacz dokumentacji technicznej, (5) Producent olswiadcza, że opisana poniżej maszyna, (6) Jest zgodna z następującymi dynektywami i odpowiadającymi im przepisami prawa knajowego (jeśl dokyczy), (7) Dia maszyn załącznik IV. (8) Numer certyfikatu, (9) Jednostka certyfikująca, (10) Procedum stosowana, (11) Podom mocy akustycznej, (12) Zmierzony, (13) Gwarzatowane normy zharmonizowane, (15) Zastosowane normy lub przepisy techniczne, (16) Sporządzono w, (17) Data, (18) Nazwisko podpisującego, (19) Stanowisko, (20) Firma (21) Podpis

pt : (1) Declaração de conformidade CE (original). (2) Fabricania, (3) Morada, (4) Titular do processo tácnico, (5) O tabricante alimna que a máquina descrita abaixo, (6) Está em conformida com as seguintes diretivas e as suas transposições para o direito nacional ise for o caso), (7) Para as máquinas no anexo IV, (8) Número de centificado, (9) Entidade notificada, (10) Procedimento aglicado, (11) Nivel de potência acoistaca, (12) Medida, (13) Garantida, (14) normas harmonizadas utilizadas, (15) catras normas e específicações técnicas utilizadas, (16) Elaborado em, (17) Data, (18) Nome do signatário, (19) Cargo, (20) Empresa, (21) Assinatura

F0: (1) Declaration to conformation CE (original), (2) Productificor, (3) Adresa, (4) Titulanal din desarut tehnic, (5) Procuestional afirmà că aparatul descria mai jos, (6) Este conform cu directivele urmitiloaris și cu transpunerea lor în dreptul responsi (dacă este cazul), (7) Pentru maşinile din anexe IV, (8) Număr de atestare, (9) Organism notificat, (10) Procedure aplicată, (11) Nivel de putere ecustică, (12) Misurat, (13) Gazantat, (14) standardele armonizate utilizate, (15) alte standarde si specificadi tehnice utilizate, (16) Intecnt III, (17) Data, (18) Numele persoanei care servedază, (19) Funcție, (20) Firma, (21) Sermatura

sk : (1) Vyrkázenie o zhode ES (pôvodné), (2) Výrobca, (3) Adresa, (4) Držiteľ technickej dokumentácie, (5) Výrobca vyňlasuje, že nižšie popisaný stroj, (6) Je v súlade s nasledujúcími smomicami a smemicami knarsponovanými do vnětoňkinoho práva (v prípade potroby), (7) Pre stroje v průbně IV, (8) Číslo certifikátu, (9) Notifikovaný orgán, (10) Použitý postup, (11) Akustická úroveň hluku, (12) Namoraná, (13) Zaručená, (14) Použité harmonizované normy, (15) Iné použité normy a technické predpisy, (16) Mieste vytlania, (17) Dátum vydania, (18) Mono podpísanaj dobýv, (19) Funkcia, (20) Spotočnasť, (21) Podpis

st : (1) ES Itavia o składnosti (izvinsk), (2) Protzvajaleci, (3) Naslov, (4) Imetnik tehnične dokumentecije, (5) Protzvajaleci izjavlja, da naprava, opisana v nadaljevanju, (6) Ustreza naslednjim direktivam in nacionalni zakonodaji (če ta velja). (7) Za stroje v skladu s prilogo IV, (8) Števlika potrdita, (9) Proješen organ, (10) Uporsbijen postopek, (11) Raven akustične moči, (12) Izmetjena, (13) Zajemčena, (14) Uporsbijeni usklajeni standardi, (15) Drugi uporsbijeni tehnični standardi in specifikacija, (16) V, (17) Datum, (18) Ime podpisnika, (19) Funkcija, (20) Podjelja, (21) Podpis. sv : (1) EG-forsikran om burrotestammoke (conjene). (2) Tiliverkare, (3) Adress. (4) Agaren av det tekniska underlaget, (5) Tiliverkaren försikkra att den maskin som beskrivs nedan, (5)

8V : (1) Co-Intraktin on ontronstatistics (cogne), (2) (Inversite, (3) Adress, (4) Agreen av oldt tekniska undenliget, (5) Illiverkaren forsakvar at den maskin som beskrivs redam, (5) Överensstämmer med nedanstäende direktiv och inörfivandet av dem i nationell rätt (om tillämpligt), (7) För maskinema i bil aga IV, (8) Nummer för godkännande, (9) Anmält organ, (10) Förfarande som tillämpals, (11) Ljudfrycksnivå, (12) Uppmilt, (13) Garanterad (14) Hamoniserade standarder som använts, (15) andra tekniska standarder och specifikationer som använts, (16) Uppriltat I, (17) Datem, (18) Namn på den som undertecknal, (19) Befattning, (20) Företag (21) Namnteckning 

**A IMPORTANT A** Clean all stickers so that they are legible. Any stickers which are illegible or damaged must be replaced. Check that the stickers are present after replacing any spare parts.

1 - WHITE ARROW	Part No. 498327 2-10
2 - BLACK ARROW	Part No. 498326 2-10
3 - WHEEL LOAD 150 AETJ (150 AETJC) - 150 AETJ 3D (150 AETJC 3D)	Part No. 679342 2-10
4 - WHEEL LOAD 170 AETJ L	Part No. 516913 2-10
5 - EMERGENCY CONTROL PROCEDURE	Part No. 52706358 / Part No. 679307 2-10
6 - EMERGENCY CONTROL PROCEDURE 150 AETJ 3D (150 AETJC 3D)	Part No. 683279 2-11
7 - GROUND SAFETY INSTRUCTIONS	Part No. 830065 (1) / 685608 (2) 2-11
8 - WASHING INSTRUCTION	Part No. 313672 2-11
9 - LASHING POINT	Part No. 598895 (1) / 833041 (2) 2-12
10 - BASKET SAFETY INSTRUCTIONS.	Part No. 679321 2-12
11 - REPLACING THE BATTERY	Part No. 677856 2-12
12 - BATTERY SAFETY	Part No. 683241 (1) / 314569 (2) 2-13
13 - DANGER KEEP AWAY	Part No. 679450 2-13
14 - HAND CRUSHING HAZARD	Part No. 679451 (1) / 676988 (2) 2-14
15 - DANGER OF CRUSHING	Part No. 679452 2-14
16 - LOCATION OF ACCESS PLATFORM KEY	Part No. 598897 2-14
17 - HARNESS ATTACHMENT POINT	Part No. 684503 (1) / 834438 (2) 2-15
18 - LIFTING POINT	Part No. 833291 2-15
19 - RESET BUTTON SPS - FIRST VERSION (OPTION)	Part No. 52513971 2-15
20 - RESET BUTTON SPS - SECOND VERSION (OPTION)	Part No. 52676715 2-15
21 - HYDRAULIC OIL	Part No. 597652 2-16
22 - LIVE COMPONENTS DEPENDING ON VERSION	Part No. 52720522 2-16







647536 (26/11/2020) 150 AETJ/AETJ3D - 150 AETJ C/AETJ C 3D - 170 AETJ L

#### <u>1 - WHITE ARRO</u>W

#### Part No. 498327

Part No. 498326

Indicates forward driving direction, *◄* OPERATING THE PLATFORM: TRANSPORT/ WORKING POSITION.



#### 2 - BLACK ARROW

Indicates reverse driving direction, OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

#### 3 - WHEEL LOAD 150 AETJ (150 AETJC) - 150 AETJ 3D (150 AETJC 3D)

#### Part No. 679342

Part No. 516913

4 - WHEEL LOAD 170 AETJ L

Indicates the maximum ground load per wheel.

NOTE: Each access platform has its own specific wheel load. Please refer to this sticker to find out the value.



#### 5 - EMERGENCY CONTROL PROCEDURE Part No. 52706358 / Part No. 679307

Illustrations: (#1) = first version, (#2) = second version.

Indicates the procedure to be followed for using the emergency controls.

NOTE: ⊲ RESCUE PROCEDURE.







#### 6 - EMERGENCY CONTROL PROCEDURE 150 AETJ 3D (150 AETJC 3D)

Part No. 683279

Part No. 830065 (1) / 685608 (2)

Indicates the procedure to be followed for using the emergency jib rotation controls. NOTE: ⊲ RESCUE PROCEDURE.

#### 7 - GROUND SAFETY INSTRUCTIONS

Indicates:

- 1: That the safety and operating instructions must be read before using the platform.
- 2: That the platform must not be towed in the event of breakdown.
- 3: That it is strictly forbidden to direct a pressure washer nozzle over the control panels and electrical components.
- NOTE: (1) = 1st version. (2) = 2nd version. The reference (1) must be replaced by reference (2) for spare parts orders.





#### 8 - WASHING INSTRUCTION

Indicates that it is strictly forbidden to direct a pressure washer nozzle over the control panels and electrical components.

## <u>А</u> 11672-8

Part No. 313672

#### 9 - LASHING POINT

#### Part No. 598895 (1) / 833041 (2)

Indicates the location of the platform's anchoring points,  $\triangleleft$  PLATFORM OPERATION: SECURING THE PLATFORM.

NOTE: (1) = 1st version. (2) = 2nd version. The reference (1) must be replaced by reference (2) for spare parts orders.







Indicates:

- 1: Maximum load capacity for the basket.
- 2: The safety and operating instructions must be read before starting the platform.
- 3: Operating the platform outside and inside.
- (4): The maximum wind speed when operating outside.
- 5: The maximum manual force.
- 6: Maximum tilt in the working position.
- $\bigcirc$ : The risk of electric shock.
- NOTE: Each platform has its own specific capacity. Please refer to this sticker for your platform.

#### Part No. 679321



#### **11 - REPLACING THE BATTERY**

#### Part No. 677856

Indicates that the weight of a replacement battery must be greater than or equal to the weight of the battery being replaced. Failure to follow this instruction may result in the platform tipping over.



647536 (26/11/2020) 150 AETJ/AETJ 3D - 150 AETJ C/AETJ C 3D - 170 AETJ L

2 - 12

#### **12 - BATTERY SAFETY**

#### Indicates:

- That the battery cut-off must be set to the off position"OFF" before connecting the battery charger.
- B: That the emergency stop button and the battery cut-off must be set to the off position"OFF" before connecting the battery charger.

2: The following hazards:

- Explosion when charging.
- Possibility of explosion caused by a flame, spark or short-circuit.
- Risk of gas emissions. Charge the battery outside or in a well-ventilated area.

(3): The characteristics of the power source for connecting the battery charger.

#### NOTE: ⊲ CHARGE THE BATTERY.

NOTE: (1) = 1st version. (2) = 2nd version. The reference (1) must be replaced by reference (2) for spare parts orders.





#### 13 - DANGER KEEP AWAY

Part No. 679450

Indicates that it is strictly forbidden to stand under the lifting mechanism (arms, jib, basket, etc.) or within the access platform's operating area.



#### **14 - HAND CRUSHING HAZARD**

#### Part No. 679451 (1) / 676988 (2)

Indicates that it is strictly forbidden to place your hands or any other part of the body in the lifting mechanism components (arms, jib, basket, etc.).

NOTE: (1) = 1st version. (2) = 2nd version. The reference (1) must be replaced by reference (2) for spare parts orders.





#### **15 - DANGER OF CRUSHING**

Indicates that it is strictly prohibited to stand in this area when the platform is moving. The components on which the stickers are present could crush you.

#### **16 - LOCATION OF ACCESS PLATFORM KEY**

Indicates the location of the platform's spare keys.

#### Part No. 679452

Part No. 598897





#### **17 - HARNESS ATTACHMENT POINT**

#### Part No. 684503 (1) / 834438 (2)

Indicates the location of the safety harness attachment points,  $<\!\!<\!\!<\!\!<\!\!<\!\!\mathsf{SAFETY}$  COMPONENTS: HARNESS ATTACHMENT POINTS.

NOTE: (1) = 1st version. (2) = 2nd version. The reference (1) must be replaced by reference (2) for spare parts orders.





#### **18 - LIFTING POINT**

Indicates the location of the platform's lifting points, <  $\checkmark$  3 - MAINTENANCE: OCCASIONAL OPERATION: LIFTING THE PLATFORM.

#### Part No. 833291



#### **19 - RESET BUTTON SPS - FIRST VERSION (OPTION)**

Part No. 52513971

Indicates the location of the reset button SPS of the SECONDARY PROTECTION SYSTEM option SPS - FIRST VERSION "SafeManSystem".



#### 20 - RESET BUTTON SPS - SECOND VERSION (OPTION)

Part No. 52676715

Indicates the location of the reset button SPS of the SECONDARY PROTECTION SYSTEM option SPS - SECOND VERSION.



#### 21 - HYDRAULIC OIL

Part No. 597652

This indicates that the tank is intended to contain only hydraulic oil.



#### 22 - LIVE COMPONENTS DEPENDING ON VERSION

#### Part No. 52720522

Indicates the presence of live components, even if the battery cut-off is in the off position.


# **IDENTIFICATION OF THE PLATFORM**

As our policy is to promote constant improvement of our products, our range of platforms may undergo certain modifications, without obligation for us to advise our customers.

When you order parts, or when you require any technical information, always specify:

NOTE: We recommend that you write these numbers down in the places provided for this purpose when you receive the access platform so that you can pass them on more easily when required.

#### **PLATFORM MANUFACTURER'S PLATE**

#### 



#### SECOND VERSION

"Designation" Designation	
"Year of manufacture" Year of manufacture	
"Model year" Model year	
"Unladen mass" Unladen weight	
"Nominal power" Nominal power	
"Voltage" Voltage	
"Inside / Outside" Interior/Exterior	
"Maximum load" Maximum load	
"Maximum number of persons" Maximum number of people	
"Mass of equipment" Equipment weight	
"Manual forces" Manual forces	
"Maximum inclination" Maximum tilt	
"Maximum wind speed" Maximum wind speed	
"Serial Number" Serial number	

For any other technical information about your platform, *◄* SPECIFICATIONS.

# **SPECIFICATIONS**

LOAD SPECIFICATIONS		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Platform					
- Maximum load capacity of the basket	200			-	
- Maximum wind speed for external use	km/h		45		-
- Maximum number of occupants for internal use	- Maximum number of occupants for internal use 2				
- Maximum number of occupants for external use			2		-
- Authorized maximum tilt	0		3		0.1%
- Unladen weight (wheels 600X190)	kg	6,700	6,760	6,950	2%
- Unladen weight (wheels 27X10X12)	kg	6,870	6,930	7,100	2%
- Maximum slope accessible (+100 kg) (wheels 600X190)	%		22		1%
- Maximum slope accessible (+100 kg) (wheels 27X10X12)	%		18.6		1%
Wheels (600X190)					
- Load on one front wheel - transport position	kg	1,465	1,465	1,534	2%
- Load on one rear wheel - transport position	kg	1,885	1,885	1,921	2%
- Maximum load on one wheel - working position	ka	3,630	3,630	4,073	2%
- Ground contact area - hard / soft	cm <sup>2</sup>	268.3 /	268.3 /	245.8 /	5%
- Ground bearing stress - hard / soft	daN/cm <sup>2</sup>	13.5 /	13.5 /	16.6 /	5%
Wheels (27X10X12)					
- Load on one front wheel - transport position	ka	1.465	1.465	1.555	2%
- Load on one rear wheel - transport position	ka	1.885	1,885	1,992.5	2%
- Maximum load on one wheel - working position	ka	3.560	3,560		2%
- Ground contact area - hard / soft	cm <sup>2</sup>	195.1 / 646	195.1/646	664 /	5%
- Ground bearing stress - hard / soft	daN/cm <sup>2</sup>	19.5 / 5.9	19.5 / 5.9	6.13 /	5%
SPEEDS AND MOVEMENTS		150 AETJ	150 AETJ 3D	170 AETJ L	±
Driving speed		(ISUAEIJC)	(ISU AEIJC SD)		
- WORKING POSITION speed	ka		0.6		01
- TRANSPORT POSITION speed	ka				0.1
Main arm (telescone extended)	ĸġ		J		0.5
Lifting - unladen/laden	c	30	/ 30	36/36	2
- Lowering - unladen / laden	5	28	/ 30	3/ / 3/	2
Secondary arm	3	20	/ 20	J4 / J4	2
- Lifting - unladen/laden	c	40	/ 40	40 / 40	2
- Lowering - unladen / laden	5 c		/ 76	26/26	2
	3	20	/ 20	20/20	2
- Extension - unladen/laden	c	13	/13	21/21	2
- Betraction - unladen/laden	<u>5</u>		/ 10	18/18	2
	3	10	/ 10	10/10	2
Lifting unladen /laden					
	s	17	/ 17	17/17	2
- Lowering - unladen / laden	S S	17	/ 17	17/17	2
- Linung - unladen/laden - Lowering - unladen / laden Turntable rotation (telescope extended/retracted) - 355°	S S	17 18 02	/ 17 / 18 / 92	17/17 18/18 112/112	2 2 5
- Lowering - unladen / laden - Lowering - unladen / laden Turntable rotation (telescope extended/retracted) - 355° Backet rotation - right/left	S S S	17 18 92	/ 17 / 18 / 92 / 8	17/17 18/18 112/112 8/8	2 2 5 2
- Linting - unladen/laden - Lowering - unladen / laden Turntable rotation (telescope extended/retracted) - 355° Basket rotation - right/left lib rotation to the right - unladen/laden	S S S S	17 18 92 8	/ 17 / 18 / 92 / 8 14 / 14	17/17 18/18 112/112 8/8	2 2 5 2 2
- Linting - unladen/laden - Lowering - unladen / laden Turntable rotation (telescope extended/retracted) - 355° Basket rotation - right/left Jib rotation to the right - unladen/laden lib rotation to the left - unladen/laden	S S S S S	17 18 92 8 -	/ 17 / 18 / 92 / 8 14/14 14/14	17/17 18/18 112/112 8/8	2 2 5 2 2 2

MOTOR / TRANSMISSION		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Wheel motor					
- Type			Electric (SEPEX) - ISKRA	ł	-
- Power	kW		2 x 4.5		-
- Voltage	V		48		-
- S2 - temporary operation	min		60		-
- S3 - alternate operation	%		100		-
Wheel reduction gear					
- Supplier			BONFIGLIOLI		-
- Reduction ratio			51.8		-
Steering/directional wheels - front/rear			2/0		-
Drive wheels - front/rear			0/2		-
Wheels (600X190)					
- Supplier			SOLIDEAL / CAMSO		-
- Dimensions: external Ø x width	mm		600 x 190		-
- Inflation			Solid tire		-
Wheels (27X10X12)					
- Supplier			SOLIDEAL / CAMSO		-
- Dimensions: external Ø x width	mm		700 x 246		-
- Inflation			Foam		-

ELECTRIC PUMP		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Engine					
- Type		Electric - ISKRA			-
- Power	kW	3.7			-
- Voltage	V	48			-
- Current	A	100			5%
- S2 - temporary operation	min	18			2%
- S3 - alternate operation	%	30			2%
Pump					
- Type			Gear pump - CASAPPA	l	-
- Cubic capacity	cm <sup>3</sup>	8.25		-	

BRAKE		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
- Type of brake			Negative		-
- Type of control			Hydraulics		-
- Braked wheels			Rear wheels		-
- Brake release (freewheel mode)			Yes, manual		-
- Braking torque	N.m		86		5%

HYDRAULIC CIRCUIT	150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Distributor				
- Type		BOSCH-REXROTH		-
- Maximum pressure bar		210		5
Turntable motor				
- Type		BONFIGLIOLI		-
- Reduction ratio		7.2		-

BACKUP PUMP		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Туре			Manual		-
Cubic capacity	cm <sup>3</sup>		20		-

ELECTRICAL SYSTEM		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±	
Battery (original equipment - standard)						
- Quantity			2		-	
- Туре		1	raction - HAWKER / GN	В	-	
- Capacity C5	Ah		240		-	
- Capacity C20	Ah	300			-	
- Rated voltage	V	48			-	
- Control system voltage	V		24		-	
- EARL cycle			44 (HAWKER) / 46 (GNB		-	
Battery charger (original equipment)						
- Туре		IES			-	
- Maximum current	А	30		-		
- Rated voltage	V	48			-	
- Phase progression type			11-P-U-12		-	

DIMENSIONS		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Working height = maximum height of the basket floor (F2) + 2,000 mm (wheels 600X190)	mm	14,985 16,905		16,905	1%
Working height = maximum height of the basket floor (F2) +	mm	15	020	16 0/15	1%
2,000 mm (wheels 27X10X12)		15,020		10,945	170
Working reach = max. reach (A3) + 500 mm	mm	7,605		9,430	1%
Basket					
- External dimensions (length x width)	mm		1200 x 922		1%
- Floor dimensions (length x width)	mm		1191 x 766		1%
- Rotation angle - right/left	0		66 / 59		1%
Jib angle - up/down	0		65 / 65		1%
Jib rotation angle - right/left	0	-	70 / 70	-	1%
Turntable rotation angle	0		355		1%
Other dimensions, ≪ DIMENSIONS AND DIAGRAM)					

Other dimensions, <> DIMENSIONS AND DIAGRAM)

NOISE AND VIBRATION		150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Sound power level LwA	dB	<70		-	
Vibrations affecting body in the basket	m/s²	0.52 0.66		0.66	-

EQUIPMENT	150 AETJ (150 AETJC)	150 AETJ 3D (150 AETJC 3D)	170 AETJ L	±
Multi-function display		Standard		-
Low battery alarm		Standard		-
Tool box in basket		Standard		-
User interface - diagnostic aid		Standard		-
Battery cut-off		Standard		-
Built-in battery charger		Standard		-
Cover for basket control panel		Option		-
Orange flashing light		Option		-
All movements alarm	Option			-
Driving/steering alarm		Option		-
230V electric power socket in the basket		Option		-
Working light		Option		-
Secondary protection system SPS - first version "SafeManSystem"		Option		-
Secondary protection system SPS - second version		Option		-
Batteries "EXIDE" 48V 360A	Option			-
Batteries "HAWKER" 48V 360A	Option			-
Batteries "ENERSYS" 48V 300A	Option			-
Gel batteries "EXIDE" 48V 275A		Option		-

# DIMENSIONS AND DIAGRAM 150 AETJ (150 AETJC) - 150 AETJ 3D (150 AETJC 3D)

		WHEELS ( 600X190)	WHEELS (27X10X12)
А	mm	6,050	6,085
A1	mm	4,400	4,450
В	mm	2,0	00
B1	mm	1,0	00
С	mm	1,970	2,005
C1	mm	2,080	2,115
D	mm	1,500	1,650
E	mm	140	175
F	mm	475	510
G	mm	1,870	1,794
Н	mm	3,960	4,046
	mm	4,820	4,820
J	mm	2,640	2,790
K	0	32.5	44.5
L	mm	120	44







647536 (26/11/2020) 150 AETJ/AETJ 3D - 150 AETJ C/AETJ C 3D - 170 AETJ L

		WHEELS ( 600X190)	WHEELS (27X10X12)			
A1	mm	6,300				
F1	mm	235	270			
A2	mm	2,665				
F2	mm	12,985	13,020			
A3	mm	7,105				
F3	mm	7,165	7,200			
A4	mm	3,425				
F4	mm	11,835	11,870			



## ONLY FOR 150 AETJ 3D (150 AETJC 3D)



# DIMENSIONS AND DIAGRAM 170 AETJL



		WHEELS ( 600X190)	WHEELS (27X10X12)	
A1	mm	8,130		
F1	mm	270	305	
A2	mm	2,840		
F2	mm	14,905	14,945	
A3	mm	8,930		
F3	mm	7,160	7,195	
A4	mm	3,600		
F4	mm	13,750	13,785	



# **SAFETY COMPONENTS**

## **GUARDRAIL**

## A IMPORTANT A

Do not attach the guardrail with a clamp, twine or any device that could prevent it from functioning properly. - Raise the guardrail and keep it raised to get in and out of the basket.



## HARNESS ATTACHMENT POINTS

Only one operator is permitted to use each attachment point. - Attach security harnesses to attachment points in the basket. NOTE: 2 attachment points, ≪ STICKERS: HARNESS ATTACHMENT POINTS.



## **TURNTABLE LOCKING PIN**

Locking the turntable prevents it from rotating.

Position <sup>1</sup> : The turntable is unlocked.

Position <sup>18</sup>: The turntable is locked.

## LOCK THE TURNTABLE

- Put the turntable in neutral position.
- Put the pin in the hole in the chassis (position 18).

## UNLOCK THE TURNTABLE

- Put the pin back in its housing (position 1).





# **CONTROL PANEL AND SAFETY DEVICES AT GROUND LEVEL**

A IMPORTANT A

The front, rear, left and right are defined in OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

**FIRST VERSION** 



## SECOND VERSION











2 - IGNITION SWITCH       2-34         3 - ACTIVATION BUTTON.       2-34         4 - BASKET ROTATION SWITCH       2-35         5 - JIB SWITCH       2-35         6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D)).       2-35         7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         13 - OVERLOAD ALARM LIGHT       2-37         16 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-37         18 - TILT SENSOR       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	1 - EMERGENCY STOP BUTTON	. 2-34
3 - ACTIVATION BUTTON.       2-34         4 - BASKET ROTATION SWITCH       2-35         5 - JIB SWITCH       2-35         6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D)).       2-35         7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP       2-37         15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	2 - IGNITION SWITCH	. 2-34
4 - BASKET ROTATION SWITCH       2-35         5 - JIB SWITCH       2-35         6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D)).       2-35         7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH.       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         13 - OVERLOAD ALARM LIGHT       2-37         14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP       2-37         15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR.       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	3 - ACTIVATION BUTTON.	. 2-34
5 - JIB SWITCH       2-35         6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D)).       2-35         7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH.       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         13 - OVERLOAD ALARM LIGHT       2-36         14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP       2-37         15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	4 - BASKET ROTATION SWITCH	. 2-35
6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D)).       2-35         7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH.       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         13 - OVERLOAD ALARM LIGHT       2-36         14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP       2-37         15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	5 - JIB SWITCH	. 2-35
7 - TELESCOPIC ARM SWITCH       2-35         8 - MAIN ARM SWITCH.       2-35         9 - SECONDARY ARM SWITCH       2-36         10 - TURNTABLE ROTATION SWITCH       2-36         11 - BASKET TILT SWITCH       2-36         12 - MULTI-FUNCTION DISPLAY       2-36         13 - OVERLOAD ALARM LIGHT       2-36         14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP       2-37         15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D))	. 2-35
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9 - SECONDARY ARM SWITCH2-3610 - TURNTABLE ROTATION SWITCH2-3611 - BASKET TILT SWITCH2-3612 - MULTI-FUNCTION DISPLAY2-3613 - OVERLOAD ALARM LIGHT2-3714 - MAINTENANCE/FAULT ALARM INDICATOR LAMP2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP2-3716 - BATTERY CUT-OFF2-3717 - ORANGE FLASHING LIGHT (OPTION)2-3818 - TILT SENSOR2-3819 - HORN2-3820 - FLASHING LIGHT SPS (OPTION)2-38	8 - MAIN ARM SWITCH	. 2-35
10 - TURNTABLE ROTATION SWITCH2-3611 - BASKET TILT SWITCH2-3612 - MULTI-FUNCTION DISPLAY2-3613 - OVERLOAD ALARM LIGHT2-3714 - MAINTENANCE/FAULT ALARM INDICATOR LAMP2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP2-3716 - BATTERY CUT-OFF2-3717 - ORANGE FLASHING LIGHT (OPTION)2-3818 - TILT SENSOR2-3819 - HORN2-3820 - FLASHING LIGHT SPS (OPTION)2-38	9 - SECONDARY ARM SWITCH	. 2-36
11 - BASKET TILT SWITCH .2-3612 - MULTI-FUNCTION DISPLAY .2-3613 - OVERLOAD ALARM LIGHT .2-3714 - MAINTENANCE/FAULT ALARM INDICATOR LAMP .2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP .2-3716 - BATTERY CUT-OFF .2-3717 - ORANGE FLASHING LIGHT (OPTION) .2-3818 - TILT SENSOR .2-3819 - HORN .2-3820 - FLASHING LIGHT SPS (OPTION) .2-3820 - FLASHING LIGHT SPS (OPTION) .2-38	10 - TURNTABLE ROTATION SWITCH	. 2-36
12 - MULTI-FUNCTION DISPLAY2-3613 - OVERLOAD ALARM LIGHT2-3714 - MAINTENANCE/FAULT ALARM INDICATOR LAMP2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP2-3716 - BATTERY CUT-OFF2-3717 - ORANGE FLASHING LIGHT (OPTION)2-3818 - TILT SENSOR2-3819 - HORN2-3820 - FLASHING LIGHT SPS (OPTION)2-3820 - FLASHING LIGHT SPS (OPTION)2-38	11 - BASKET TILT SWITCH	. 2-36
13 - OVERLOAD ALARM LIGHT2-3714 - MAINTENANCE/FAULT ALARM INDICATOR LAMP2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP2-3716 - BATTERY CUT-OFF2-3717 - ORANGE FLASHING LIGHT (OPTION)2-3818 - TILT SENSOR2-3819 - HORN2-3820 - FLASHING LIGHT SPS (OPTION)2-3820 - FLASHING LIGHT SPS (OPTION)2-38	12 - MULTI-FUNCTION DISPLAY	. 2-36
14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP2-3715 - BATTERY CHARGER STATUS INDICATOR LAMP2-3716 - BATTERY CUT-OFF2-3717 - ORANGE FLASHING LIGHT (OPTION)2-3818 - TILT SENSOR2-3819 - HORN2-3820 - FLASHING LIGHT SPS (OPTION)2-3820 - FLASHING LIGHT SPS (OPTION)2-38	13 - OVERLOAD ALARM LIGHT	. 2-37
15 - BATTERY CHARGER STATUS INDICATOR LAMP       2-37         16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP	. 2-37
16 - BATTERY CUT-OFF       2-37         17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	15 - BATTERY CHARGER STATUS INDICATOR LAMP	. 2-37
17 - ORANGE FLASHING LIGHT (OPTION)       2-38         18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	16 - BATTERY CUT-OFF	. 2-37
18 - TILT SENSOR       2-38         19 - HORN       2-38         20 - FLASHING LIGHT SPS (OPTION)       2-38	17 - ORANGE FLASHING LIGHT (OPTION)	. 2-38
19 - HORN	18 - TILT SENSOR	. 2-38
20 - FLASHING LIGHT SPS (OPTION)	19 - HORN	. 2-38
	20 - FLASHING LIGHT SPS (OPTION)	. 2-38

# **CONTROL PANEL AND SAFETY DEVICES IN THE BASKET**

## 

The front, rear, left and right are defined in OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

**FIRST VERSION** 



## SECOND VERSION









22 - HORN BUTTON2-3923 - CONTROL HANDLE2-4024 - ROTATION MODE SELECTION SWITCH2-4025 - BASKET TILTING ACTIVATION SWITCH AND INDICATOR LAMP2-4126 - JIB ACTIVATION SWITCH AND LIGHT2-4127 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
23 - CONTROL HANDLE2-4024 - ROTATION MODE SELECTION SWITCH2-4025 - BASKET TILTING ACTIVATION SWITCH AND INDICATOR LAMP2-4126 - JIB ACTIVATION SWITCH AND LIGHT2-4127 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
24 - ROTATION MODE SELECTION SWITCH2-4025 - BASKET TILTING ACTIVATION SWITCH AND INDICATOR LAMP2-4126 - JIB ACTIVATION SWITCH AND LIGHT2-4127 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
25 - BASKET TILTING ACTIVATION SWITCH AND INDICATOR LAMP2-4126 - JIB ACTIVATION SWITCH AND LIGHT.2-4127 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
26 - JIB ACTIVATION SWITCH AND LIGHT.2-4127 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP.2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
27 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4228 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
28 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP2-4229 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP2-42
29 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP
30 - OPERATION ACTIVATION SWITCH AND INDICATOR LAMP
31 - TILT ALARM LIGHT
32 - OVERLOAD/FAULT ALARM INDICATOR LAMP
33 - AUDIBLE ALARM
34 - RESET BUTTON SPS (OPTION)
35 - SAFETY EDGE SPS (OPTION)
36 - SAFETY CABLE SPS (OPTION)
37 - COVER (OPTION)

## **1 - EMERGENCY STOP BUTTON**

#### **FIRST VERSION**

A IMPORTANT A

In all cases this control takes priority, even if the movements are executed from the basket control panel or the box. Movements may stop suddenly if the emergency stop is activated.

#### 2 positions:

- OFF (locked): Press the knob to cut off the movements.
- ON (unlocked): Turn the knob clockwise a quarter turn and release it.

#### SECOND VERSION

## A IMPORTANT A

In all cases this control takes priority, even if the movements are executed from the basket control panel or the box. Movements may stop suddenly if the emergency stop is activated.

### 2 positions:

- OFF (locked): Press the knob to cut off the movements.
- ON (unlocked): Pull the button or turn it clockwise a quarter turn and release it.

### 2 - IGNITION SWITCH

#### Illustration = second version.

3 positions:

- NEUTRAL to turn the platform off. The key can be removed.
  - CONTROLS IN THE BASKET to start up the platform and use the functions from the basket. The key cannot be removed.
  - NOTE: The battery cut-off must be in the ON position and the two emergency stop buttons must be in the ON position to start up the platform.

H

CONTROLS ON THE GROUND to start up the platform and use the functions from the ground. The key cannot be removed.

NOTE: The battery cut-off must be in the ON position and the emergency stop button on the ground level control panel must be in the ON position to start up the platform.

## **3 - ACTIVATION BUTTON**

#### Illustration = second version.

- Press and hold down the button to activate the functions from the ground level control panel.

NOTE: The functions cannot be activated if the pushbutton is released.









## 4 - BASKET ROTATION SWITCH

### Illustration = second version.

- Press and hold down the activation button.

#### TURN BASKET TO THE LEFT

- Push and hold the switch to the left.
- Release it or release the activation button to stop.

## TURN BASKET TO THE RIGHT

- Push and hold the switch to the right.
- Release it or release the activation button to stop.

## 5 - JIB SWITCH

#### Illustration = second version.

- Press and hold down the activation button.

## **RAISE THE JIB**

- Push and hold the switch upwards.
- Release it or release the activation button to stop.

### LOWER THE JIB

- Push and hold the switch downwards.
- Release it or release the activation button to stop.

## 6 - JIB ROTATION SWITCH (ONLY FOR 150 AETJ 3D (150 AETJC 3D))

### Illustration = second version.

- Press and hold down the activation button.

## TURN JIB TO THE LEFT

- Push and hold the switch to the left.
- Release it or release the activation button to stop.

### TURN JIB TO THE RIGHT

- Push and hold the switch to the right.
- Release it or release the activation button to stop.

## 7 - TELESCOPIC ARM SWITCH

### Illustration = second version.

- Press and hold down the activation button.

## **EXTEND THE TELESCOPIC ARM**

- Push and hold the switch to the left.
- Release it or release the activation button to stop.

### **RETRACT THE TELESCOPIC ARM**

- Push and hold the switch to the right.
- Release it or release the activation button to stop.

## 8 - MAIN ARM SWITCH

### Illustration = second version.

- Press and hold down the activation button.

### **RAISE THE MAIN ARM**

- Push and hold the switch upwards.
- Release it or release the activation button to stop.

### LOWER THE MAIN ARM

- Push and hold the switch downwards.
- Release it or release the activation button to stop.











## 9 - SECONDARY ARM SWITCH

## Illustration = second version.

- Press and hold down the activation button.

### **RAISE THE SECONDARY ARM**

- Push and hold the switch upwards.
- Release it or release the activation button to stop.

## LOWER THE SECONDARY ARM

- Push and hold the switch downwards.
- Release it or release the activation button to stop.

## **10 - TURNTABLE ROTATION SWITCH**

#### Illustration = second version.

- Press and hold down the activation button.

## TURN THE TURNTABLE TO THE LEFT

- Push and hold the switch to the left.
- Release it or release the activation button to stop.

## TURN THE TURNTABLE TO THE RIGHT

- Push and hold the switch to the right.
- Release it or release the activation button to stop.

## <u>11 - BASKET TILT SWITCH</u>

Illustrations: (#1) = first version, (#2) = second version.

- Press and hold down the activation button.

### **TILT BASKET UP**

- Push and hold the switch upwards.
- Release it or release the activation button to stop.

### **TILT BASKET DOWN**

- Push and hold the switch downwards.
- Release it or release the activation button to stop.



### Illustration = second version.

The multi-function display displays:

- The battery charge level.
- The maintenance warning.
- The hour counters.
- The fault codes.











## 13 - OVERLOAD ALARM LIGHT

## Illustration = second version.

- To stop the overload alarm:Remove excessive load.
- Remove excessive load.
- NOTE: If the indicator lamp <sup>(1)</sup> flashes at the same time, *<*<sup>€</sup> DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: FAULT CODES.

## 14 - MAINTENANCE/FAULT ALARM INDICATOR LAMP

#### Illustration = second version.

 ${\boldsymbol{\triangleleft}}$  DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: MAINTENANCE WARNING and FAULT CODES.

## **15 - BATTERY CHARGER STATUS INDICATOR LAMP**

Illustration = second version.

 $\triangleleft$  Charge the batteries.

## 16 - BATTERY CUT-OFF

### **Position ON**

- Turn the handle a quarter turn: current flows.

### **Position OFF**

- Turn the handle a quarter turn: current does not flow.











## **17 - ORANGE FLASHING LIGHT (OPTION)**

The orange flashing light flashes when the functions are activated and while the platform is being driven/steered.

## 18 - TILT SENSOR

A light on the tilt sensor indicates its operating status:

- On: The maximum tilt has not been reached.
- Off: The maximum tilt has been reached.

## <u> 19 - HORN</u>

The horn sounds:

- When the horn button is pressed.
- When the battery charger is connected with the battery cut-off in the ON position,  $\triangleleft$  CHARGE THE BATTERIES.

ALL MOVEMENTS ALARM option: This sounds intermittently when the functions are activated and when driving/steering the platform.

DRIVING/STEERING ALARM option: This sounds intermittently when driving/steering the platform.

SECONDARY PROTECTION SYSTEM option SPS - FIRST VERSION "SafeManSystem": It sounds intermittently when the system is in alarm mode, *<*I OPTIONS.

SECONDARY PROTECTION SYSTEM option SPS - SECOND VERSION: It sounds intermittently when the system is in alarm mode, *◄* OPTIONS.

## 20 - FLASHING LIGHT SPS (OPTION)









## 21 - EMERGENCY STOP BUTTON

## **FIRST VERSION**

A IMPORTANT A

In all cases this control takes priority, except when the movements are executed from the ground control panel. Movements may stop suddenly if the emergency stop is activated.

## 2 positions:

- OFF (locked): Press the knob to cut off the movements.
- ON (unlocked): Turn the knob clockwise a quarter turn and release it.



## A IMPORTANT A

In all cases this control takes priority, except when the movements are executed from the ground control panel. Movements may stop suddenly if the emergency stop is activated.

### 2 positions:

- OFF (locked): Press the knob to cut off the movements.
- ON (unlocked): Pull the button or turn it clockwise a quarter turn and release it.



### Illustration = second version.

- Press and hold down the button to sound the horn. Release to stop.







## 23 - CONTROL HANDLE

### Illustration = second version.

#### A IMPORTANT A

#### The proportional control handle must be operated smoothly, without jolting.

The control handle enables use of all the platform functions.

### **DRIVING AND BRAKING**

- Refer to the activation switch  $\overline{\mathfrak{B}}$ .

#### STEER TO THE LEFT

- Press and hold down trigger (A).
- Press and hold down button <sup>B</sup>.
- Release it or release the trigger to stop.

NOTE: The <sup>309</sup> indicator lamp comes on when the <sup>B</sup> button is pressed. The driving function is activated for 8 seconds.

## STEER TO THE RIGHT

- Press and hold down trigger A.
- Press and hold down button **C**.
- Release it or release the trigger to stop.

NOTE: The <sup>609</sup> indicator lamp comes on when the <sup>C</sup> button is pressed. The driving function is activated for 8 seconds.

## **OTHER FUNCTIONS**

- Refer to the 24 and 29 switches.

NOTE: The functions cannot be activated if the trigger A is released.

## 24 - ROTATION MODE SELECTION SWITCH

#### Illustration = second version.

The control handle and the trigger on the control handle must be released before selecting the appropriate rotation mode.

### **TURN THE BASKET**



- Put the switch in the *position*.
- Press and hold down the trigger of the control handle.
- Turn the basket to the left:
  - Push and hold the control handle to the left.
  - Release it or release the trigger to stop.
- Turn the basket to the right:
  - Push and hold the control handle to the right.
  - Release it or release the trigger to stop.

### TURN THE TURNTABLE



- Put the switch in the position.
- Press and hold down the trigger of the control handle.
- Turn the turntable to the left:
  - Push and hold the control handle to the left.
  - Release it or release the trigger to stop.
- Turn the turntable to the right:
  - Push and hold the control handle to the right.
  - Release it or release the trigger to stop.







## TURN THE JIB (ONLY FOR 150 AETJ 3D (150 AETJC 3D))



- Put the switch in the deposition.
- Press and hold down the trigger of the control handle.
- Turn the jib to the left:
  - Push and hold the control handle to the left.
  - Release it or release the trigger to stop.
- Turn the jib to the right:
  - Push and hold the control handle to the right.
  - Release it or release the trigger to stop.

## 25 - BASKET TILTING ACTIVATION SWITCH AND INDICATOR LAMP

Illustration = second version.

#### A IMPORTANT A

Up to machine no. 949269: These controls are active when the platform is in transport position or working position,

From machine no. 949270: \* These controls are only active when the platform is in transport position, << OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the <sup>(3)</sup> switch forward and release it to activate the function.

Result: The light <sup>39</sup> comes on. The function is activated when the lamp is on.

NOTE: It goes out if the control handle is not activated in the next 8 seconds.

- Press and hold down the trigger of the control handle.

#### TILT BASKET UP

- Push and hold the control handle forward.
- Release it or release the trigger to stop.

#### **TILT BASKET DOWN**

- Push and hold the control handle back.
- Release it or release the trigger to stop.

## 26 - JIB ACTIVATION SWITCH AND LIGHT

#### Illustration = second version.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the <sup>669</sup> switch forward and release it to activate the function.
  - Result: The light <sup>66</sup> comes on. The function is activated when the lamp is on.
- NOTE: It goes out if the control handle is not activated in the next 8 seconds.
- Press and hold down the trigger of the control handle.

#### **RAISE THE JIB**

- Push and hold the control handle forward.
- Release it or release the trigger to stop.

#### LOWER THE JIB

- Push and hold the control handle back.
- Release it or release the trigger to stop.





## 27 - TELESCOPIC ARM ACTIVATION SWITCH AND INDICATOR LAMP

#### Illustration = second version.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the 🚧 switch forward and release it to activate the function.

Result: The light 🕮 comes on. The function is activated when the lamp is on.

- NOTE: It goes out if the control handle is not activated in the next 8 seconds.
- Press and hold down the trigger of the control handle.

## **EXTEND THE TELESCOPIC ARM**

- Push and hold the control handle back.
- Release it or release the trigger to stop.

## **RETRACT THE TELESCOPIC ARM**

- Push and hold the control handle forward.
- Release it or release the trigger to stop.

## 28 - MAIN ARM ACTIVATION SWITCH AND INDICATOR LAMP

### Illustration = second version.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the <sup>689</sup> switch forward and release it to activate the function.

Result: The light  $^{
emtuf{model}
emtuf{mo$ 

NOTE: It goes out if the control handle is not activated in the next 8 seconds.

- Press and hold down the trigger of the control handle.

### **RAISE THE MAIN ARM**

- Push and hold the control handle forward.
- Release it or release the trigger to stop.

## LOWER THE MAIN ARM

- Push and hold the control handle back.
- Release it or release the trigger to stop.

## 29 - SECONDARY ARM ACTIVATION SWITCH AND INDICATOR LAMP

### Illustration = second version.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the 🥮 switch forward and release it to activate the function.

Result: The light <sup>(39)</sup> comes on. The function is activated when the lamp is on.

NOTE: It goes out if the control handle is not activated in the next 8 seconds.

- Press and hold down the trigger of the control handle.

### **RAISE THE SECONDARY ARM**

- Push and hold the control handle forward.
- Release it or release the trigger to stop.

## LOWER THE SECONDARY ARM

- Push and hold the control handle back.
- Release it or release the trigger to stop.







## **30 - OPERATION ACTIVATION SWITCH AND INDICATOR LAMP**

Illustration = second version.

#### A IMPORTANT A

#### Always refer to the colors of the direction arrows on the chassis and on the control panel in the basket before driving/ steering the platform.

The control handle and the trigger on the control handle must be released before activating the function.

- Push the <sup>(M)</sup> switch forward and release it to activate the function.

Result: The light 🕮 comes on. The function is activated when the lamp is on.

NOTE: It goes out if the control handle is not activated in the next 8 seconds.

- Press and hold down the trigger.

### **DRIVE FORWARDS AND BRAKE**

- Push and hold the control handle forward.
- Release the handle or the trigger to brake.

### **DRIVE BACKWARDS AND BRAKE**

- Push and hold the control handle back.
- Release the handle or the trigger to brake.



## 31 - TILT ALARM LIGHT

#### Illustration = second version.

The indicator lamp flashes and the audible alarm sounds intermittently when the platform is on a steep slope. Some controls are locked, <</td>OPERATING THE PLATFORM:LOCKED FUNCTIONS.

- To stop the tilt alarm:
- 1 Fully retract the telescope.
- 2 Fully lower the main arm.
- 3 Fully lower the secondary arm.
- 4 Move the platform to a level surface.



## 32 - OVERLOAD/FAULT ALARM INDICATOR LAMP

#### Illustration = second version.

- To stop the overload alarm.
  - Remove excessive load.

It flashes in sequence when a platform fault occurs, *◄* DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: FAULT CODES.



## 33 - AUDIBLE ALARM

The audible alarm sounds:

- Once when the platform is powered on.
- Intermittently when the platform is on a steep slope, < TILT ALARM LIGHT.
- Continuously when the basket load has reached maximum capacity,  $\triangleleft$  OVERLOAD ALARM INDICATOR LAMP and OVERLOAD/FAULT ALARM INDICATOR LAMP.
- Continuously when a specific platform fault occurs, *<*<sup>4</sup> DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: FAULT CODES.



## 34 - RESET BUTTON SPS (OPTION)

## Illustrations: $(\ddagger)$ = first version, $(\ddagger)$ = second version.

## 35 - SAFETY EDGE SPS (OPTION)

◄ OPTIONS: SECONDARY PROTECTION SYSTEM SPS - FIRST VERSION "SAFEMANSYSTEM".

## 36 - SAFETY CABLE SPS (OPTION)

◄ OPTIONS: SECONDARY PROTECTION SYSTEM SPS - SECOND VERSION.





## 37 - COVER (OPTION)

The cover is designed to protect the control panel in the basket.



# **DESCRIPTION OF THE MULTI-FUNCTION DISPLAY**

## **BATTERY CHARGE LEVEL**

The bar graph indicates the battery charge level from 0% to 100%, with each segment representing 10%.

It flashes when the batteries are below 30% charge.

Examples:

- **A** = 100%:
  - The batteries are fully charged.
- 🕑 = 20%:
  - The batteries are low, they need charging, *◄* CHARGE THE BATTERIES.
  - A fault code is displayed, *<*<sup>€</sup> DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: FAULT CODES.
  - It is no longer possible to raise the main arm or the secondary arm, or to extend the telescope.





## MAINTENANCE WARNING



## Always consult the maintenance personnel when a maintenance warning is displayed.

The maintenance warning is displayed after every 50 hours of service.

Maintenance can be carried out before the alert depending on how much the platform has been used, for example:

- Maintenance is required every 50 hours of service or every 3 months.
- The platform has reached 3 month of service and 40 hours of operation.
- Maintenance has been performed but it is not possible for maintenance personnel to reset the warning before 50 hours of service.
- The warning will be displayed when 50 hours of service are reached.
- In this case, maintenance personnel can reset the warning.





## **HOUR COUNTERS**

Two counters are displayed:

- (E): Daily hour counter (P). It can be reset, see below.
- E: Functions counter (T). It cannot be reset.

Both are incremented when a function is activated and when driving/steering the platform.

They are displayed one after the other when no function is activated.

The functions counter (T) is the only one displayed when a function is activated.





## **RESETTING THE DAILY HOUR COUNTER**

Illustration = second version.

#### A IMPORTANT

The platform must be in transport position, ✓ OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.<br/>The platform must not be on a steep slope.

- Turn the ignition switch to position



- Wait for the audible alarm to sound once.

NOTE: The procedure described below must be carried out within 3 seconds of the audible alarm sounding. Otherwise, repeat the procedure from the beginning.

- Press and hold down the activation button 3.
- Push and hold the jib switch  $\bigcirc$  down.
- Push and hold the basket tilting switch (1) downward.
- Release the button and the switches when the daily hour counter is reset.







## **FAULT CODES**

#### Illustration = second version.

When a platform fault occurs: A fault code G is displayed.

The maintenance/fault alarm indicator lamp 14 flashes in sequence.

The overload/fault alarm indicator lamp  $^{(3)}$  flashes in sequence.

The audible alarm may sound depending on the fault. Certain functions may be locked depending on the fault.

The platform must be stopped as soon as possible and checked by a qualified service technician approved by Manitou.

## Alarm indicator light flashing codes (4) and (3):

- 1 flash every 2 seconds: Parameters fault.
- Sequence of 2 flashes (\*): Incorrect sequence fault.
- Sequence of 3 flashes (\*): MOSFET short-circuit.
- Sequence of 4 flashes (\*): Switch fault.
- Sequence of 5 flashes (\*), the overload alarm light <sup>13</sup> flashes and the fault code F02004 is displayed: Overload sensor synchronization fault.
- Sequence of 5 flashes (\*), the audible alarm sounds continuously and the fault code F02005 is displayed: Synchronization fault with the arm limit switch sensors.
- Sequence of 6 flashes (\*): Throttle fault, control handle potentiometer fault or speed sensor cable fault.
- Sequence of 7 flashes (\*): Battery fault.
- Sequence of 7 flashes (\*) and the fault code F01004 is displayed: The batteries are low, they need charging, *<*I CHARGE THE BATTERIES. It is no longer possible to raise the main arm or the secondary arm, or to extend the telescope.
- Sequence of 8 flashes (\*): Overheat fault.
- Sequence of 9 flashes (\*): Switch coil fault.
- Sequence of 12 flashes (\*): CAN bus fault.
- (\*): 2-second interval between each sequence of flashes.







## A IMPORTANT A

Part 1 - INSTRUCTIONS AND SAFETY INSTRUCTIONS must be read and understood before operating the platform.

## TRANSPORT/WORKING POSITION



#### TRANSPORT POSITION

The platform in the transport position when:

- The main arm is completely lowered.
- The secondary arm is completely lowered.
- The telescope is completely retracted.
- NOTE: The jib may or may not be raised. The turntable and the basket may or may not be turned. The jib may or may not be turned (150 AETJ 3D (150 AETJC 3D)).

The turntable and the basket are in the neutral position when the main/secondary arms and the basket are parallel to the platform chassis, with the basket between the 2 rear wheels.

The jib is in neutral position when it is parallel to the main/secondary arms (150 AETJ 3D (150 AETJC 3D)).

Driving forward, driving backward, front, rear, left and right are defined as follows:

- The platform is in transport position.
- The turntable and basket are in the neutral position.
- The jib is in neutral position (150 AETJ 3D (150 AETJC 3D)).
- The operator is in the basket facing the direction of the front wheels.

The TRANSPORT POSITION speed is the only one available in this position.

#### **WORKING POSITION**

The platform is in the working position when the main jib is not completely lowered, when the secondary jib is not completely lowered or when the telescope is not completely retracted.

NOTE: The jib may or may not be raised. The turntable and the basket may or may not be turned. The jib may or may not be turned (150 AETJ 3D (150 AETJC 3D)).

The WORKING POSITION speed is automatically activated when the platform is in the working position.

## **OPERATION FROM THE GROUND LEVEL CONTROL PANEL**

## A IMPORTANT A

#### CONTROL PANEL AND SAFETY DEVICES ON THE GROUND for detailed information about the ground controls.

### SWITCH THE PLATFORM ON

- Turn the battery cut-off to the ON position.
- to activate the functions from the ground level control panel. - Turn the ignition switch to position 🞯

NOTE: The emergency stop button on the ground level control panel must be in the ON position to switch the platform on.

OR



- Turn the ignition switch to position to activate the functions from the basket control panel.

NOTE: The two emergency stop buttons must be in ON position to switch the platform on.

Result:

- The multi-function display comes on.
- The audible alarm sounds once.

NOTE: SECONDARY PROTECTION SYSTEM option SPS - FIRST VERSION "SAFEMANSYSTEM", ≪ OPTIONS.

NOTE: SECONDARY PROTECTION SYSTEM option SPS - SECOND VERSION, < OPTIONS.

## **TURN THE PLATFORM OFF**

- Turn the ignition switch to position •••••••
- Turn the battery cut-off to the OFF position.

### **POSITION THE BASKET**

- Ensure that the turntable is unlocked, ≪ SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- NOTE: It is essential that the turntable is locked when the platform is being transported and lifted, *A* TRANSPORTING THE PLATFORM and *◄* 3 -MAINTENANCE: OCCASIONAL OPERATION: LIFTING THE PLATFORM.
- Press and hold down the activation button.
- Push and hold the appropriate switch to activate a function.
- Release it or release the activation button to stop the activated function.

NOTE: It is not possible to activate functions simultaneously.

### **EMERGENCY STOP**

- Press the emergency stop button (OFF position).

## A IMPORTANT A

CONTROL PANEL AND SAFETY DEVICES IN THE BASKET for detailed information about the controls in the basket.

Make sure that the basket is level before putting the platform in working position, < OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

The turntable covers can be locked with padlocks. To guarantee access to the emergency controls, it is mandatory to unlock the right-hand turntable cover before using the machine from the basket.

### SWITCH THE PLATFORM ON AND OFF

OPERATION FROM THE GROUND LEVEL CONTROL PANEL.

#### DRIVING, STEERING AND BRAKING

## A IMPORTANT A

Always refer to the arrow colors on the chassis and on the control panel in the basket before driving/steering the platform.

- Ensure that the turntable is unlocked, </br/>  $\sphericalangle$  SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

NOTE: It is essential that the turntable is locked when the platform is being transported and lifted, 

PLATFORM and 
3 -MAINTENANCE: OCCASIONAL OPERATION: LIFTING THE PLATFORM.

- Drive, steer and brake the platform, <</th>CONTROL PANEL AND SAFETY DEVICES IN THE BASKET: CONTROL HANDLE.

NOTE: It is possible to drive and steer simultaneously.

#### **POSITION THE BASKET**

- Ensure that the turntable is unlocked, \land SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

NOTE: It is essential that the turntable is locked when the platform is being transported and lifted, 

PLATFORM and 
3 -MAINTENANCE: OCCASIONAL OPERATION: LIFTING THE PLATFORM.

### ALL FUNCTIONS, APART FROM ROTATION FUNCTIONS

- Activate the function by pushing the appropriate switch forward and releasing it.
- Press and hold down the trigger of the control handle.
- Push and hold the control handle forward/backward.
- Release it or release the trigger to stop.

NOTE: It is not possible to activate functions simultaneously.

#### **ROTATION FUNCTIONS**

- Put the rotation mode selection switch into the desired speed position.
- Press and hold down the trigger of the control handle.
- Push and hold down the control handle to the left/right.
- Release it or release the trigger to stop.

NOTE: It is not possible to activate functions simultaneously.

#### **EMERGENCY STOP**

- Press the emergency stop button (OFF position).

## LOCKED FUNCTIONS

Some or all functions are locked (refer to the tables below):

- When the basket load has reached maximum capacity (OVERLOAD ALARM).
- When the platform is on a steep slope (TILT ALARM).

## TRANSPORT POSITION

GROUND CONTROLS	OVERLOAD ALARM	TILT ALARM			
RAISE THE MAIN ARM	LOCKED				
RAISE THE SECONDARY ARM	LOCKED				
EXTEND THE TELESCOPIC ARM	LOCKED				
RAISE/LOWER THE JIB	LOCKED				
TILT THE BASKET UPWARD/DOWNWARD	LOCKED				
TURN THE TURNTABLE (LEET/RIGHT)	LOCKED				
TURN THE BASKET (LEET/RIGHT)	LOCKED				
TURN THE JIB (LEET/RIGHT)	LOCILD				
ONLY FOR 150 AETJ 3D (150 AETJC 3D)	LOCKED				
CONTROLS IN THE BASKET	OVERLOAD ALARM	TILT ALARM			
RAISE THE MAIN ARM	LOCKED	LOCKED			
RAISE THE SECONDARY ARM	LOCKED	LOCKED			
EXTEND THE TELESCOPIC ARM	LOCKED	LOCKED			
RAISE/LOWER THE JIB	LOCKED				
TILT THE BASKET UPWARD/DOWNWARD	LOCKED				
TURN THE TURNTABLE (LEFT/RIGHT)	LOCKED				
TUBN THE BASKET (LEET/RIGHT)	LOCKED				
TURN THE JIB (I FET/RIGHT)	Local				
ONLY FOR 150 AETJ 3D (150 AETJC 3D)	LOCKED				
DRIVE (EORWARD/BACKWARD)	LOCKED				
STEER (LEFT/RIGHT)	LOCKED				
WORKING POSITION					
GROUND CONTROLS	OVERLOAD ALARM	TILT ALARM			
RAISE/LOWER THE MAIN ARM	LOCKED				
RAISE/LOWER THE SECONDARY ARM	LOCKED				
EXTEND/RETRACT THE TELESCOPIC ARM	LOCKED				
RAISE/LOWER THE JIB	LOCKED				
TILT THE BASKET UPWARD/DOWNWARD	LOCKED				
TURN THE TURNTABLE (LEFT/RIGHT)	LOCKED				
TURN THE BASKET (LEFT/RIGHT)	LOCKED				
TURN THE JIB (LEFT/RIGHT)					
ONLY FOR 150 AETJ 3D (150 AETJC 3D)	LOCKED				
CONTROLS IN THE BASKET	OVERLOAD ALARM	TILT ALARM			
RAISE THE MAIN ARM	LOCKED	LOCKED			
LOWER THE MAIN ARM	LOCKED				
RAISE THE SECONDARY ARM	LOCKED	LOCKED			
LOWER THE SECONDARY ARM	LOCKED				
EXTEND THE TELESCOPIC ARM	LOCKED	LOCKED			
RETRACT THE TELESCOPIC ARM	LOCKED				
RAISE/LOWER THE JIB	LOCKED				
UP TO MACHINE NO. 949266 (*): TILT THE BASKET UPWARD/					
DOWNWARD	LOCKED				
TURN THE TURNTABLE (LEFT/RIGHT)	LOCKED				
TURN THE BASKET (LEFT/RIGHT)	LOCKED				
TURN THE JIB (LEFT/RIGHT)					
ONLY FOR 150 AETJ 3D (150 AETJC 3D)	LUCKED				
DRIVE (FORWARD/BACKWARD)	LOCKED	LOCKED			
STEER (LEFT/RIGHT)	LOCKED	LOCKED			

(\*): From machine no. 949270, the controls are locked in working position whatever the conditions.

#### IMPORTANT

Always charge the battery in a well-ventilated area, protected from sunlight and rain. Do not charge the batteries during a lightning storm. Do not charge the batteries if the electrolyte temperature is over 40 °C. Always remove the battery covers during charging.

Ensure that the battery terminals cannot come into contact with metal objects. No flames or sparks. Do not smoke near to the batteries during charging.

### A IMPORTANT A

It is recommended to charge the batteries at the end of each day's use. Do not interrupt the charging cycle. It is recommended to charge the batteries to 100% to preserve their life. Check the battery charge level every week when the platform is stored away for a long period. Recharge if necessary.

NOTE: Depending on use, battery life is approximately 5 hours when fully charged.

The charging time to go from 20% to 100% is approximately 10 hours.

- Park the platform.

- Remove the right and left battery covers  $\bigcirc$ .
- Connect the electrical plug 2 of the battery charger to a power source.
- NOTE: The horn sounds (modulated frequency) when the battery cut-off is in the ON position.
- Wait until the batteries are fully charged.
- Disconnect the electrical plug (2).
- Turn the battery cut-off to the ON position.
- Turn the ignition switch to position @
- Wait for the audible alarm to sound once.
- Check the battery charge level on the multi-function display, *A* DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: BATTERY CHARGE LEVEL.
- Put the battery covers  $\bigcirc$  back in place.
- Turn the platform off.

## BATTERY CHARGER STATUS INDICATOR LAMP 3 (GROUND LEVEL CONTROL PANEL)

### Illustration = second version.

- Off: The battery charger is not turned on.
- Steady red light: Initial charging phase.
- Steady yellow light: Batteries 80% charged.
- Steady green light: Batteries fully charged.
- Flashing yellow light: Battery balancing cycle.
- Blinking red light: The battery charger is in alarm mode; refer to maintenance personnel.








## TRANSPORTING THE PLATFORM

## A IMPORTANT A

Check that the safety instructions associated with the flatbed have been correctly applied before loading the platform and ensure that the driver of the vehicle has been informed of the dimensional characteristics and total weight of the platform.

Make sure that the dimensions and load capacity of the flatbed are adequate for transporting the platform, <> SPECIFICATIONS.

It is essential that the turntable is locked when the platform is being transported, < SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

Covers must be closed and locked while the platform is being transported.

## LOADING/UNLOADING THE PLATFORM

## A IMPORTANT A

The flatbed must be parked on a level surface. The wheels must be blocked with shims  $oldsymbol{0}$  .

The loading ramps must be attached to the flatbed so as to obtain as small an angle 2 as possible.

Turntable rotation is prohibited while the platform is being loaded onto the flatbed and during unloading.

The turntable must be locked before loading the platform onto a transport flatbed or before unloading it, \land SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

The platform must be loaded and unloaded using a winch if the loading ramps are slippery, <i 3 - MAINTENANCE: OCCASIONAL OPERATION: TOWING/WINCHING THE PLATFORM.

The platform must be loaded and unloaded using a crane if the angle of the loading ramps exceeds the maximum slope accessible value, <i 3 - MAINTENANCE: OCCASIONAL OPERATION: LIFTING THE PLATFORM.



## LOADING THE PLATFORM ONTO THE FLATBED

- Switch the platform on.
- From the ground control panel:
  - Put the platform in transport position, < OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
  - Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D) in neutral position, *<*¶ OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Lock the turntable, ◄ SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- Get into the basket.
- Raise the jib slightly to prevent the basket hitting the ground or the loading ramps.
- Drive the platform forward slowly with the basket at the bottom of the slope, see illustration above.

## UNLOADING THE PLATFORM FROM THE FLATBED

- Ensure that the turntable is locked, *◄* SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

- Switch the platform on.
- Get into the basket.
- Raise the jib slightly to prevent the basket hitting the ground or the loading ramps.
- Drive the platform backward slowly with the basket at the bottom of the slope, see illustration above.

## A IMPORTANT A

Turntable rotation is prohibited once on the flatbed. The turntable must be locked once on the flatbed, ≪ SAFETY COMPONENTS: TURNTABLE LOCKING PIN. The platform must be transported in TRANSPORT POSITION (A) or in FOLDED POSITION (B).

## TRANSPORT POSITION A:

- NOTE: The platform is switched on. The platform is in the transport position. The turntable and the basket are in neutral position. The jib is in neutral position (150 AETJ 3D (150 AETJC 3D)). The turntable is locked.
- Lower the jib completely.
- Get out of the basket.
- Turn the platform off. Remove the key.

## FOLDED POSITION **B**:

- NOTE: The platform is switched on. The platform is in the transport position. The turntable and the basket are in neutral position. The jib is in neutral position (150 AETJ 3D (150 AETJC 3D)). The turntable is locked.
- Lower the jib completely.
- Get out of the basket.
- From the ground control panel:
  - Turn the basket to the left until it stops.
  - Raise the main arm slightly.
  - Tilt the basket fully downwards. Ensure that the basket cannot hit the flatbed.
  - Lower the main jib so that the basket is a distance of about 10 cm from the flatbed.
- Turn the platform off. Remove the key.

## MOVE FROM THE FOLDED POSITION B TO THE TRANSPORT POSITION A:

NOTE: The turntable is locked.

- Switch the platform on.
- From the ground control panel:
  - Raise the main arm slightly.
  - Tilt the basket/jib upwards until the basket floor is horizontal. Ensure that the basket cannot hit the flatbed.
  - Fully lower the main arm.
  - Turn the basket to the right in the neutral position, < OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Turn the platform off.





## ▲ IMPORTANT ▲

Turntable rotation is prohibited once on the flatbed.





NOTE: The platform is powered down. The platform is in TRANSPORT position (A) or FOLDED (B) position, <</td>

CONFIGURING

THE PLATFORM FOR TRANSPORT. The turntable is locked.

- Ensure that the platform is switched off: The ignition switch must be in the even position, the key must be removed and the battery cut-off must be in the OFF position.
- Ensure that the turntable is unlocked, ◄ SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- Fix chocks (1) to the flatbed truck at the front and rear of each of the platform's wheels.
- Fix chocks 2 to the flatbed on the outside of each of the platform's wheels.
- Secure the platform to the flatbed with sufficiently robust straps or chains ③ attached to the platform's anchoring points, < STICKERS: ANCHORING POINT.
- Only for TRANSPORT position (A):
  - Place a wooden shim  $\overset{\circ}{4}$  under the basket.
  - Strap the basket down (5).



- Ensure that the platform is switched off: The ignition switch must be in the **example** position, the key must be removed and the battery cut-off must be in the OFF position.
- Ensure that the turntable is unlocked, < SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- Fix chocks (1) to the flatbed truck at the front and rear of each of the platform's wheels.
- Fix chocks 2 to the flatbed on the outside of each of the platform's wheels.
- Secure the platform to the flatbed with sufficiently robust straps or chains 3 attached to the platform's anchoring points, <a>(3)</a> attached to the platform's attach
- Only for TRANSPORT position (A):
  - Place a wooden shim  $\frac{4}{2}$  under the basket.
  - Strap the basket down <sup>5</sup>.

## **RESCUE PROCEDURE**

## A IMPORTANT A

This procedure should be read and fully understood by the operator and any other persons likely to be involved with working on the platform in the event of a breakdown or someone getting trapped in the basket.

## IF THE PLATFORM IS WORKING CORRECTLY

Illustration = second version.

## A IMPORTANT A

## Activate the functions with extreme caution and check for obstructions at all times.

Activate the functions from the ground level control panel when the platform can no longer be activated from the basket.

- Turn the ignition switch 1 to position
- Press and hold down the activation button 2.
- Push and hold the appropriate switch to activate a function.
- Release it or release the activation button to stop the activated function.



## IN THE EVENT OF FAILURE OF THE PLATFORM

#### First version.

#### A IMPORTANT A

The tilt alarm system may no longer be activated and the platform may tip over.

Activate the functions with extreme caution and check for obstructions at all times.

#### A IMPORTANT A

Operate the valve knobs carefully to avoid damaging the hydraulic distributor and the hydraulic block.

Activate the functions using the manual backup pump when the platform can no longer be operated from the basket and has a fault:

- Open the right-hand turntable cover.
- Take the pump lever <sup>1</sup> and place it in the manual backup pump <sup>2</sup>.
- Locate the hydraulic distributor 3 and the values 3 at 3.
- Unscrew the appropriate plug 4.
- Activate functions as described on the following pages.

NOTE: ◄ STICKERS: INSTRUCTIONS FOR EMERGENCY CONTROLS.









## A - TILT BASKET UP

- 1 Turn the valve knob (3) counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to tilt the basket up, stop when the desired position is reached.
- 3 Turn the valve knob (3) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **B - TILT BASKET DOWN**

- 1 Turn the valve knob (3A) counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to tilt the basket down, stop when the desired position is reached.
- 3 Turn the valve knob (3A) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **C - RAISE THE JIB ARM**

- 1 Turn the valve knob <sup>(38)</sup> counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to raise the jib arm, stop when the desired position is reached.
- 3 Turn the valve knob (B) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **D - LOWER THE JIB ARM**

- 1 Turn the valve knob <sup>(3B)</sup> counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to lower the jib arm, stop when the desired position is reached.
- 3 Turn the valve knob (B) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **E - EXTEND THE TELESCOPIC ARM**

- 1 Turn the valve knob <sup>30</sup> counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to extend the telescopic arm, stop when the desired position is reached.
- 3 Turn the valve knob <sup>3C</sup> clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **F** - RETRACT THE TELESCOPIC ARM

- 1 Turn the valve knob 3 counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to retract the telescopic arm, stop when the desired position is reached.
- 3 Turn the valve knob (3C) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.













## **G - RAISE THE MAIN ARM**

- 1 Turn the valve knob <sup>(1)</sup> counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to raise the main arm, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(1)</sup> clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## H - LOWER THE MAIN ARM

- 1 Turn the valve knob (3) counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to lower the main arm, stop when the desired position is reached.
- 3 Turn the valve knob (1) clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## I - RAISE THE SECONDARY ARM

- 1 Turn the valve knob <sup>(B)</sup> counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to raise the secondary arm, stop when the desired position is reached.
- 3 Turn the valve knob () clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## J - LOWER THE SECONDARY ARM

- 1 Turn the valve knob <sup>(3)</sup> counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to lower the secondary arm, stop when the desired position is reached.
- 3 Turn the valve knob () clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

## **K - TURN BASKET TO THE LEFT**

- 1 Pull and hold the valve knob **F**.
- 2 Pump to turn the basket to the left, stop when the desired position is reached.
- 3 Release the valve knob <sup>3</sup>. Do up the plug.

## L - TURN BASKET TO THE RIGHT

- 1 Push and hold the valve knob <sup>35</sup>.
- 2 Pump to turn the basket to the right, stop when the desired position is reached.
- 3 Release the valve knob <sup>36</sup>. Do up the plug.













## **M - STEER TO THE LEFT**

- 1 Push and hold the valve knob 36.
- 2 Pump to steer to the left, stop when the desired position is reached.
- 3 Release the valve knob <sup>36</sup>. Do up the plug.

## **N - STEER TO THE RIGHT**

- 1 Pull and hold the valve knob 36.
- 2 Pump to steer to the right, stop when the desired position is reached.
- 3 Release the valve knob 36. Do up the plug.

## **O - TURN THE TURNTABLE TO THE LEFT**

- 1 Pull and hold the valve knob  $\mathfrak{B}$ .
- 2 Pump to turn the turntable to the left, stop when the desired position is reached.
- 3 Release the valve knob (3). Do up the plug.

## **P - TURN THE TURNTABLE TO THE RIGHT**

- 1 Push and hold the valve knob 3.
- 2 Pump to turn the turntable to the right, stop when the desired position is reached.
- 3 Release the valve knob <sup>(3)</sup>. Do up the plug.









## IN THE EVENT OF FAILURE OF THE PLATFORM

## Second version. A IMPORTANT The tilt alarm system may no longer be activated and the platform may tip over. Activate the functions with extreme caution and check for obstructions at all times. A IMPORTANT A Operate the valve knobs carefully to avoid damaging the hydraulic distributor and the hydraulic block.

Activate the functions using the manual backup pump when the platform can no longer be used from the basket and has a fault:

- Open the right-hand turntable cover. Take the pump lever ① and place it in the manual backup pump 2.
- Locate the hydraulic distributor 3 and the valves 3 at 3.
- Locate the hydraulic block 4 and the valve (only for 150 AETJ 3D (150 AETJC 3D)).
- Unscrew the appropriate plug 5.
- Activate functions as described on the following pages.
- NOTE: ◄ STICKERS: INSTRUCTIONS FOR EMERGENCY CONTROLS.



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## A - RETRACT THE TELESCOPIC ARM

- 1 Press and hold down the valve button <sup>34</sup>.
- 2 Pump to retract the telescopic arm, stop when the desired position is reached. Release the valve button **3**.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **B - EXTEND THE TELESCOPIC ARM**

- 1 Press and hold down the valve button  $^{(38)}$ .
- 2 Pump to extend the telescopic arm, stop when the desired position is reached. Release the valve button **3**.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **C - TILT BASKET DOWN**

- 1 Press and hold down the valve button  $^{39}$ .
- 2 Pump to tilt the basket down, stop when the desired position is reached. Release the valve button <sup>3</sup>.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **D - TILT BASKET UP**

- 1 Press and hold down the valve button  $^{(3)}$ .
- 2 Pump to tilt the basket up, stop when the desired position is reached.Release the valve button <sup>(1)</sup>.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **E - LOWER THE JIB**

- 1 Turn the valve knob 🖲 clockwise until it stops.
- 2 Pump to lower the jib, stop when the desired position is reached.
- 3 Turn the valve knob 🖲 counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## F - RAISE THE JIB

- 1 Turn the valve knob <sup>(3)</sup> clockwise until it stops.
- 2 Pump to raise the jib, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(3)</sup> counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.













## **G** - LOWER THE MAIN ARM

- 1 Turn the valve knob <sup>36</sup> clockwise until it stops.
- 2 Pump to lower the main arm, stop when the desired position is reached.
- 3 Turn the valve knob  $\frac{30}{30}$  counterclockwise until it stops.

Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## H - RAISE THE MAIN ARM

- 1 Turn the valve knob <sup>(3)</sup> clockwise until it stops.
- 2 Pump to raise the main arm, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(3)</sup> counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## I - LOWER THE SECONDARY ARM

- 1 Turn the valve knob <sup>(3)</sup> clockwise until it stops.
- 2 Pump to lower the secondary arm, stop when the desired position is reached.
- 3 Turn the valve knob (3) counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## J - RAISE THE SECONDARY ARM

- 1 Turn the valve knob (3) clockwise until it stops.
- 2 Pump to raise the secondary arm, stop when the desired position is reached.
- 3 Turn the valve knob 3 counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **K - TURN BASKET TO THE LEFT**

- 1 Turn the valve knob <sup>36</sup> clockwise until it stops.
- 2 Pump to turn the basket to the left, stop when the desired position is reached.
- 3 Turn the valve knob 🛞 counterclockwise until it stops.

Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## L - TURN BASKET TO THE RIGHT

- 1 Turn the valve knob  $^{(3)}$  clockwise until it stops.
- 2 Pump to turn the basket to the right, stop when the desired position is reached.
- 3 Turn the valve knob (3) counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.













## **M - STEER THE PLATFORM TO THE LEFT**

- 1 Turn the valve knob 🛞 clockwise until it stops.
- 2 Pump to steer the platform to the left, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(M)</sup> counterclockwise until it stops.

Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **N - STEER THE PLATFORM TO THE RIGHT**

- 1 Turn the valve knob 🛞 clockwise until it stops.
- 2 Pump to steer the platform to the right, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(3)</sup> counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## **O - TURN THE TURNTABLE TO THE LEFT**

- 1 Turn the valve knob <sup>30</sup> clockwise until it stops.
- 2 Pump to turn the platform to the left, stop when the desired position is reached.
- 3 Turn the valve knob  $^{30}$  counterclockwise until it stops.

Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## P - TURN THE TURNTABLE TO THE RIGHT

- 1 Turn the valve knob <sup>(39)</sup> clockwise until it stops.
- 2 Pump to turn the platform to the right, stop when the desired position is reached.
- 3 Turn the valve knob <sup>(P)</sup> counterclockwise until it stops.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.









## Q - TURN THE JIB TO THE LEFT (ONLY FOR 150 AETJ 3D (150 AETJC 3D))

- 1 Turn the valve knob (4) counterclockwise until it stops, pull until it stops, turn counterclockwise until it stops and then release.
- 2 Pump to turn the jib to the left, stop when the desired position is reached.
- 3 Turn the valve knob 4 clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.
- Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.

## R - TURN THE JIB TO THE RIGHT (ONLY FOR 150 AETJ 3D (150 AETJC 3D))

1 - Turn the valve knob (4) counterclockwise until it stops, push until it stops, turn counterclockwise until it stops and then release.

- 2 Pump to turn the jib to the right, stop when the desired position is reached.
- 3 Turn the valve knob 4 clockwise until it stops, release it and then turn it clockwise until it stops. Do up the plug.

Note: remove the lever, put it back in place and close the right-hand turntable cover when no other machine functions are necessary.





## **OPTIONS**

## SECONDARY PROTECTION SYSTEM SPS - FIRST VERSION "SAFEMANSYSTEM"

## A IMPORTANT A

Activate the platform controls extremely carefully during attempts at clearance.

If the audible alarm sounds intermittently and rapidly and the flashing light SPS ① flashes rapidly: The platform can be used, but the secondary protection system SPS "SafeManSystem" is deactivated; consult the maintenance personnel.

NOTE: The audible alarm sounds once and the flashing light SPS ① flashes several times when the platform is powered up. This indicates that the secondary protection system SPS "SafeManSystem" is operating correctly.

NOTE: The flashing light SPS  $\bigcirc$  can be blue or red depending on the country.

## **OPERATION DESCRIPTION**

If you are trapped between the pressure sensitive bar SPS 2 and a structure A:

- All of the platform controls are stopped and locked.
- The horn sounds intermittently and the flashing light SPS (1) flashes.
- If you are still trapped between the pressure sensitive bar SPS and the structure:
  Press and release the reset button SPS 3.

Result:

- The platform controls are unlocked, use them to get free.
- The horn stops sounding and the flashing light SPS stops flashing when you are no longer trapped.
- If you are no longer trapped between the pressure sensitive bar SPS and the structure:
   Press and release the reset button SPS 3.

Result:

- The platform controls are unlocked.
- The horn stops sounding and the flashing light SPS stops flashing.







## SECONDARY PROTECTION SYSTEM SPS - SECOND VERSION

## A IMPORTANT A

Activate the platform controls extremely carefully during attempts at clearance. If the audible alarm sounds intermittently and rapidly and the flashing light SPS ① flashes rapidly: The platform can be used, but the secondary protection system SPS is deactivated; consult the maintenance personnel.

NOTE: The audible alarm sounds once and the flashing light SPS ① flashes several times when the platform is powered up. This indicates that the secondary protection system SPS is operating correctly.

NOTE: The flashing light SPS 1 can be blue or red depending on the country.

## **OPERATION DESCRIPTION**

If you are trapped between the safety cable SPS  $\bigcirc$  and a structure  $\bigcirc$ :

- All of the platform controls are stopped and locked.
- The horn sounds intermittently and the flashing light SPS (1) flashes.
- If you are still trapped between the safety cable SPS and the structure:
  - Press and release the reset button SPS <sup>3</sup>. Result:
  - The platform controls are unlocked, use them to get free.
  - The horn stops sounding and the flashing light SPS stops flashing when you are no longer trapped.
- If you are no longer trapped between the safety cable SPS and the structure:
  - Press and release the reset button SPS (3).
  - Result:
  - The platform controls are unlocked.
  - The horn stops sounding and the flashing light SPS stops flashing.







# 3 - MAINTENANCE

## 3 - MAINTENANCE

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## MAINTENANCE OPERATIONS REQUIRE SPECIFIC PRECAUTIONS.

## A IMPORTANT A

Unless specific instructions are given, during maintenance operations:

- The platform must be on a level surface. The wheels must be chocked.

- The platform should be in transport position, \land 2 - DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.

- The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) should be in neutral position, \land 2 - DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/

WORKING POSITION.

- The jib must be fully lowered.

- It is essential that the turntable is locked, < 2 - DESCRIPTION: SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

- The basket must be empty.

In order to maintain the connectivity of the machine, some of the equipment remains powered on even if the battery cut-off is in the off position, <>> 2 - DESCRIPTION: STICKERS.

## **ORIGINAL MANITOU SPARE PARTS AND EQUIPMENT**

OUR PLATFORMS MUST BE SERVICED USING ORIGINAL MANITOU PARTS.

## **BY ALLOWING THE USE OF NON ORIGINAL MANITOU PARTS, YOU RISK:**

## A IMPORTANT A

THE USE OF COUNTERFEIT PARTS OR COMPONENTS NOT APPROVED BY THE MANUFACTURER, MEANS YOU LOSE THE BENEFIT OF THE CONTRACTUAL GUARANTEE.

- Legally to incur liability in the event of an accident.
- Technically, causing operating malfunctions and reducing the access platform's service life.

## BY USING ORIGINAL MANITOU PARTS FOR MAINTENANCE OPERATIONS, YOU BENEFIT FROM OUR KNOW-HOW

Through its network, MANITOU provides the user with,

- Know-how and competence.
- The guarantee of high-quality work.
- Original replacement parts.
- Help with preventive maintenance.
- Efficient help with diagnosis.
- Improvements due to experience feedback.
- Operator training.
- Only the MANITOU network has detailed knowledge of the design of the access platform and therefore the best technical ability to provide maintenance.

## A IMPORTANT A

ORIGINAL REPLACEMENT PARTS ARE DISTRIBUTED EXCLUSIVELY BY MANITOU AND ITS DEALER NETWORK. The dealer network list is available on the MANITOU web site: www.manitou.com

## A IMPORTANT A

DAILY MAINTENANCE MUST BE CARRIED OUT BY THE OPERATOR BEFORE USING THE PLATFORM. WEEKLY MAINTENANCE MUST BE CARRIED OUT BY THE MAINTENANCE PERSONNEL.

## **DAILY MAINTENANCE**

- CHECK	General inspection	
- CHECK	Hydraulic oil level	
- CHECK	Battery charge level	3-13
- CHECK	Battery fluid level	3-13
- CHECK	Platform controls	3-14
- CHECK	Secondary protection system SPS - first version "SafeManSystem" (OPTION)	3-20
- CHECK	Secondary protection system SPS - second version (OPTION)	3-21

## **WEEKLY MAINTENANCE**

#### ALSO PERFORM THE DAILY MAINTENANCE.

- CHECK	Wheel nut tightening	. 3-22
- CHECK	Battery electrolyte specific gravity	. 3-23
- GREASE	Front steering pivots and steering cylinder ring	. 3-23
- BLEED	Battery trays	. 3-24
- RESET	Maintenance warning	. 3-24

## A IMPORTANT A

## MANDATORY SERVICING AND PERIODIC MAINTENANCE MUST BE CARRIED OUT BY AN APPROVED PROFESSIONAL FROM THE MANITOU NETWORK.

## MAINTENANCE SCHEDULE

This schedule enables the periodic maintenance on the platform to be kept up to date by reporting the total number of hours worked and the date of the service.

	U	U	OR U
SCHEDULE 🔵	FIRST 50 HOURS	FIRST 6 MONTHS	FIRST 200 HOURS
MANDATORY SERVICE 🂙	FIRST 50 HOURS + 1	FIRST 200 HOURS OR 6 MONTHS	FIRST 200 HOURS OR 6 MONTHS + 3
MACHINE COUNTER 💭			
DATE OF SERVICING 🌑			

SCHEDULE 🔵	100 H	150 H	<b>200 H</b> or 1 YEAR	250 H	300 H
PERIODIC MAINTENANCE 🌑	0+0	0	<b>1</b> + <b>2</b> + <b>3</b>	0	0+0
MACHINE COUNTER 🍮					
DATE OF SERVICING 🌑					

	350 H	400 H or 2 YEARS	450 H	500 H	550 H
PERIODIC MAINTENANCE 🌑	0	<b>1</b> + <b>2</b> + <b>3</b>	0	0+0	0
MACHINE COUNTER 🍮					
DATE OF SERVICING 🍮					

SCHEDULE 🔵	600 H or 3 YEARS	650 H	700 H	750 H	800 H or 4 YEARS
PERIODIC MAINTENANCE	0+2+8	0	0+2	0	0+2+8
MACHINE COUNTER 🍮					
DATE OF SERVICING 🌑					

	850 H	900 H	950 H	1000 H or 5 YEARS	1050 H
PERIODIC MAINTENANCE	0	0+2	0	<b>1</b> + <b>2</b> + <b>3</b>	0
MACHINE COUNTER 🍮					
DATE OF SERVICING 🌑					

SCHEDULE 🔵	1100 H	1150 H	1200 H or 6 YEARS	1250 H	1300 H
PERIODIC MAINTENANCE	0+0	0	<b>1</b> + <b>2</b> + <b>5</b>	0	0+0
MACHINE COUNTER 🌑					
DATE OF SERVICING 🌑					

647536 (26/11/2020) 150 AETJ/AETJ 3D - 150 AETJ C/AETJ C 3D - 170 AETJ L

SCHEDULE 🔵	1350 H	1400 H or 7 YEARS	1450 H	1500 H	1550 H
PERIODIC MAINTENANCE	0	0+2+8	0	0+0	0
MACHINE COUNTER 🍮					
DATE OF SERVICING 🌑					

	1600 H or 8 YEARS	1650 H	1700 H	1750 H	<b>1800 H</b> or 9 YEARS
PERIODIC MAINTENANCE	0+2+8	0	0+0	0	0+0+0
MACHINE COUNTER 🌑					
DATE OF SERVICING 🌑					

	1850 H	1900 H	1950 H	2000 H or 10 YEARS	2050 H
PERIODIC MAINTENANCE	0	0+0	0	0+2+8	0
MACHINE COUNTER 🍮					
DATE OF SERVICING 🌑					

SCHEDULE 🔵	2100 H	2150 H	2200 H or 11 YEARS	2250 H	2300 H
PERIODIC MAINTENANCE	0+0	0	<b>1</b> + <b>2</b> + <b>3</b>	0	0+0
MACHINE COUNTER 🌑					
DATE OF SERVICING 🌑					
SCHEDULE 🔵	2350 H	2400 H or 12 YEARS	2450 H	2500 H	2550 H
PERIODIC MAINTENANCE	0	<b>0+0+8</b>	0	0+0	0
MACHINE COUNTER 🌑					
DATE OF SERVICING 🌑					

SCHEDULE 🔵	2600 H or 13 YEARS	2650 H	2700 H	2750 H	<b>2800 H</b> or 14 YEARS
PERIODIC MAINTENANCE	1+2+8	0	0+0	0	0+2+8
MACHINE COUNTER 🌑					
DATE OF SERVICING 🌑					

SCHEDULE 🔵	2850 H	2900 H	2950 H	<b>3000 H</b> or 15 YEARS
PERIODIC MAINTENANCE	0	0+0	0	0+2+8
MACHINE COUNTER 🍮				
DATE OF SERVICING 🍮				

## ALSO PERFORM THE MONTHLY MAINTENANCE.

This service must be carried out in the first 50 hours of service.

- CHECK	Wheel nut tightening	3-22
- CHECK	Tightening of electrical connections	3-26
- CHECK	Basket nut tightening	3-30
- CHECK	Tightening of the fixing screws on the jib rotation cylinder (150 AETJ 3D (150 AETJC 3D))	3-30

## MANDATORY SERVICE - FIRST 200 HOURS OR 6 MONTHS

This service must be carried out after approximately the first 200 hours of service or within the 6 months following the start-up of the platform (whichever occurs first):

#### FIRST 200 HOURS BEFORE THE FIRST 6 MONTHS

- If the platform has reached the first 200 hours of service before the first 6 months have expired, perform both the
- mandatory service and the 200-hour periodic maintenance  $\triangleleft \bigcirc 3$  200H PERIODIC MAINTENANCE EVERY 200 HOURS OF SERVICE OR 1 YEAR.

## FIRST 6 MONTHS BEFORE THE FIRST 200 HOURS

- If the platform has not completed 200 hours of service in the first 6 months, carry out only the compulsory service.

- CHECK	General inspection	3-12
- CHECK	Platform controls	3-14
- CHECK	Secondary protection system SPS - first version "SafeManSystem" (OPTION).	3-20
- CHECK	Secondary protection system SPS - second version (OPTION)	3-21
- CHECK	Wheel nut tightening	3-22
- CHECK	Battery electrolyte specific gravity	3-23
- GREASE	Front steering pivots and steering cylinder ring	3-23
- BLEED	Battery trays	3-24
- CHECK	Emergency controls	3-26
- CHECK	Tightening of electrical connections	3-26
- GREASE	Teeth on crown gear	3-26
- LUBRICATE	Shafts, hubs and cylinder rings	3-27
- CHECK	Basket nut tightening	3-30
- CHECK	Tightening of the fixing screws on the jib rotation cylinder (150 AETJ 3D (150 AETJC 3D))	3-30
- CHECK	Telescope setting	3-31
- CHECK	Tightening of the fixing screws on the turntable motor	3-32
- CHECK	Counterweight fixing screw tightening	3-32
- CHECK	Tightening of the battery fixing screws	3-32
- CHECK	Overload alarm	3-33
- CHECK	Brakes	3-34
- CHECK	Turntable motor oil level	3-35
- CHECK	Hydraulic hoses	3-35
- LUBRICATE	Telescope	3-36
- GREASE	Crown gear bearings	3-36
- CHECK	Tightening of the fixing screws for the crown gear	3-38
- CHECK	Clearance of crown gear *	3-41
- CHECK	Condition of cylinders *	3-41
- CHECK	Condition of electric wiring *	3-41

\* Consult your dealer.

## **3 0** 50H - PERIODIC MAINTENANCE - EVERY 50 HOURS OF SERVICE OR 3 MONTHS

## ALSO PERFORM THE DAILY AND WEEKLY MAINTENANCE.

- CHECK	Emergency controls	
- CHECK	Tightening of electrical connections	
- GREASE	Teeth on crown gear	
- LUBRICATE	Shafts, hubs and cylinder rings	
- RESET	Maintenance warning	

## **2 2** 100H - PERIODIC MAINTENANCE - EVERY 100 HOURS OF SERVICE OR 6 MONTHS

#### ALSO PERFORM THE DAILY MAINTENANCE AND THE PERIODIC MAINTENANCE AT 50 HOURS OF SERVICE.

- CHECK	Basket nut tightening	3-30
- CHECK	Tightening of the fixing screws on the jib rotation cylinder (150 AETJ 3D (150 AETJC 3D))	3-30
- CHECK	Telescope setting	3-31
- CHECK	Tightening of the fixing screws on the turntable motor	3-32
- CHECK	Counterweight fixing screw tightening	3-32
- CHECK	Tightening of the battery fixing screws	3-32
- CHECK	Overload alarm	3-33
- CHECK	Brakes	3-34
- CHECK	Turntable motor oil level	3-35
- CHECK	Hydraulic hoses	3-35
- LUBRICATE	Telescope	3-36
- GREASE	Crown gear bearings	3-36
- RESET	Maintenance warning	3-36

## **3 O** 200H - PERIODIC MAINTENANCE - EVERY 200 HOURS OF SERVICE OR 1 YEAR

#### ALSO PERFORM THE DAILY SERVICE AND THE PERIODIC SERVICES AT 50 HOURS AND 100 HOURS OF SERVICE.

- CHECK	Tightening of the fixing screws for the crown gear	
- REPLACE	Wheel reduction gear oil	
- REPLACE	Turntable motor oil	
- REPLACE	Hydraulic oil	
- REPLACE	Hydraulic return filter cartridge	
- CLEAN	Suction strainer	
- CHECK	Clearance of crown gear *	
- CHECK	Condition of cylinders *	
- CHECK	Condition of electric wiring *	
- RESET	Maintenance warning	
		* Consult your dealer.

## OCCASIONAL MAINTENANCE AND OPERATION

## **OCCASIONAL MAINTENANCE**

- REPLACE	Wheels	
- REPLACE	Batteries	
- REPLACE	Fuses	

## **OCCASIONAL OPERATION**

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HYDRAULIC RETURN FILTER CARTRIDGE Part No.: 599004

## **OTHER FILTER CARTRIDGES**



SUCTION STRAINER Part No.: 598623

## A IMPORTANT A

USE THE RECOMMENDED LUBRICANTS: - For topping up, oils may not be miscible.

## - For oil changes, MANITOU oils are perfectly appropriate.

#### DIAGNOSTIC ANALYSIS OF OILS

If a service or maintenance contract has been set up with the dealer, a diagnostic analysis of the hydraulic oil may be requested depending on the rate of use.

## RECOMMENDATIONS

TRANSMISSION											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C
FRONT STEERING PIVOTS		MANITOU BLACK MULTI-PURPOSE LUBRICANT									
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C
WHEEL GEAR REDUCER	2 x 0.8 L				MANITOL	J SAE80W	90 MECH	IANICAL 1	RANSMIS	SION OIL	

HYDRAULICS											
DESCRIPTION	CAPACITY	RECOMMENDATION									
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C
							ISO VG 100				
HYDRAULIC OIL							ISO VG 68				
First version	12 L				MAN	IITOU HY	DRAULIC	OIL ISO V	G 46		
Second version	15 L					ISO VG	37				
					ISC	) VG 32					

LIFTING STRUCTURE												
DESCRIPTION	CAPACITY	RECOMMENDATION										
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C	
GENERAL GREASING												
CROWN GEAR BEARINGS			MANITOU BLACK MULTI-PURPOSE LUBRICANT									
TELESCOPE												
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C	
CROWN GEAR TEETH		MANITOU MULTI-PURPOSE EXTREME PRESSURE LUBRICANT										
		-40 °C	-30 °C	-20 °C	-10 °C	0°C	10 °C	20 °C	30 °C	40 °C	50 °C	
TURNTABLE MOTOR	0.85 L	MANITOU MECHANICAL TRANSMISSION OI						ON OIL S	AE80W90	)		

## PACKAGING

OIL									
DDODUCT	PACKAGING - PART NO.								
PRODUCI		2 LITERS	5 LITERS	20 LITERS	55 LITERS	209 LITERS			
- MANITOU ISO VG 46 HYDRAULIC FLUID			545500	582297	546108	546109			
- MANITOU SAE80W90 MECHANICAL TRANSMISSION OIL		499237	720184	546330	546221	546220			

GREASE									
DDODUCT	PACKAGING - PART NO.								
PRODUCT	400 ML	400 GR	1 KG	5 KG	20 KG	50 KG			
- MANITOU MULTI-PURPOSE EXTREME PRESSURE LUBRICANT	947765								
- MANITOU BLACK MULTI-PURPOSE LUBRICANT		947766	161590			499235			

## **CALLY MAINTENANCE**

## CHECK

## A IMPORTANT A

## Consult the maintenance personnel if there is doubt about the condition of the platform.

NOTE: The turntable covers must be opened to carry out the general inspection of the platform. They must be closed once finished.

The operator must perform a visual inspection of the platform:

- Check that the operator's manual is clean and complete.
- Check the stickers and make sure they are all present, clean and legible, </ 2 DESCRIPTION: STICKERS.
- Check for leaks: Battery fluid, hydraulic oil, lubricants, etc.
- Check the condition of the structure: No dents, damage, cracked welding, corrosion, excessive mechanical play, wear, etc.
- Check the condition of the basket: Structure, floor, safety rail, harness attachment points, etc.
- Check the condition of the hydraulic components: Pumps, distributors, valves, motors, cylinders, hoses, etc.
- Check the condition of the mechanical components: Wheels, tires, tie rods, crown gear, axles, etc.
- Check the condition of the electrical components: Control panels, control handles, switches, buttons, indicator lamps, battery, fuses, cables, harnesses, flashing lights, etc.
- Check the condition of covers, handles, locks, plugs, etc.
- Check if any parts are missing or loose: Screws, nuts, pins, etc.
- Check that no parts are missing or have had unauthorized modifications.
- Check the general cleanliness of the platform: Basket floor, turntable compartments, etc.

#### CHECK

## A IMPORTANT A

The platform must be in transport position with the jib lowered completely.

There can be a difference in level of 10 mm to 20 mm between hot and cold oil. It is recommended the level is checked again when the hydraulic oil is hot.

## Clean the oil can before adding oil to the hydraulic oil tank.

Use a clean funnel to add oil to the hydraulic oil tank.

- Open the left-hand turntable cover.

## **FIRST VERSION**

- Locate the level indicator 1. The level is correct when the oil reaches the red dot on the level indicator.
- If the level is low:
  - Remove the cap from the tank 2.
  - Add hydraulic oil until the correct level is reached, <> LUBRICANTS.
  - Refit the tank cap.
- If the level is correct:
  - Ensure that the tank cap <sup>(2)</sup> is correctly closed.

## SECOND VERSION

- Clean the outside of the tank (1) with a clean cloth.
- Check the level of hydraulic oil in the transparent tank. The level is correct when the oil is between the MIN and MAX marks.
- If the level is low:
  - Remove the cap from the tank 2.
  - Add hydraulic oil until the correct level is reached, *◄* LUBRICANTS.
  - Refit the tank cap.
- If the level is correct:

• Ensure that the tank cap <sup>2</sup> is correctly closed.

- Close the left-hand turntable cover.





**General** inspection

Hydraulic oil level

## **Battery charge level**

## A IMPORTANT A

If there is doubt about the battery charge, refer to the maintenance personnel. Do not use the platform if the battery charge level is lower than 30%.

- Switch the platform on.
- Check the battery charge level (A) displayed on the LCD indicator. Consult the maintenance personnel if the charge level is low.
- Turn the platform off.





## **Battery fluid level**



- The positive terminals cannot come into contact with metallic parts of the platform. Do not add distilled water if the battery charge level is not 100%. The battery contains a highly corrosive liquid. Always wear protective clothing, safety gloves, and goggles or a face

A IMPORTANT A At all times, make sure that: - The positive terminals cannot come into contact with the negative terminals.

shield during maintenance. Avoid contact with any part of the body or clothing at all times. Rinse any exposed area with clean water and seek medical advice.

Clean and dry the battery cell caps before closing them.

- Remove the right and left battery covers (1).
- Open one of the battery cell caps 2.
- The level is correct when the liquid reaches the top of the filter  $\Im$ .

- If the level is low:

- Add distilled water until the correct level is reached.
- Close the battery cell cap.
- If the level is correct:
- Close the battery cell cap.
- Repeat these steps for all the battery cells.
- Put the battery covers  $\bigcirc$  back in place.





## A IMPORTANT A

ightarrow 2 - DESCRIPTION for more information on the control panels on the ground and in the basket.

Select a test area on a firm, level surface that is free of any obstacles.

Look around and above you when maneuvering the platform (lifting, rotation, etc.).

Pay particular attention to electric lines and any object that may be within the platform's field of operation.

Shut the platform down if a malfunction is detected.

#### **GROUND LEVEL CONTROL PANEL**

## IGNITION SWITCH, BATTERY CUT-OFF AND EMERGENCY STOP BUTTON

The battery cut-off is in the OFF position. The ignition switch is in the position

The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

- Ensure that the emergency stop buttons on the ground level and basket control panels are in the ON position.
- Turn the battery cut-off to the ON position.

- Turn the ignition switch to position 🧕

NOTE: SECONDARY PROTECTION SYSTEM option SPS, *◄* CHECK: SECONDARY PROTECTION SYSTEM SPS - FIRST VERSION "SAFEMANSYSTEM" (OPTION) or *◄* CHECK: SECONDARY PROTECTION SYSTEM SPS - SECOND VERSION (OPTION).

Result:

- The multi-function display must come on.
- The audible alarm should sound once.
- Press the emergency stop button (OFF position).

Result:

- The emergency stop button should be locked in the OFF position.
- The multi-function display must turn off.
- Depending on version:
  - Turn the emergency stop button clockwise a quarter turn and release it.
  - Pull the emergency stop button or turn it clockwise a quarter turn and release it.

Result:

- The emergency stop button should be unlocked in the ON position.
- The multi-function display must come on.

## **PLATFORM FUNCTIONS**

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

NOTE:

- ORANGE FLASHING LIGHT option: The orange flashing light must light up when the functions are activated.
- ALL MOVEMENTS ALARM option: The horn must sound intermittently when the functions are activated.

- Do not press the activation button. Try to activate all the functions one by one.

Result:

- It should not be possible to activate any of the functions.
- Press and hold down the activation button.

- Activate all the functions one by one. Check that all the movements are complete up to the mechanical stops. Result:

- It should be possible to activate all the functions.
- All the movements must operate correctly and smoothly.
- All the movements must be complete up to the mechanical stops.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D) in neutral position. Level the basket. Lower the jib completely.

## **TILT ALARM**

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D) are in neutral position. The jib is completely lowered.

- Open the right-hand turntable cover.

- Locate the leveling sensor.
- Press and hold the leveling sensor.

Result:

- The audible alarm should sound intermittently.
- The leveling sensor indicator lamp should go out.
- Release the leveling sensor.

Result:

- The audible alarm should stop.
- The leveling sensor indicator lamp should light up.
- Close the right-hand turntable cover.

## **OVERLOAD ALARM**

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D) are in neutral position. The jib is completely lowered.

- Place a uniformly distributed load in the basket = between 220 kg and 250 kg.

Result:

- The audible alarm should sound continuously.
- The overload alarm indicator lamp should flash.
- Try to activate all the functions one by one.

Result:

- It should not be possible to activate any of the functions.
- Remove between 20 kg and 50 kg to obtain a load of 200 kg in the basket.

Result:

- The audible alarm should stop.
- The overload alarm indicator lamp should go out.
- Activate all the functions one by one.

Result:

• It should be possible to activate all the functions.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Level the basket. Lower the jib completely.

## **CONTROL PANEL IN THE BASKET**

## OVERLOAD ALARM

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

There is a 200 kg load in the basket.

- Turn the ignition switch to position

- Turn the ignition switch to position

• The multi-function display must come on.

- The audible alarm should sound once.
- Get into the basket.

Result:

- The audible alarm should sound continuously.
- The overload/fault alarm indicator lamp should flash.

- Try to activate all the functions one by one.

Result:

- It should not be possible to activate any of the functions.
- Get out of the basket.

Result:

- The audible alarm should stop.
- The overload/fault alarm indicator lamp should go out.
- Remove the whole load from the basket.

## HORN AND EMERGENCY STOP BUTTON

## A IMPORTANT A

#### The functions may stop suddenly when the emergency stop button is pressed.

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

NOTE:

- ORANGE FLASHING LIGHT option: The orange flashing light must light up when the functions are activated.
- ALL MOVEMENTS ALARM option: The horn must sound intermittently when the functions are activated.
- Get into the basket.
- Press horn button and release it.

Result:

• The horn should sound.

- Raise the jib and press the emergency stop button (OFF position) at the same time.

Result:

- The emergency stop button should function properly.
- The jib should stop.
- Depending on version:
  - Turn the emergency stop button clockwise a quarter turn and release it.
  - Pull the emergency stop button or turn it clockwise a quarter turn and release it.

## A IMPORTANT A

#### During the test, tilt the basket up/down slightly to avoid injury.

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D) are in neutral position. The jib is slightly raised.

NOTE:

• ORANGE FLASHING LIGHT option: The orange flashing light must light up when the functions are activated.

• ALL MOVEMENTS ALARM option: The horn must sound intermittently when the functions are activated.

- Do not press the control handle trigger. Try to activate the basket tilt up and down functions one after the other. Result:

• It should not be possible to activate any of the functions.

- Press and hold down the trigger of the control handle.

- Activate the basket tilt up and down functions one after the other.

Result:

• It should be possible to activate the functions.

- Press and hold down the trigger of the control handle.

- Extend the telescope for 3 seconds.

Result:

• It should be possible to activate the function.

- Press and hold down the trigger of the control handle.

- Test the basket tilt up and down functions one after the other.

#### Result:

• Up to machine no. 950123: It should be possible to activate the functions.

- From machine no. 950124: It should not be possible to activate the functions.
- Fully retract the telescope.
- Level the basket.

- Lower the jib completely.

## PLATFORM FUNCTIONS: MAIN ARM, SECONDARY ARM, TELESCOPE, JIB AND TURNTABLE ROTATION, BASKET ROTATION, JIB ROTATION (150 AETJ 3D (150 AETJC 3D))

NOTE: Do not drive or steer the platform during this test.

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

NOTE:

• ORANGE FLASHING LIGHT option: The orange flashing light must light up when the functions are activated.

• ALL MOVEMENTS ALARM option: The horn must sound intermittently when the functions are activated.

- Do not press the control handle trigger. Try to activate all the functions one by one.

Result:

• It should not be possible to activate any of the functions.

- Press and hold down the trigger of the control handle.

- Activate all the functions one by one. Check that all the movements are complete up to the mechanical stops. Result:

• It should be possible to activate all the functions.

- All the movements must operate correctly and smoothly.
- All the movements must be complete up to the mechanical stops.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Level the basket. Lower the jib completely.

## DRIVING/BRAKING/STEERING FUNCTIONS (TRANSPORT POSITION)

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

## NOTE:

- ORANGE FLASHING LIGHT option: The orange flashing light must come on when driving and steering.
- ALL MOVEMENTS ALARM or DRIVING/STEERING ALARM option: The horn should sound intermittently when driving and steering.

- Do not press the control handle trigger. Try to drive and steer the platform.

Result:

- It should not be possible to activate the driving and steering functions.
- Raise the jib slightly for better visibility.
- Press and hold down the trigger of the control handle.
- Drive the platform forward and brake. Assess and remember the platform's braking distance.
- Drive the platform forward, test the steering and brake.
- Reverse the platform for a short distance and brake.

## Result:

- It should be possible to activate the driving/steering functions.
- Driving and steering should function properly and smoothly.
- The brakes should function properly.

## WORKING POSITION SPEED

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is slightly raised.

## NOTE:

• ORANGE FLASHING LIGHT option: The orange flashing light must come on when driving and steering.

- ALL MOVEMENTS ALARM or DRIVING/STEERING ALARM option: The horn should sound intermittently when driving and steering.
- Drive the platform forward for a short distance and brake. Assess and remember the platform's braking distance.
- Raise the main arm for three seconds.
- Drive the platform forward for a short distance and brake.

Result:

- The driving speed must be WORKING POSITION speed.
- Fully lower the main arm.
- Drive the platform forward for a short distance and brake.

Result:

- The driving speed must be TRANSPORT POSITION speed (fast speed).
- Raise the secondary arm for 3 seconds.
- Drive the platform forward for a short distance and brake. Result:

• The driving speed must be WORKING POSITION speed.

- Fully lower the secondary arm.

- Drive the platform forward for a short distance and brake.

Result:

• The driving speed must be TRANSPORT POSITION speed (fast speed).

- Extend the telescope for three seconds.

- Drive the platform forward for a short distance and brake. Result:

• The driving speed must be WORKING POSITION speed.

- Fully retract the telescope.
- Drive the platform forward for a short distance and brake.

Result:

• The driving speed must be TRANSPORT POSITION speed (fast speed).

## **DRIVING ON A SLOPE AND TILT ALARM**

The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is slightly raised.

## TEST No. 1

- Select a slope between 15% (8.5°) and 20% (11.3°).
- Raise the jib to the horizontal position.
- Drive the platform forwards slowly on the slope, facing it, with the basket at the bottom of the slope.

Result:

- The audible alarm should sound intermittently.
- The tilt alarm indicator lamp should flash.
- Brake the platform on the slope.

#### Result:

- The brakes should function properly.
- The platform should be immobilized on the slope for at least 1 minute.
- Try to raise the main arm and the secondary arm and to extend the telescope.

Result:

• It should not be possible to activate the functions.

- Reverse slowly to drive the platform off the slope onto a level surface.

Result:

- The audible alarm should stop.
- The tilt alarm indicator lamp should go out.
- Brake the platform.

## TEST No. 2

- Extend the telescope for three seconds.
- Drive the platform forwards slowly on the slope, facing it, with the basket at the bottom of the slope. Result:
  - The platform should brake automatically.
  - The audible alarm should sound intermittently.
  - The tilt alarm indicator lamp should flash.
- Try to raise the main arm and the secondary arm, to extend the telescope and to drive/steer.

Result:

- It should not be possible to activate the functions.
- Fully retract the telescope.

#### Result:

- It should be possible to activate the function.
- Reverse slowly to drive the platform off the slope onto a level surface.

Result:

- The audible alarm should stop.
- The tilt alarm indicator lamp should go out.
- Brake the platform.
- Lower the jib completely.
- Get out of the basket.
- Turn the ignition switch to position . Turn the battery cut-off to the OFF position.



647536 (26/11/2020) 150 AETJ/AETJ3D - 150 AETJ C/AETJ C 3D - 170 AETJ

## Secondary protection system SPS - first version "SafeManSystem" (OPTION)

## A IMPORTANT A

#### Select a test area on a firm, level surface that is free of any obstacles. Shut the platform down if a malfunction is detected.

NOTE: The flashing light SPS  $\bigcirc$  can be blue or red depending on the country.

- Turn the battery cut-off to the ON position.

ition switch to position

- Turn the ignition switch to position Result:
  - The audible alarm should sound once.
  - The flashing light SPS  $\bigcirc$  should flash several times and stop.
- NOTE: If the audible alarm sounds intermittently and the flashing light SPS 1 flashes rapidly: The platform can function normally but the option is deactivated. Refer to maintenance personnel.
- Get into the basket.
- Turn the basket to the right or left. At the same time, press and release the safety edge SPS <sup>2</sup>.

Result:

- The basket rotation should stop.
- The horn should sound intermittently and the flashing light SPS should flash.
- It should not be possible to activate the functions.

- Press and release the reset button SPS 3.

Result:

- The horn should stop sounding and the flashing light SPS should stop flashing.
  It should be possible to activate the functions.
- Turn the basket to the right or left. At the same time, press and hold down the safety edge SPS 2.

Result:

- The basket rotation should stop.
- The horn should sound intermittently and the flashing light SPS should flash.
- It should not be possible to activate the functions.
- Press and release the reset button SPS <sup>3</sup> without releasing the safety edge SPS <sup>2</sup>. Result:
  - The horn and the flashing light SPS should continue to operate.
  - It should be possible to activate the functions.
- Release the safety edge SPS.

## Result:

• The horn should stop sounding and the flashing light SPS should stop flashing.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Lower the jib completely.
- Get out of the basket.
- Turn the ignition switch to position <sup>•</sup> Turn the battery cut-off to the OFF position.




## Secondary protection system SPS - second version (OPTION)

#### **A** IMPORTANT **A**

Select a test area on a firm, level surface that is free of any obstacles. Shut the platform down if a malfunction is detected.

NOTE: The flashing light SPS <sup>1</sup> can be blue or red depending on the country.

- Turn the battery cut-off to the ON position.

- Turn the ignition switch to position

Result:

- The audible alarm should sound once.
- The flashing light SPS  $\bigcirc$  should flash several times and stop.
- NOTE: If the audible alarm sounds intermittently and the flashing light SPS (1) flashes rapidly: The platform can function normally but the option is deactivated. Refer to maintenance personnel.
- Get into the basket.
- Check the condition of the safety cable SPS <sup>2</sup>. If there is doubt about its condition, have it replaced by an approved professional from the Manitou network.
- Turn the basket to the right or left. At the same time, push the safety cable SPS 2 forward and release it.

Result:

- The basket rotation should stop.
- The horn should sound intermittently and the flashing light SPS should flash.
  It should not be possible to activate the functions.
- Press and release the reset button SPS 3.

Result:

- The horn should stop sounding and the flashing light SPS should stop flashing.It should be possible to activate the functions.
- Turn the basket to the right or left. At the same time, push and hold the safety cable SPS 2 forward.

Result:

- The basket rotation should stop.
- The horn should sound intermittently and the flashing light SPS should flash.
- It should not be possible to activate the functions.
- Press and release the reset button SPS <sup>3</sup> without releasing the safety cable SPS <sup>2</sup>. Result:
  - The horn and the flashing light SPS should continue to operate.
  - It should be possible to activate the functions.
- Release the safety cable SPS.

Result:

• The horn should stop sounding and the flashing light SPS should stop flashing.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Lower the jib completely.
- Get out of the basket.
- Turn the ignition switch to position <sup>•</sup> Turn the battery cut-off to the OFF position.





#### ALSO PERFORM THE DAILY MAINTENANCE.

**CHECK** 

Wheel nut tightening

## A IMPORTANT A

Failure to follow this instruction may result in the platform tipping over.

It is highly recommended to replace the "Nord lock" washers in the event of retightening or significant tightening.

- Check the tightening torques of all the wheel nuts:



- Apply a drop of threadlock (MANITOU Part No.: 187526) on the areas (A) (on the faces of the front and rear wheel nuts (1) and on the threads of the stude (2).



### Battery electrolyte specific gravity

## 🛦 IMPORTANT 🛕

At all times, make sure that:

- The positive terminals cannot come into contact with the negative terminals.

- The positive terminals cannot come into contact with metallic parts of the platform.

The battery contains a highly corrosive liquid. Always wear protective clothing, safety gloves, and goggles or a face shield during maintenance. Avoid contact with any part of the body or clothing at all times. Rinse any exposed area with clean water and seek medical advice.

Before checking the specific gravity of the electrolyte, if distilled water has been added: Charge the batteries and wait for at least 1 hour.

# - Remove the right and left battery covers $\bigcirc$ .

- Open one of the battery cell caps 2.
- Check the specific gravity of the electrolyte in a battery cell with a hydrometer. Refer to the gray area A in the illustration.
  - Example: The specific gravity should be at least 1.27 g/cm3 with an electrolyte temperature of 16 °C.
- Close the battery cell cap 2.
- Repeat these steps for all the battery cells.
- If the specific gravity is not correct:
  - Replace the faulty battery, *◄* OCCASIONAL MAINTENANCE.







## **GREASE**

Front steering pivots and steering cylinder ring

# 

Grease the steering pivot pins and the steering cylinder ring more often when the platform is used in a dusty environment.

NOTE: The battery covers are removed.

- Remove the 4 caps from the lubrication connectors (1) and (2), on the right and left-hand sides.
- Remove the lubrication connector cap (3), on the right-hand side.
- Inject the lubricant into the lubrication connectors,  $\sphericalangle$  LUBRICANTS.
- Refit the lubrication connector caps.





#### **BLEED**

## **Battery trays**

## NOTE: The battery covers are removed.

- Locate the rigid pipe <sup>1</sup> in the battery.
  Locate the flexible pipe <sup>2</sup> and the aspirator bulb <sup>3</sup> in one of the batteries.
  Connect the rigid pipe to the flexible pipe.
- Connect the flexible pipe to the aspirator bulb.
- Drain the water contained in the battery tray.
- Repeat these steps for the other battery.
- Put the battery covers 4 back in place.





RESET

**Maintenance warning** 

Where the maintenance warning needs to be reset, < 50H - PERIODIC MAINTENANCE - EVERY 50 HOURS OF SERVICE OR 3 MONTHS.

# **• 0** 50H - PERIODIC MAINTENANCE - EVERY 50 HOURS OF SERVICE OR 3 MONTHS

#### ALSO PERFORM THE DAILY AND WEEKLY MAINTENANCE.

### **CHECK**

**Emergency controls** 

## A IMPORTANT A

Never use the platform in the event of an emergency control failure. - Check that the emergency controls are working,  $\triangleleft 2$  - DESCRIPTION: RESCUE PROCEDURE.

## **CHECK**

Tightening of electrical connections

- Remove the right and left battery covers  $\bigcirc$ .
- Remove the turntable cover 2.
- Remove the rear chassis cover.
- Remove the electrical cover  $\bigcirc$ .
- Open the left-hand turntable cover.
- Check that all the electrical connections are properly tightened:
  - Batteries.
  - Battery cut-off 4.
  - Hydraulic pump motor.
  - Voltage controller <sup>5</sup>.
  - Power relays module 6.
  - Wheel motors 7.
- Put the electrical cover  $\bigcirc$  back in place.
- Refit the rear chassis cover.
- Put the turntable cover 2 back in place.
- Put the battery covers 1 back in place.





## **GREASE**

NOTE: The left turntable cover is open.

- Lubricate the teeth of the crown gear <sup>①</sup>, *◄* LUBRICANTS.
- Switch the platform on.
- Turn the turntable a full turn to spread the lubricant.
- Put the turntable in neutral position.
- Turn the platform off.
- Close the left-hand turntable cover.

## Teeth on crown gear



## A IMPORTANT A

#### Always secure the raised arms with a suitable lifting device.

- Switch the platform on.
- Perform the appropriate main arm, secondary arm, jib and basket tilt movements to access the various lubricators. Secure the raised arms with a suitable lifting device.
- Remove the caps of the lubrication connectors.
- Inject lubricant into each lubrication connector, <</li>
- Refit the lubrication connector caps.
- Tilt the basket up or down until the basket floor is horizontal. Ensure that the basket cannot hit the floor.
- Fully lower the main arm, the secondary arm and the jib.



### Illustration = second version.

- NOTE: It is not possible to reset the maintenance warning if it is not displayed. The warning may need to be reset even if no maintenance has been performed, ≪ 2-DESCRIPTION: DESCRIPTION OF THE MULTI-FUNCTION DISPLAY: MAINTENANCE WARNING.
- NOTE: The platform should be in transport position. The platform must not be on a steep slope.
- Switch the platform on.
- Wait for the audible alarm to sound once.
- NOTE: The procedure described below must be performed within 3 seconds of the audible alarm sounding. Otherwise, repeat the procedure from the beginning.
- Press and hold down the activation button  $\bigcirc$ .
- Push and hold the switches 2 and 3 down until the maintenance/fault alarm light 4 goes out, the information "Maintenance" A should no longer be displayed.
- Turn the platform off.





# **○** ② 100H - PERIODIC MAINTENANCE - EVERY 100 HOURS OF SERVICE OR 6 MONTHS

## ALSO PERFORM THE DAILY MAINTENANCE AND THE PERIODIC MAINTENANCE AT 50 HOURS OF SERVICE.

**CHECK** 

Basket nut tightening

**A IMPORTANT A** Failure to follow this instruction may result in the basket falling.

- Check the tightening torques of all the fixing screws (1) on the basket, left and right-hand sides (quantity=5):
  69 N.m ± 6.5 N.m.
- Check the tightening torques of all the fixing screws 2 on the basket, left and right-hand sides (quantity=2):
  - 90 N.m ± 9 N.m.



## CHECK

## Tightening of the fixing screws on the jib rotation cylinder (150 AETJ 3D (150 AETJC 3D))



- Failure to follow this instruction may result in the basket falling.
  Check all the fixing screw tightening torques 1:
  80 N.m ± 8 N.m.
- Check the tightening torque of the pin 2:
  80 N.m ± 8 N.m



## **Telescope setting**

## A IMPORTANT A

- Check all the wheel nut tightening torques 1:
   69 N.m ± 6.5 N.m
- Raise the jib slightly.
- Extend the telescope for 1 second.
- Check the clearances between the pads and the telescope:
  - (upper pads 2) must be between 0.5 mm and 1 mm.

• (side pads 3) must be between 0.25 mm and 0.5 mm on either side.

- Fully extend the telescope.
- Check the clearances A and B again.
- Fully retract the telescope.
- Lower the jib completely.
- Take off the cover 4.
- Raise the main arm slightly.
- Place several wooden pallets under the basket.
- Slowly lower the main arm until the pads (5) are in contact with the main arm.
- Check the clearances between the pads and the main arm:
  - $\bigcirc$  (upper pads  $\bigcirc$ ) must be between 0.5 mm and 1 mm.
  - (side pads 7) must be between 0.25 mm and 0.5 mm on either side.
- Raise the main arm slightly.
- Remove the wooden pallets.
- Fully lower the main arm.
- Turn the platform off.
- Put the cover  $\overset{\bullet}{4}$  back in place.









## CHECK

## Tightening of the fixing screws on the turntable motor

#### A IMPORTANT A

Failure to follow this instruction may result in involuntary movement of the turntable.

- Remove the turntable cover (1).
- Open the left-hand turntable cover.
- Check all the fixing screw tightening torques 2:
  80 N.m ± 8 N.m.
- Put the turntable cover 1 back in place.





## **CHECK**

## Counterweight fixing screw tightening

#### **A IMPORTANT A** Failure to follow this instruction may result in the platform tipping over.

NOTE: The left turntable cover is open. The turntable cover is removed.

- Open the right-hand turntable cover.
- Check the tightening torques for all the counterweight fixing screws  $\bigcirc$  , left and right-hand sides:
  - 300 N.m ± 30 N.m.
- Close the left and right-hand turntable covers.





## CHECK

Tightening of the battery fixing screws

## A IMPORTANT A

Failure to follow this instruction may result in the platform tipping over.

NOTE: The turntable cover is removed.

- Check the tightening torques for all the battery fixing screws <sup>(1)</sup>, left and righthand sides:
  - 69 N.m ± 7 N.m.



A IMPORTANT A

## Refer to the platform repair manual if the overload alarm is not correctly calibrated.

NOTE: The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

NOTE: The turntable cover is removed.

- Switch the platform on.

- Place a uniformly distributed 220 kg weight in the basket.

Result:

• The audible alarm should sound continuously.

• The overload alarm indicator lamp should flash.

- Try to activate all the functions one by one using the ground level control panel.

Result:

• It should not be possible to activate any of the functions.

- Remove 20 kg to obtain a load of 200 kg in the basket.

Result:

• The audible alarm should stop.

• The overload alarm indicator lamp should go out.

- Try to activate all the functions one by one using the ground level control panel.

Result:

• It should be possible to activate all the functions.

- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Lower the jib completely.
- Get into the basket.

Result:

• The audible alarm should sound continuously.

• The overload/fault alarm indicator lamp should flash.

- Try to activate all the functions one by one using the control panel in the basket.

Result:

• It should not be possible to activate any of the functions.

- Get out of the basket.

Result:

- The audible alarm should stop.
- The overload/fault alarm indicator lamp should go out.

- Remove the whole load from the basket.

### **BRAKING DISTANCE ON A LEVEL SURFACE**

NOTE: The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered.

NOTE: The turntable cover is removed.

- Select a level surface for the following test.
- Place a uniformly distributed load in the basket = 200 kg less your own weight.
- Get into the basket.
- Drive the platform forward until the maximum speed is reached.
- Release the control handle to brake the platform.

Result:

- $\bullet$  The braking distance should be: 1000 mm  $\pm 200$  mm.
- Raise the jib for 2 seconds and extend the telescope for 2 seconds.
- Drive the platform forward until the maximum speed is reached:

NOTE: The driving speed must be WORKING POSITION speed.

- Release the control handle to brake the platform.

Result:

• The braking distance should be: 70 mm ±30 mm.

- Fully retract the telescope and lower the jib completely.

#### **BRAKING ON A SLOPE**

NOTE: The platform is switched on. The platform is in transport position. The turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) are in neutral position. The jib is completely lowered. The previous test load is in the basket.

NOTE: The turntable cover is removed.

- Select a slope of 20% (11.3°) for the following test.
- Raise the jib to the horizontal position.
- Drive the platform forwards slowly on the slope, facing it, with the basket at the bottom of the slope.
- Release the control handle to brake the platform on the slope.

#### Result:

- The platform should be immobilized on the slope for at least 1 minute.
- Drive the platform off the slope.
- Lower the jib completely.
- Get out of the basket.
- Remove the load from the basket.



## CHECK

## Turntable motor oil level

NOTE: The turntable cover is removed.

- Open the left-hand turntable cover.
- Check for leaks.
- Remove the filler plug 🕛.
- Clean the dipstick on the filler cap with a clean cloth and put it back in place.
- Remove the filler cap. The level is correct when the oil is between the 2  $^{(A)}$  and
- <sup>B</sup> notches.
- If the level is low:
  - Add oil until the correct level is reached, *◄* LUBRICANTS.
  - Refit the filler cap.
- If the level is correct:
  - Refit the filler cap.





## **CHECK**

## Hydraulic hoses

#### A IMPORTANT A Always secure the raised arms using a suitable lifting device. Always use a piece of paper or cardboard to check there are no hydraulic oil leaks. Replace any damaged hydraulic hoses.

NOTE: The left turntable cover is open. The turntable cover is removed.

- Switch the platform on.
- Raise the secondary arm as far as possible. Secure the raised arms using a lifting device.
- Turn the platform off.
- Open the right-hand turntable cover.
- Remove the front and rear chassis covers.
- Remove the electrical cover <sup>(1)</sup>.
- Check the condition of the hydraulic hoses and that there are no leaks.
- Check the wheel reduction gears for leaks.
- Put the electrical cover 1 back in place.
- Refit the front and rear chassis covers.
- Close the left and right-hand turntable covers.
- Switch the platform on.
- Fully lower the secondary arm.
- Turn the platform off.
- Check the condition of the other hydraulic hoses and check that there are no leaks.



## LUBRICATE

#### Telescope

#### A IMPORTANT A

Lubricate the telescope more often when the platform is used in a dusty environment.

NOTE: The turntable cover is removed.

- Switch the platform on.
- Raise the jib slightly.
- Fully extend the telescope.
- Check the sliding surfaces (A) of the pads:
- Surfaces must be smooth and free from corrosion.
- Lubricate the telescope if necessary,  $\lhd$  LUBRICANTS.

NOTE: Extend and retract the telescope several times to spread the lubricant. Remove the excess with a clean cloth.

- Fully retract the telescope.
- Lower the jib completely.
- Turn the platform off.

GREASE

Crown gear bearings

NOTE: The turntable cover is removed.

- Remove the 2 caps of the lubrication connectors  $\bigcirc$  for the crown gear.
- Inject the lubricant into the lubrication connectors, *◄* LUBRICANTS.
- Switch the platform on.
- Turn the turntable 90° to the left or the right and inject lubricant again.
- Refit the lubrication connector caps.
- Turn the turntable a full turn to spread the lubricant.
- Put the turntable in neutral position.
- Put the turntable cover  $^{(2)}$  back in place.
- Turn the platform off.





Maintenance warning

RESET

◄ 50H - PERIODIC MAINTENANCE - EVERY 50 HOURS OF SERVICE OR 3 MONTHS.



# CODE CONTRACTION OF SERVICE OR 1 YEAR

#### ALSO PERFORM THE DAILY SERVICE AND THE PERIODIC SERVICES AT 50 HOURS AND 100 HOURS OF SERVICE.

#### Tightening of the fixing screws for the crown gear **CHECK** A IMPORTANT A Failure to follow this instruction may result in the platform tipping over. Always secure the raised arms using a suitable lifting device. - Switch the platform on. - Raise the secondary arm as far as possible. Secure the raised arms using a lifting device. - Turn the platform off. - Remove the turntable cover $\bigcirc$ 1. - Remove the front chassis cover. - Remove the rear chassis cover. - Remove the electrical cover 2. - Remove the batteries, left and right-hand sides, *◄* OCCASIONAL MAINTENANCE. - Open the left-hand turntable cover. - Open the right-hand turntable cover. - Check all the fixing screw tightening torques 3: • 215 N.m ± 21 N.m. - Check the tightening torques of all the fixing screws 4 (4 at the front, 4 at the rear, 3 on the left and 3 on the right): • 215 N.m ± 21 N.m. - Close the right-hand turntable cover. - Close the left-hand turntable cover. - Refit the batteries, *◄* OCCASIONAL MAINTENANCE.

- Put the electrical cover 2 back in place.

- Put the turntable cover <sup>1</sup> back in place.

Refit the rear chassis cover.Refit the front chassis cover.

Switch the platform on.Fully lower the secondary arm.

- Turn the platform off.

647536 (26/11/2020) 150 AETJ/AETJ3D - 150 AETJ C/AETJ C 3D - 170 AETJI

## Wheel reduction gear oil

#### A IMPORTANT A

#### It is recommended that the oil is slightly warm before being changed.

NOTE: Drain and fill the wheel reduction gears one by one.

### **DRAIN THE OIL**

- Remove the rear wheels, << OCCASIONAL MAINTENANCE.
- Release the brakes, *◄* OCCASIONAL MAINTENANCE.
- Turn the wheel reduction gear to place the plug (1) at the bottom and the plug (1) on the right.
- Place a drain pan under the plug  $^{(1)}$ .
- Remove the 2 plugs.
- Wait until the wheel reduction gear is completely empty.

## FILL THE WHEEL REDUCTION GEARS

- Turn the wheel reduction gear to place the  ${}^{\textcircled{B}}$  hole at the top and the A hole on the right.
- Clean around the holes with a clean cloth.
- Fill the wheel reduction gear with new oil,  $\triangleleft$  LUBRICANTS. The level is correct when the oil reaches the rim of the filling hole  $\textcircled{\texttt{A}}$ .
- Refit the 2 plugs:
  - Tightening torque =  $20 \text{ N.m} \pm 2 \text{ N.m}$ .
- Reapply the brakes,  $\triangleleft$  OCCASIONAL MAINTENANCE.
- Refit the rear wheels, *◄* OCCASIONAL MAINTENANCE.





## **REPLACE**

Turntable motor oil

## A IMPORTANT A

It is recommended that the oil is slightly warm before being changed.

## **DRAIN THE OIL**

- Open the left-hand turntable cover.
- Place a drain pan under the drain plug (1).
- Remove the drain plug and the filler plug  $\bigcirc$ .
- Wait until the crankcase is completely empty.

#### **FILL THE TURNTABLE MOTOR**

- Clean around the drain hole with a clean cloth.
- Refit the drain plug.
- Fill the turntable motor with new oil,  $\triangleleft$  LUBRICANTS.
- Clean the dipstick on the filler cap with a clean cloth and put it back in place.
- Remove the filler cap. The level is correct when the oil is between the 2 (A) and B notches.
- If the level is low:
  - Add oil until the correct level is reached, *◄* LUBRICANTS.
- Refit the filler cap.
- If the level is correct:
  - Refit the filler cap.





REPLACE
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Hydraulic oil Hydraulic return filter cartridge

**Suction strainer** 

## A IMPORTANT A

It is recommended that the oil is slightly warm before being changed. Clean the oil can before adding oil to the hydraulic oil tank. Use a clean funnel to add oil to the hydraulic oil tank.

NOTE: The left turntable cover is open.

## **FIRST VERSION**

## **DRAIN THE OIL**

- Clean the outside of the tank  $\bigcirc$  with a clean cloth.
- Clean the outside of the hydrostatic return filter assembly <sup>2</sup> with a clean cloth.
- Locate the drain plug 3 and put a drain pan underneath.
- Remove the drain plug and the tank plug 4.
- Wait until the tank is completely empty.

## REPLACE THE HYDRAULIC RETURN FILTER CARTRIDGE 6

- Remove the cover of the hydraulic return filter (5).
- Remove the used hydraulic return filter cartridge.
- Put the new hydraulic return filter cartridge in place,  $\sphericalangle$  FILTER CARTRIDGES.
- Put the hydraulic return filter cover back in place.

## CLEAN THE SUCTION STRAINER

- Locate the hydraulic hose  $\bigodot$  and put a drain pan underneath.
- Remove the hydraulic hose, the union fitting and the suction strainer (8).
- Clean the suction strainer with compressed air, from the inside out:
   Maximum pressure = 3 bars. Minimum distance = 30 mm.
- Check its condition. Replace it if necessary, *◄* FILTER CARTRIDGES.
- Refit the suction strainer, the union fitting and the hydraulic hose.

## FILL THE HYDRAULIC OIL TANK

- Refit the drain plug 🗿.
- Fill the tank with new hydraulic oil,  $\triangleleft$  LUBRICANTS. The level is correct when the oil reaches the red dot on the level indicator 9.
- Refit the tank cap  $\bigcirc$ .
- Switch the platform on. Activate the functions for 10 minutes.
- Check for leaks.
- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Lower the jib completely.
- Check the hydraulic oil level. Top up if necessary.
- Close the left-hand turntable cover.
- Turn the platform off.









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### **SECOND VERSION**

#### **DRAIN THE OIL**

- Clean the outside of the tank (1) with a clean cloth.
- Clean the outside of the hydrostatic return filter assembly 2 with a clean cloth.
- Locate the drain plug  $\bigcirc$  and put a drain pan underneath.
- Remove the drain plug and the tank plug 4.
- Wait until the tank is completely empty.

## REPLACE THE HYDRAULIC RETURN FILTER CARTRIDGE 6

- Remove the cover of the hydraulic return filter <sup>(5)</sup>.
- Remove the used hydraulic return filter cartridge.
- Put the new hydraulic return filter cartridge in place, *◄* FILTER CARTRIDGES.
- Put the hydraulic return filter cover back in place.

## **CLEAN THE SUCTION STRAINER**

- Locate the hydraulic hose  $\bigcirc$  and put a drain pan underneath.
- Remove the hydraulic hose, the union fitting and the suction strainer  $^{(8)}$ .
- Clean the suction strainer with compressed air, from the inside out:
- Maximum pressure = 3 bars. Minimum distance = 30 mm.
- Check its condition. Replace it if necessary, *◄* FILTER CARTRIDGES.
- Refit the suction strainer, the union fitting and the hydraulic hose.

## **FILL THE HYDRAULIC OIL TANK**

- Refit the drain plug (3).
- Fill the tank with new hydraulic oil, IUBRICANTS. The level is correct when the oil is between the MINI and MAXI marks.
- Refit the tank cap 4.
- Switch the platform on. Activate the functions for 10 minutes.
- Check for leaks.
- Place the platform in transport position. Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position. Lower the jib completely.
- Check the hydraulic oil level. Top up if necessary.
- Close the left-hand turntable cover.
- Turn the platform off.







Clearance of crown gear *	CHECK
Condition of cylinders *	CHECK
Condition of electric wiring *	CHECK
Maintenance warning	RESET

RESET

✓ 50H - PERIODIC MAINTENANCE - EVERY 50 HOURS OF SERVICE OR 3 MONTHS

\* Consult your dealer.

## OCCASIONAL MAINTENANCE

#### REPLACE

## A IMPORTANT A

42- DESCRIPTION: SPECIFICATIONS and the applicable stickers for information about the total weight of the platform and wheel load.

When lifting the platform with a hydraulic or mechanical jack:

Always use a suitable jack for lifting the platform.

Make sure that the 2 wheels on the opposite side to the lift are chocked.

Position the jack near the wheel to be removed.

Always use suitable jack stands to secure the raised platform.

### A IMPORTANT A

Weight of a wheel (600X190) = 53 kg. Weight of a wheel (27X10X12) = 95 kg.

**Batteries** 

- Loosen the wheel nuts slightly.
- Raise the platform.
- Remove the wheel nuts and the wheel.
- Put the new wheel in place.
- Refit the wheel nuts and tighten them slightly with a spanner.
- Lower the platform to the ground.
- Tighten the wheel nuts, *◄* WEEKLY MAINTENANCE.

#### REPLACE

### A IMPORTANT A

Always use an appropriate pallet truck or lift truck to remove and replace batteries. Keep the batteries flat when removing and replacing them. Weight of a battery = 265 kg.

Ensure that the battery terminals cannot come into contact with metal objects.

- Remove the right and left battery covers (1).
- Disconnect the right-hand battery:
  - Negative (-) terminal first.
  - Positive (+) terminal.
- Disconnect the left-hand battery:
  - Negative (-) terminal first.
  - Positive (+) terminal.
- Remove the batteries.
- Put the new batteries in place.
- Connect the left-hand battery:
  - Positive (+) terminal first.
  - Negative (-) terminal.
- Disconnect the right-hand battery:
  - Positive (+) terminal first.
  - Negative (-) terminal.
- Put the battery covers <sup>1</sup> back in place.



Wheels

## **POWER FUSES**

- Remove the rear chassis cover.
- Remove the electrical cover  $\bigcirc$ .
- Locate the power relay module  $^{(2)}$  and the voltage controller  $^{(3)}$ .
- Replace the appropriate fuse:

<mark>(F1</mark> )	Main electrical power supply	Fuse 325 A
<b>F4</b>	Electric pump	Fuse 100 A

- Put the electrical cover 1 back in place.
- Refit the rear chassis cover.













## **GROUND CONTROL PANEL FUSES**

- Open the right-hand turntable cover.
- Unlock and open the ground level control panel 4.
- Replace the appropriate fuse:

<mark>F2</mark>	Battery charger	Fuse 15 A
(F3)	Control power supply	Fuse 5 A
<b>F4</b>	Anti-theft predisposition (OPTION)	Fuse 1 A

- Close the ground control panel.
- Close the right-hand turntable cover.

Platform

## A IMPORTANT A

The surface of the departure/arrival zone must be closed, level and even.

If the departure/arrival zone is a flatbed:

- The flatbed must be parked on a level, firm surface.

- The wheels of the flatbed must be chocked.

Make sure that the lifting beam and the lifting slings are solid enough to take the weight of the platform.

Make sure that the lifting capacity of the crane is sufficient to take the weight of the platform.

The turntable must be locked before lifting the platform, < 2 - DESCRIPTION: SAFETY COMPONENTS: TURNTABLE LOCKING PIN.

Covers must be closed and locked (if applicable) while the platform is being lifted.



- Mark out a wide safety area around the platform.
- Switch the platform on.
- Place the platform in transport position, <>12 DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Put the turntable, the basket and the jib (150 AETJ 3D (150 AETJC 3D)) in neutral position, < 2 DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Lower the jib completely.
- Lock the turntable, <- 2 DESCRIPTION: SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- Turn the platform off. Remove the key.
- Attach a lifting beam to the crane lifting hook.
- Attach lifting slings to the lifting beam and the 4 lifting points on the platform, < 2 DESCRIPTION: STICKERS: LIFTING POINT.
- Slowly lift the crane's lifting hook until the lifting slings are slightly taut.
- If necessary, adjust the lifting slings to prevent damage and keep the platform level.
- Ensure that there is nobody in the safety zone.
- Lift the platform slowly and move it to the arrival zone.
- Slowly lower the platform until the 4 wheels are in contact with the receiving surface.
- Lower the crane's lifting hook until the lifting slings are no longer taut.
- Detach the lifting slings.



- Mark out a wide safety area around the platform.
- Switch the platform on.
- Place the platform in transport position, <>12 DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Put the turntable and basket in neutral position, < 2 DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION.
- Lower the jib completely.
- Lock the turntable, <1 2 DESCRIPTION: SAFETY COMPONENTS: TURNTABLE LOCKING PIN.
- Turn the platform off. Remove the key.
- Attach a lifting beam to the crane lifting hook.
- Attach lifting slings to the lifting beam and the 4 lifting points on the platform, < 2 DESCRIPTION: STICKERS: LIFTING POINT.
- Slowly lift the crane's lifting hook until the lifting slings are slightly taut.
- If necessary, adjust the lifting slings to prevent damage and keep the platform level.
- Ensure that there is nobody in the safety zone.
- Lift the platform slowly and move it to the arrival zone.
- Slowly lower the platform until the 4 wheels are in contact with the receiving surface.
- Lower the crane's lifting hook until the lifting slings are no longer taut.
- Detach the lifting slings.

Platform

## A IMPORTANT A

The platform must be winched or towed in transport position. Winching the platform in working position is prohibited,

#### 2 - DESCRIPTION: OPERATING THE PLATFORM: TRANSPORT/WORKING POSITION. Always use an appropriate traction bar to tow the platform.

Always use a suitable winch for winching the platform.

Before putting the platform into freewheel:

- The platform must be on a level surface.

- The wheels must be chocked.

When towing or winching the platform:

- The basket must be empty.

- Do not exceed 5 km/h

## I - FREEWHEEL AND TOW/WINCH THE PLATFORM

- Attach the traction bar or the winch to the anchoring points on the platform chassis, 4 2 - DESCRIPTION: STICKERS: ANCHORING POINT.
- Switch the platform on.
- Locate the screws (A) on the rear wheels, left and right-hand sides.
- Undo the screws by approximately 22 mm.
- Make sure the path is free of any obstruction.
- Remove the chocks from the wheels.
- Winch or pull the platform slowly.
- Chock the wheels when the platform is in the desired position.

## **II - RESET THE BRAKES**

## A IMPORTANT A

It may be necessary to turn the wheels slightly when tightening the screws (A) to reset the brakes.

- Screw by hand and tighten the screws A:
- Tightening torque = 150 N.m.
- Detach the traction bar or the winch.
- Remove the chocks from the wheels.
- Turn the platform off.





#### **TRANSPORT**

◄ 2 - DESCRIPTION: TRANSPORTING THE PLATFORM.

Platform