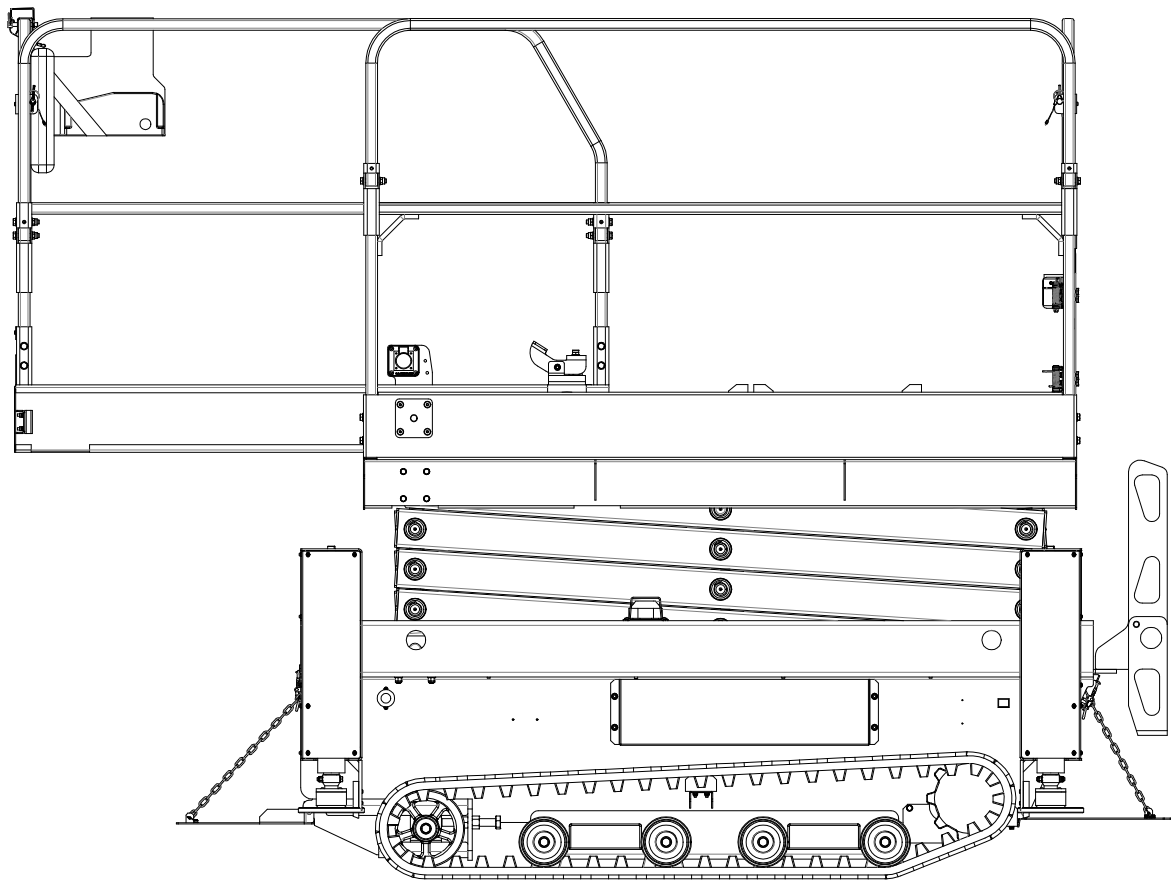




## **XE Crawler Type Scissor Lift**

### **Operator Manual**

Applicable for XE80CT-OR (With outriggers)



**DANGER -** DO NOT DRIVE MACHINE WHILE PLATFORM IS RAISED, UNLESS ON SOLID LEVEL GROUND (e.g. level concrete slab)  
Failure to comply could result in serious INJURY or DEATH.  
Must read operators manual prior to use.

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Revision record

Version No.	Creation date	Creator	Checker
A2.0.1	July, 2024		

**Mantall Heavy Industry CO., LTD is a professional enterprise of manufacturing aerial work platforms.**

**Mantall has Sales, R&D, Technology, Production, QC, Purchase, After-sales Departments, etc.**

**Our company introduced a complete set of CNC processing production equipment and painting equipment, it has advanced equipments including Plasma cutting machine, CNC flame cutting machine, CNC bending machine, CNC shearing machine, CNC drilling and milling machine, Laser machine, Welding robot, etc.**

**Strict quality control and perfect testing methods ensure the reliability and safety of the whole machine.**

**Mantall Heavy Industry CO., LTD insisted on "Rigorous, pragmatic, pioneering and innovative" as business philosophy, adhere to innovation as the basis, products as the leading, and market as the guide, take the road of "high technology, high starting point, high quality", achieve ambition and beyond self.**

**Our products are widely used in Construction, Electric power, Aviation, Military industry, Ship, Property, Port and other fields.**

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## Important

Read, understand and obey these safety rules and operating instructions before operating this machine. Only trained and authorized personnel shall be permitted to operate this machine. This manual should be considered a permanent part of your machine and should remain with the machine at all times.

Note: Company products are constantly improving, unless there is any major change, this manual will not be changed. If any discrepancy, the material object shall prevail.

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## Owner, User and Operator:

Mantall thanks your choosing and using our products. We design and produce this product is to help our operators work more safety and efficiently. We need you as an operator to strictly comply with the following requirements, which will provide security for your work.

1. Comply with user rules, workplace rules and relevant national laws and regulations.
2. Read, understand and follow the instructions in this manual and other manuals attached to the machine.
3. Perform good safety practices as usual.
4. Only trained/certified operators or under the guidance of experienced supervisors can operate the machines

If there is anything ambiguous in this manual or you think it should be added, please contact us.

## Contact information:

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## Danger

Failure to obey the instructions and safety rules in this manual will result in death or serious injury

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### Do not operate unless:

- ☒ You have mastered the code of safety operation through this operation manual.

1 Avoid hazardous situations.

Know and understand the safety rules before going on to the next section.

2 Always perform a pre operation inspection

3 Always perform function tests prior to use

4 Inspect the work place

5 Only use the machine as it was intended

- ☐ You read, understand and obey:

Manufacturer's instructions and safety rules-safety and operator's manuals and machine decals

- ☐ You read, understand and obey:

employer's safety rules and worksite regulations

- ☐ You read, understand and obey applicable governmental regulations

- ☐ You are properly trained to safely operate the machine.

## Dangerous classification

Mantall products symbol、mark and symbolic text meaning are as below:



Safety warning mark--Used to warn of potential personal injury to avoid possible injury or death.



Red--Alert the danger.



If not avoided, it can lead to death or serious injury.



Orange--Alert the danger.If not avoided, it can lead to death or serious injury.



Yellow--Alert the danger.If not avoided,it may lead to minor or moderate damage to life.

## Design purpose

The purpose of this machine is limited to lifting people and their tools and materials into the air workplaces.

## Security mark maintenance

Replace any lost or damaged safety signs so that operators can always remember safety.

Use neutral soap and clean water to clean the safety mark.

Do not use solvent - based detergents, as it may damage safety mark materials.

## Electrocution Hazards

This machine is not electrically insulated and will not provide protection from contact with or proximity to electrical current.



Maintain safe distances from electrical power lines and apparatus in accordance with applicable governmental regulations and the following chart.

Voltage                      Min safe approach distance

Phase to Phase	Feet	Meter
0-300	Avoid Contact	
300V-50KV	10	3. 05
50KV-200KV	15	4. 60
200KV-350KV	20	6. 10
350KV-500KV	25	7. 62
500KV-750KV	35	10. 67
750KV-1000KV	45	1372

## Safety Rules

Allow for platform movement, electrical line sway or sag and beware of strong or gusty winds.

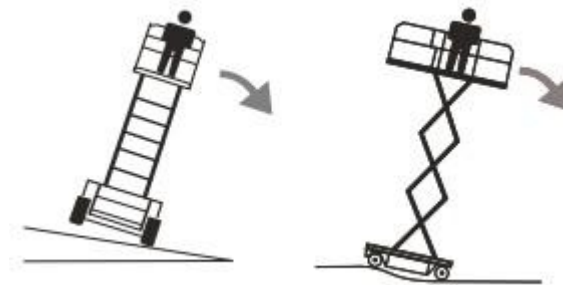
Keep away from the machine if it contacts energized power lines. Personnel on the ground or in the platform must not touch or operate the machine until energized power lines are shut off.

Do not operate the machine during lightning or storms.

Do not use the machine as a ground for welding

## Safety work area

Do not raise the platform unless the machine is on a firm, level surface.



Do not depend on the tilt alarm as a level indicator.

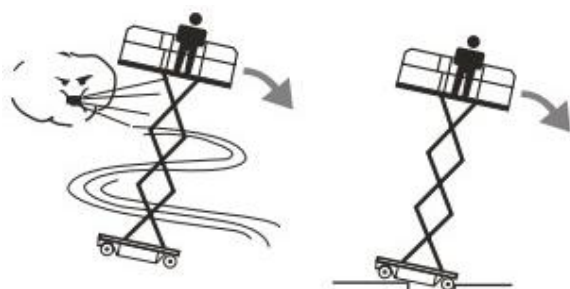
The tilt alarm sounds on the chassis only when the machine is on a slope.

If tilt alarm sounds:

Lower the platform. Move the machine to a firm, level surface. If the tilt alarm sounds when the platform is raised, use extreme caution to lower platform.

Outdoor machines cannot raise the platform when wind speed may be greater than 12.5m/s. If the wind speed exceeds 12.5m/s after rising, the platform should be lowered immediately and the machine cannot continue to operate.

Do not operate the machine in strong or gusty winds. Do not increase the surface area of the platform or the load. Increasing the area exposed to the wind will decrease machine stability



## Safety Rules

Do not drive the machine on or near uneven terrain, unstable surfaces or other hazardous conditions with the platform raised.

Use extreme care and slow speeds while driving the machine in stowed position across uneven terrain, debris, unstable or slippery surfaces and near holes and drop-offs.

Do not use the platform controls to free a platform that is caught, snagged or otherwise prevented from normal motion by an adjacent structure. All personnel must be removed from the platform before attempting to free the platform using the ground controls.

Do not push off or pull toward any object outside of the platform.



Don't use the machine as a crane.

Do not place or tie heavy objects on any part of the machine.

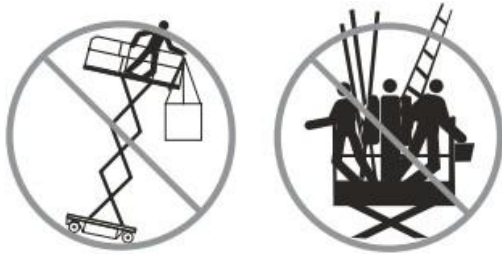
Do not use platforms to push machines or other objects.

Don't tie the platform to nearby objects

Don't put the platform together with the objects nearby.

Do not place the load outside the platform fence.

## Safety Rules



Do not modify or alter an aerial work platform. Mounting attachments for holding tools or other materials onto the platform, toeboards or guard rail system can increase the weight in the platform. and the surface area of the platform or the load.

Do not alter or disable machine components that in any way affect safety and stability.

Do not replace items critical to machine stability with items of different weight or specification.

Do not place ladders or scaffolds in platform or against any part of this machine.

Do not use machine on a moving or mobile surface or vehicle.

Be sure all tires are in good condition , castle nuts are properly tightened and cotter pins are properly installed.

Do not operate the machine when the battery box or hydraulic door is open.

original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must meet the standard (Customer optional)

T-105      28kg

T-125      30kg

T-1275    37kg



Do not enter or leave the platform unless the machine is in a closed state.



## Fall Hazards

Occupants should wear a safety belt or harness and comply with applicable governmental regulations. Attach lanyard to anchor provided in platform.

Do not sit, stand or climb on the platform guard rails.

Maintain a firm footing on the platform floor at all times.



Do not climb down from the platform when raised

Keep the platform floor clear of debris.

Do not operate the machine unless the guard rails are properly installed and the entry is secured for operation.

## Safety Rules

### Collision Hazards



Be aware of limited sight distance and blind spots when driving or operating.

Be aware of extended platform position when moving the machine.

Check work area for overhead obstructions or other possible hazards.



Be aware of crushing hazard when grasping the platform guard rail.

It is recommended that operators wear an approved hard hat when operating the machine.

Observe and use color-coded direction arrows on the platform controls and platform decal plate for drive and steer functions.

## Safety Rules

Do not operate a machine in the path of any crane or moving overhead machinery unless the controls of the crane have been locked out and / or precautions have been taken to prevent any potential collision.

When operating the machine, do not drive dangerously or operate brutally.

Do not lower the platform unless the area below is clear of personnel and obstructions.



Machine must be on level surface or secured before releasing brakes.

Limit travel speed according to condition of ground surface, congestion, slope, location of personnel and any other factors which may cause collision.

## Crushing Hazards

Keep hands and limbs out of scissors.

Use common sense and planning when operating the machine with the controller from the ground.

Maintain safe distances between the operator, the machine and fixed objects.

## **Component Damage Hazard**

Do not use any battery charger larger than 24V to charge the battery.  
Do not use machine as a ground for welding.

## **Explosion and Fire Hazard**

Do not operate the machine or charge the battery in hazardous locations or locations where potentially flammable or explosive gases or particles may be present.

## **Damaged Machine Hazards**

Do not use a damaged or malfunctioning machine.  
Conduct a thorough pre-operation inspection of the machine and test all functions before each work shift. Immediately tag and remove from service a damaged or malfunctioning machine.  
Be sure all maintenance has been performed as specified in this manual.

Be sure all decals are in place and legible

Ensure this manual is complete, legible and in the storage container located on the platform

## **Safety Rules**

### **Bodily Injury Hazard**

Do not operate the machine with a hydraulic oil or air leak. An air leak or hydraulic leak can penetrate and/or burn skin.

Incorrect contact with any component under the cover will result in a serious injury. Only trained maintenance personnel can repair and inspect the compartments, advice: only during pre-operation inspection, the operator performs maintenance. All compartments must remain closed and locked during operation.

## Safety Rules

### Battery Safety

#### Burn Hazards

Batteries contain acid. Always wear protective clothing and eyewear when working with batteries.



Avoid spilling or contacting battery acid. Neutralize battery acid spills with baking soda and water.

Do not expose the batteries or the charger to water and/or rain during charging.

#### Explosion Hazards



Keep sparks, flames and lighted tobacco away from batteries. Batteries emit an explosive gas.

The battery tray should remain open during the entire charging cycle.

Do not contact the battery terminals or the cable clamps with tools that may cause sparks.

## Component Damage Hazard

Do not use any battery charger greater than 24V to charge the batteries.

### Electrocution Hazards



Connect the battery charger to a grounded, AC 3-wire electrical outlet only.

Inspect daily for damaged cord, cables and wires. Replace damaged items before operating.

Avoid electrical shock from contact with battery terminals. Remove all rings watches and other jewelry.

### Tipover Hazard

Do not use batteries that weigh less than the original equipment. Batteries are used as counterweight and are critical to machine stability. Each battery must meet the standard (Customer optional)

T-105 28kg

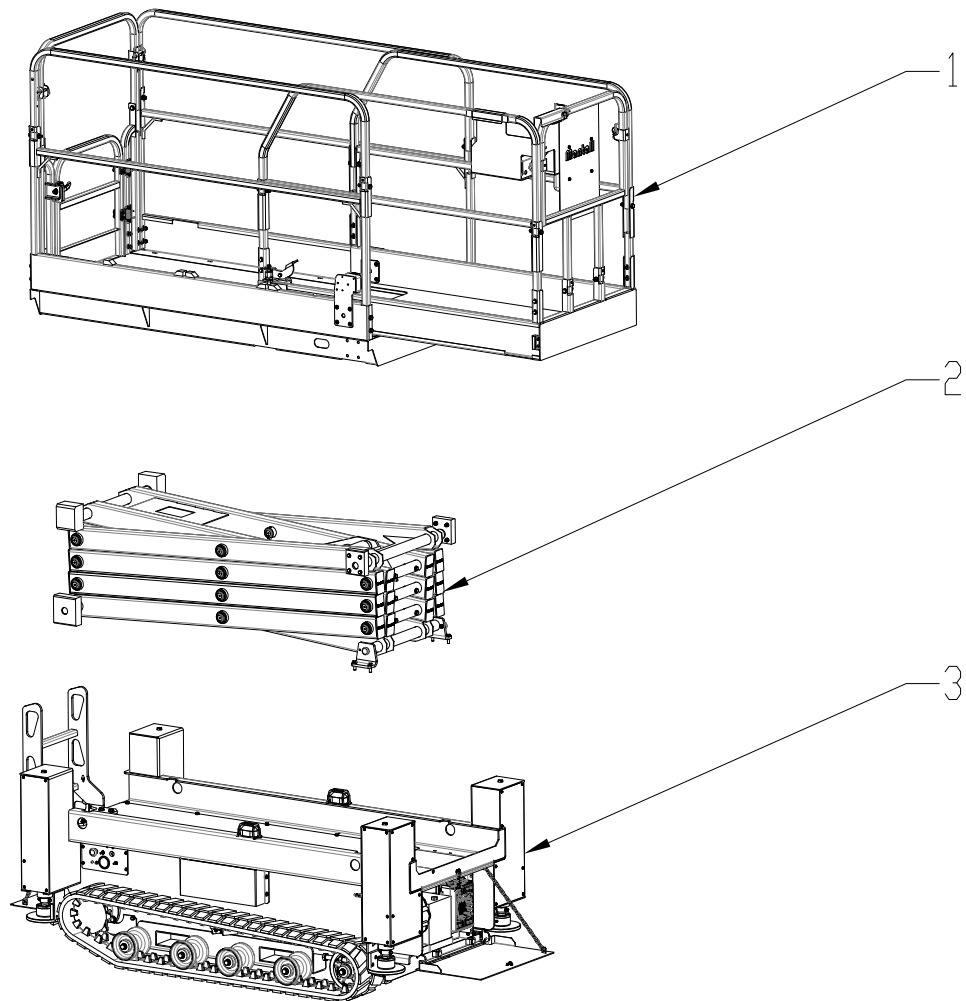
T-125 30kg

T-1275 37kg

### Lifting Hazard

Use the appropriate number of people and proper lifting techniques when lifting batteries.

## Graphic parts

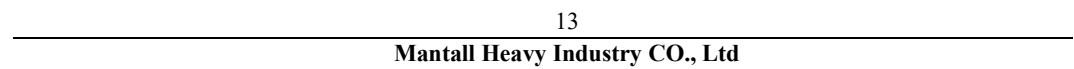


- 1 Platform
- 2 Boom
- 3 Chassis

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**Mantall Heavy Industry CO., Ltd**



1 Single axis proportional control handle & Steering function:

Press and hold the Enable switch to enable functions. Press the button at the top of the handle in the direction indicated by the green arrow on the control panel, and the machine will turn in the direction indicated by the green arrow. Press the button at the top of the handle in the direction indicated by the yellow arrow on the control panel, and the machine will turn in the direction indicated by the yellow arrow.

2 Chassis running switch

Press this button to activate the chassis drive function, press the enable switch on the platform control handle. Move the control handle in the direction indicated by the green arrow, and the machine will move in the direction indicated by the green arrow. Move the control handle in the direction indicated by the yellow arrow, and the machine will move in the direction indicated by the yellow arrow.

3 Speed selector switch with indicator light

Indicator light is off: Fast speed

Indicator light is on: Slow speed

4 Red emergency stop switch

Push the emergency switch to "Off" position, can stop all functions. Push the emergency switch to "On" position, can operate the machine.

5 Power indicator light

6 Scissor arm lifting switch

Press this button to activate the lifting function, press the function enable switch on the platform control handle. Move the control

handle in the direction indicated by the green arrow and the platform will rise. Move the control handle in the direction indicated by the yellow arrow and the platform will down. When the platform drops, the alarm will sound.

7 Horn button

Press the horn button, the horn will ring. Release the horn button, the horn will stop ring.

8 Leg leveling switches

LOWERING OUTRIGGERS

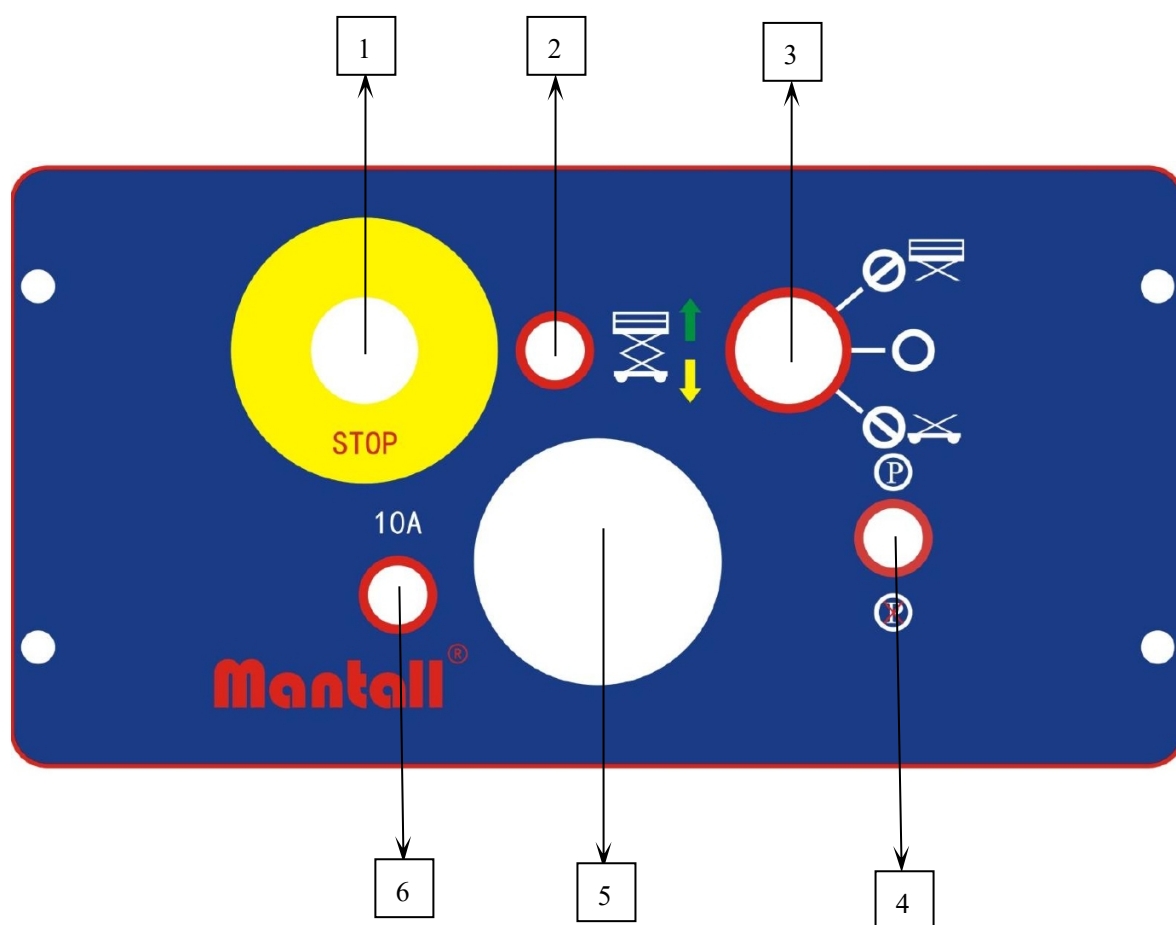
Press and hold the Auto Level Button, at the same time push the control handle forward to lower outriggers, continue until unit has self leveled, indicated by an audible beep.

RAISE OUTRIGGERS

Press and hold the Auto Level Button, at the same time pull the control handle backwards to raise outriggers.

To individually lower/raise outriggers, Press any of the four outrigger buttons, at the same time push/pull control handle to lower/raise as required.

# Ground control Operation (B System)





1 Red emergency stop switch

Push the emergency stop switch to “Off” position, can stop all functions. Push the emergency stop switch to “On” position, can operate the machine.

2 Platform lifting selection switch

Push up the platform lifting switch, the platform will rise, push down the platform lifting switch, the platform will fall.

3 Key switch

Turn the key switch to upper “Platform” icon position, platform controller will run; Turn the key switch to middle position, the machine will shut down; Turn the key switch to down “chassis” position, ground controller will run.

4 Manual release brake switch

Pull down the manual release brake switch, the brake is released.

5 Power indicator light

6 10A fuse

## Pre-operation Inspection



### Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.

- 1 Avoid hazardous situations.
- 2 Always perform a pre-operation inspection.

Know and understand the pre-operation inspection before going on to the next section.

- 3 Always perform function tests prior to use.
- 4 Inspect the work place.
- 5 Only use the machine as it was intended.

## Summary

It is the responsibility of the operator to perform a Preoperation Inspection.

The Pre-operation Inspection is a visual inspection performed by the operator prior to each work shift. The inspection is designed to discover if anything is apparently wrong with a machine before the operator performs the function tests.

Pre operational inspection can also be used to determine whether routine maintenance procedures are required. The operator can only carry out routine maintenance items specified in this manual.

Please refer to the list on the next page to check each item.

If damage or any variation from factory delivered condition is discovered, the machine must be tagged and removed from service.

Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications. After repairs are completed, the operator must perform a pre-operation inspection again before going on to the function tests.

Scheduled maintenance inspections shall be performed by qualified service technicians, according to the manufacturer's specifications and the requirements listed in the responsibilities manuals.

☐ Be sure that the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.

☐ Be sure that all decals are legible and in place. See the "Decal" logo.

☐ Check the hydraulic tank oil level. Check for leaks.

Check whether the battery fluid is leaking and the level is appropriate. Please add distilled water as needed. See the maintenance part.

☐ Electrical components, wiring and electrical cables

☐ Hydraulic hose, connector, cylinder and hydraulic block

☐ Battery pack and connections

☐ Drive motors

☐ Wear-resistant slider and gasket

☐ Tires and wheels

☐ Ground wire

☐ Limit switch, alarm and horn

☐ Nuts, bolts and other fasteners

☐ Platform entry chain or gate, Door / door lock

☐ Beacon and alarms(if equipped)

☐ Safety arm

☐ Pothole guards

☐ Platform control joystick

☐ Scissor pins and retaining fasteners

☐ Extended platform and components

## Pre-operation Inspection

Check entire machine for:

☐ Cracks in welds or structural components

☐ Dents or damage to machine

☐ Be sure that all structural and other critical components are present and all associated fasteners and pins are in place and properly tightened.

☐ Side rails are installed and bolts are fastened

☐ Be sure that the chassis trays are in place, latched and properly connected.

# Functions



## Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.

1 Avoid hazardous situations.

2 Always perform a pre-operation inspection.

Know and understand the function tests before going on to the next section.

3 Always perform function tests prior to Use

4 Inspect the work place.

5 Only use the machine as it was intended.

## Summary

The Function Tests are designed to discover any malfunctions before the machine is put into service. The operator must follow the step-by-step Instructions to test all machine functions.

A malfunctioning machine must never be used, If malfunctions are discovered, the machine must be tagged and removed from service. Repairs to the machine may only be made by a qualified service technician, according to the manufacturer's specifications.

After repairs are completed, the operator must perform a pre-operation inspection and function tests again before putting the machine into service.

1 Select a test area that is firm, level and free of obstruction.

2 Be sure the battery pack is connected.

## At the Ground Controls

3 Turn out the platform and ground red Emergency Stop button to the ON position.

4 Turn the key switch to ground control.

## Test Emergency Stop

5 Push in the ground red Emergency Stop button to the OFF position.

⊙ Result: No functions should operate.

6 Turn out the red Emergency Stop button to the ON position.

## Test the Up/Down Functions

The audible warnings on this machine and the standard horn all come from the same central alarm. The horn is a constant tone.

7 Activate the up function.

⊙ Result: The platform should raise.

8 Activate the down function.

⊙ Result: The platform should lower. The descent alarm should sound while the platform is lowering.

## Test the Manual Lowering

9 Activate the up function and raise the platform

approximately 2 feet(0.6 m).

10 Pull the manual lowering handle

☉ Result: The platform should lower. The descent alarm will not sound.

11 Turn the keys witch to platform control.

## Test the Platform Controls

### Test Emergency Stop

12 Push in the platform red Emergency Stop button to the OFF position.

☉ Result: No functions should operate.

### Test the Horn

13 Pull the red Emergency Stop button out to the on position.

14 Turn the horn button.

☉ Result: The horn should sound

## Test the Function Enable Switch

15 Do not hold the function enable switch on the control handle.

16 Slowly move the control handle in the direction indicated by the yellow arrow, then in the direction indicated by the yellow arrow

☉ Result: No functions should operate

## Test the Up/Down Functions

17 Move the lift/drive selector switch to the lift position.

18 Press and hold the function enable switch on the control handle.

19 Slowly move the control handle in the direction indicated by the green arrow.

☉ Result: The platform should raise. The pothole guards should deploy.

## FUNCTION TESTS

20 Release the control handle.

☉ Result: The platform should stop raising

21 Slowly move the control handle in the direction indicated by the yellow arrow.

☉Result: The platform should lower. The descent alarm should sound while the platform is lowering.

## Test the Steering

Note: When performing the steer and drive function tests, stand in the platform facing the steer end of the machine.

22 Move the lift/drive selector switch to the drive position.

23 Press and hold the function enable switch on the control handle.

24 Depress the thumb rocker switch on top of the control handle to left.

☉ Result: The steer wheels should turn left.

25 Depress the thumb rocker switch to right.

☉ Result: The steer wheels should turn right.

## Test Drive and Braking

26 Press and hold the function enable switch.

27 Slowly move the control handle in direction indicated by the blue arrow on the control panel until the machine begins to move, then return the handle to the center position.

☉ Result:The machine should move in the direction that the green arrow points on the control panel, then come to an abrupt stop

28 Slowly move the control handle in the direction indicated by the yellow arrow on the control panel until the machine begins to move, then return the handle to the center position.

- ☉ Result: The machine should move in the direction that the yellow arrow points on the control panel, then come to an abrupt stop.

Note: The drive brakes must be able to hold the machine on any slope it is able to climb.

## Test Limited Drive Speed

29 Move the lift/drive selector switch to the lift position.

30 Press and hold the function enable switch. Raise the platform approximately 4 feet (1.2 m) from the ground.

- ☉ Result: the pothole protection device should be deployed.

31 Move the lift/drive selector switch to the drive position.

32 Press and hold the function enable switch. Slowly move the control handle to the full drive position.

- ☉ Result The maximum achievable drive speed with the platform raised should not exceed 0.7 foot per second(20cm per second).

If the drive speed with the platform raised exceeds 0.7 foot per second(20cm per second), immediately tag and remove the machine from service.

the platform controller. Do not stand in the platform.

33 Fully lower the platform.

34 Place a 2x4in(50\*100mm) or similar piece of wood under both wheels on one side and drive the machine up onto them.

35 Raise the platform.

- ☉ Result: Before the platform is raised 7 feet (2.1 meters) from the ground, an alarm should sound.

36 Lower the platform and remove both pieces of wood.

## Test the Tilt Sensor Operation

Note: Perform this test from the ground with



## Do Not Operate Unless:

☒ You learn and practice the principles of safe machine operation contained in this operator's manual.

- 1 Avoid hazardous situations
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.

Know and understand the work place inspection before going on to the next section.

- 4 Inspect the work place.
- 5 Only use the machine as it was intended.

## Fundamentals

The Work Place Inspection helps the operator determine if the work place is suitable for safe machine operation. It should be performed by the operator prior to moving the machine to the work place.

It is the operator's responsibility to read and remember the work place hazards, then watch for and avoid them while moving, setting up and operating the machine.

## Work Place Inspection

Be aware of and avoid the following hazardous situations:

- slope or cave
- drop-offs or holes
- bumps, floor obstructions or debris
- Inclined surface
- Unfirm or smooth surface
- overhead obstructions and high voltage conductors
- Soft ground
- wind and weather conditions
- Appearance of unauthorized personnel
- Other Dangerous Conditions Used without Written Authorization

## Operating Instructions



### Do Not Operate Unless:

- ☒ You learn and practice the principles of safe machine operation contained in this operator's manual.
- 1 Avoid hazardous situations
- 2 Always perform a pre-operation inspection.
- 3 Always perform function tests prior to use.
- 4 Inspect the work place.
- 5 Only use the machine as it was intended.

## Fundamentals

The Operating Instructions section provides instructions for each aspect of machine operation. It is the operator's responsibility to follow all the safety rules and instructions in the operator's, safety and responsibilities manuals.

Using the machine for anything other than lifting personnel and tools to an aerial work site is unsafe and dangerous.

Only trained and authorized personnel should be permitted to operate a machine. If more than one operator is expected to use a machine at different times in the same work shift, they must all be qualified operators and are all expected to follow all safety rules and instructions in the operator's, safety and responsibilities manuals. That means every

new operator should perform a pre-operation inspection, function tests, and a work place inspection before using the machine.

## Emergency Stop

Push in the red Emergency Stop button to the OFF position at the ground controls or the platform controls to stop all functions.

The repair of any operation function shall be carried out when pressing any of the emergency stop buttons.

## Operation From Ground

- 1 Turn the key switch to ground control.
- 2 Turn out both ground and platform red Emergency Stop buttons to the ON position.
- 3 Be sure the battery pack is connected before operating the machine.

## To Position Platform

Move the up/down toggle switch according to the markings on the control panel.

Drive and steer functions are not available from the ground controls.

## Operation From Platform

- 1 Turn the key switch to platform control.
- 2 Turn out the ground and platform red Emergency Stop button to the on position.
- 3 Be sure the battery pack is connected before operating the machine.



## **To Position Platform**

- 1 Move the lift/drive selector switch to the lift position.
- 2 Press and hold the function enable switch on the control handle.
- 3 Move the control handle according to the markings on the control panel

### To Steer

- 1 Move the lift/drive selector switch to the drive position.
- 2 Press and hold the function enable switch on the control handle.
- 3 Turn the steer wheels with the thumb rocker switch located on the top of the control handle.

### To Drive

- 1 Move the lift/drive selector switch to the drive position.
- 2 Press and hold the function enable switch on the control handle.

3 Increase speed: Slowly move the control handle off center.

Decrease speed: Slowly move the control handle toward center.

Stop: Return the control handle to center or release the function enable switch.

Use the color-coded direction arrows on the platform controls and on the platform to identify the direction the machine will travel.

Machine travel speed is restricted when the platform is raised.

### Error indicator on



If the LED diagnostic readout shows an error code, for example, the system can be reset by pressing the red emergency shutdown button and then screwing it out.

If the error light is still on, stop using the machine and send it to repair.

## OPERATING INSTRUCTIONS

### To Extend and Retract Platform

- 1 Step on the platform extension release pedal on the platform toeboard.
- 2 Grasp the platform guard rails carefully and push to extend the platform to the mid-position stop.

- 3 Step on the release pedal again and push to fully extend the platform.

Do not stand on the platform extension while trying to extend it.

- 4 Step on the platform extension release pedal and pull to retract the platform to the mid-position stop. Step again to fully retract the platform.

### Operation From Ground with Controller

Maintain safe distances between operator, machine and fixed objects.

Be aware of the direction the machine will travel when using the controller.

## After Each Use

- 1 Select a safe parking location-firm level surface, clear of obstruction and traffic
- 2 Lower the platform.
- 3 Turn the key switch to the off position and remove the key to secure from unauthorized use.
- 4 Chock the wheels.
- 5 Charge the batteries.

## OPERATING INSTRUCTIONS

### Battery and Charger

#### Instructions

##### Observe and Obey:

- ☐ Do not use external charger or booster battery.
- ☐ Charge battery in a well-ventilated area.
- ☐ Use proper AC input voltage for charging as indicated on charger.
- ☐ Use only HaoLifts authorized battery and charger

#### To Charge Battery

- 1 Be Sure the batteries are connected before charging the batteries.
- 2 Open the battery compartment. The compartment should remain open for the entire charging cycle.
- 3 Remove the battery vent caps and check the battery acid level. If necessary, add only enough distilled water to cover the plates. Do not overfill prior to the charge cycle.
- 4 Replace the battery vent caps.
- 5 Connect the battery charger to a grounded AC circuit.
- 6 Turn the battery charger on
- 7 The charger will indicate when the battery is fully charged.
- 8 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.

### Dry Battery Filling and Charging

#### Instructions

1 Remove the battery vent caps and permanently remove the plastic seal from the battery vent openings.

2 Fill each cell with battery acid(electrolyte)until the level is sufficient to cover the plates.

Do not fill to maximum level until the battery charge cycle is complete. Overfilling can cause the battery acid to overflow during charging. Neutralize battery acid spills with baking soda and water.

3 Install the battery vent caps.

4 Charge the battery.

5 Check the battery acid level when the charging cycle is complete. Replenish with distilled water to the bottom of the fill tube. Do not overfill.



### Observe and Obey:

- ☐ Common sense and planning must be applied to control the movement of the machine when lifting it with a crane or forklift.
- ☐ Transport vehicle must be parked on a level surface.
- ☐ Transport vehicle must be secured to prevent rolling while machine is being loaded.
- ☐ Be sure vehicle capacity, loading surfaces and chains or straps are sufficient to withstand machine weight.
- ☐ Machine must be on level surface or secured before releasing brakes.

Always chock machine wheels in preparation for transport.

Use tie down points on chassis for anchoring down to transport surface.

Use chains or straps of ample load capacity.

Turn key switch to the OFF position and remove key before transporting.

Inspect entire machine for loose or unsecured items.

## Transport Instructions

### Manual Brake Release Method



As shown in the figure, hold the toggle switch on the lower control panel and press down to release the brake.



**AFTER THE MACHINE IS TOWED THE  
DISENGAGE BOLTS MUST BE  
REMOVED FROM THE BRAKE  
DISENGAGE HOLES. THE BRAKES  
CANNOT BE ENGAGED WITH THE  
DISENGAGE BOLTS IN THE BRAKE  
DISENGAGE HOLES. THIS WILL CAUSE  
THE MACHINE TO ROLL WHEN  
PARKED ON AN INCLINE.**

## Summary

The floor loading section provides information about two specific pressures imposed by the machine on load bearing surfaces.

### Localized Pressure(per tire)

This measurement is of concern where the floor surface under the machine must be protected from damage resulting from high pressure being exerted on a small area.

## Floor Loading

### Additional Floor Loading Information

max axle load	1600kg
max wheel load	618kg

## Occupied Pressure

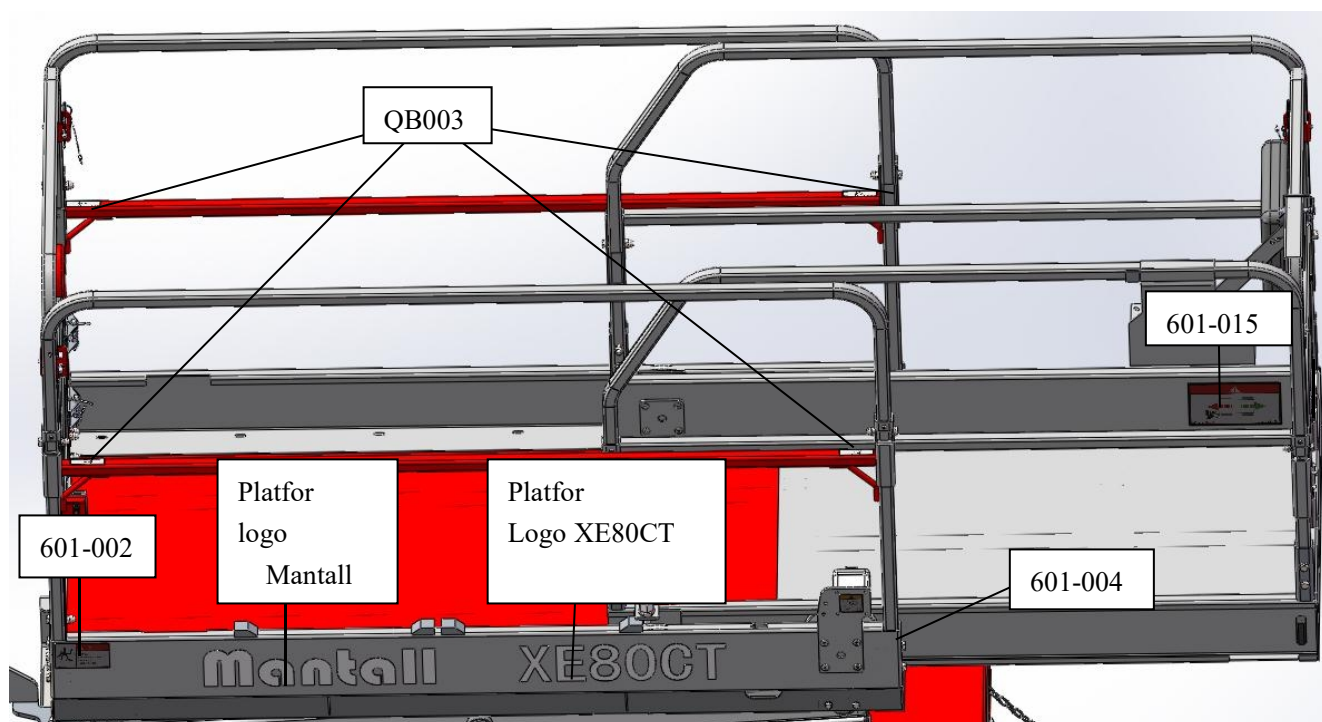
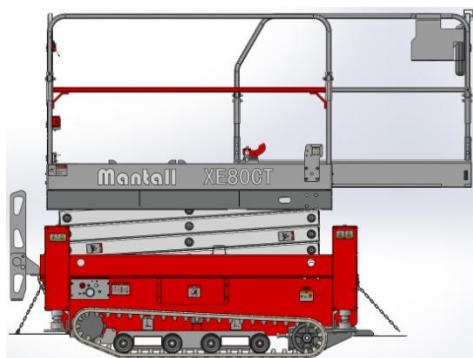
This measurement is of concern where the machine is being used on a beam supported floor or surface. The occupied pressure imposed by the machine must not exceed what the floor or surface can support.

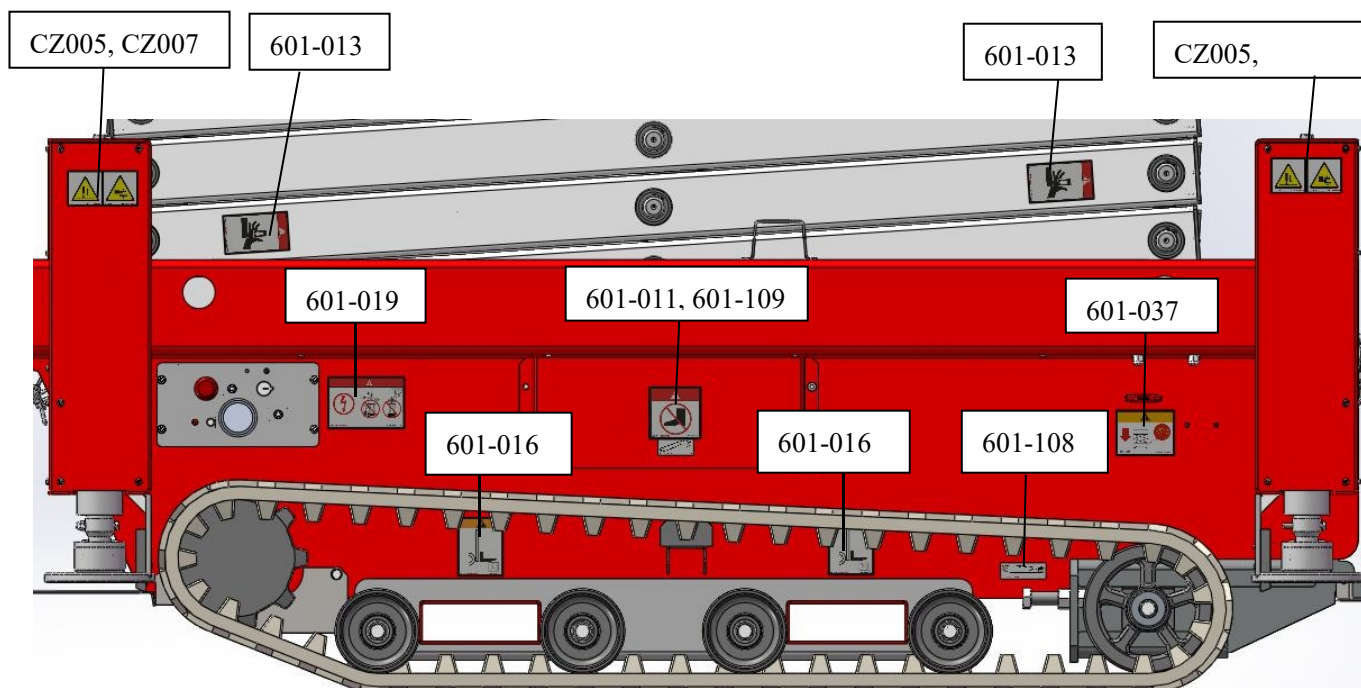
## Full vehicle label

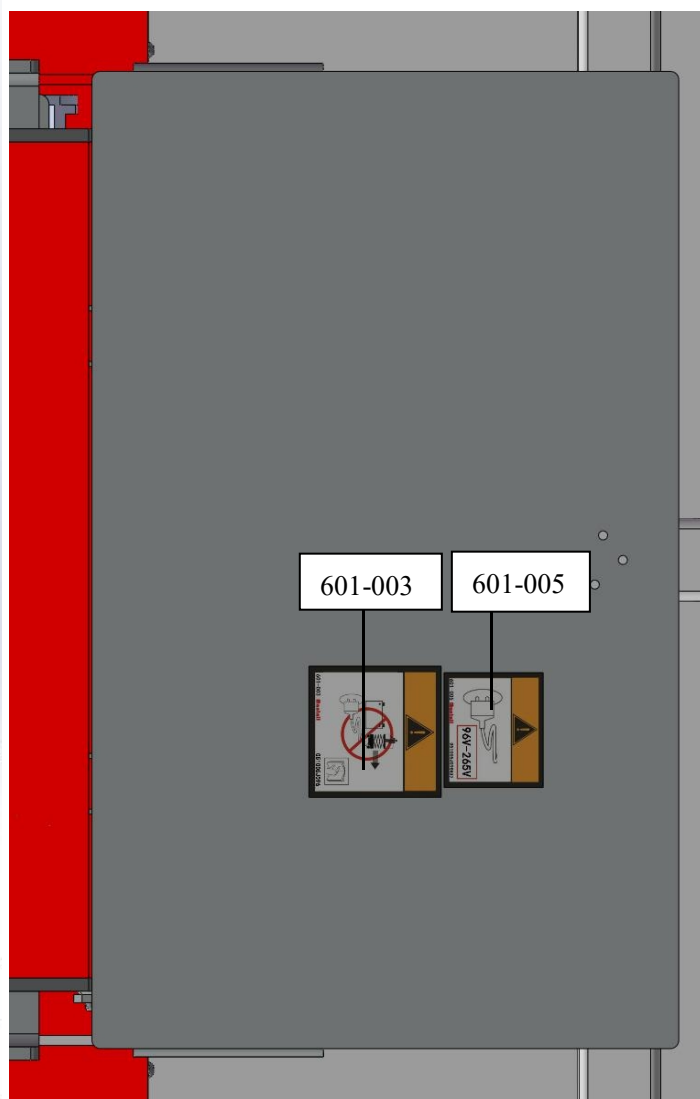
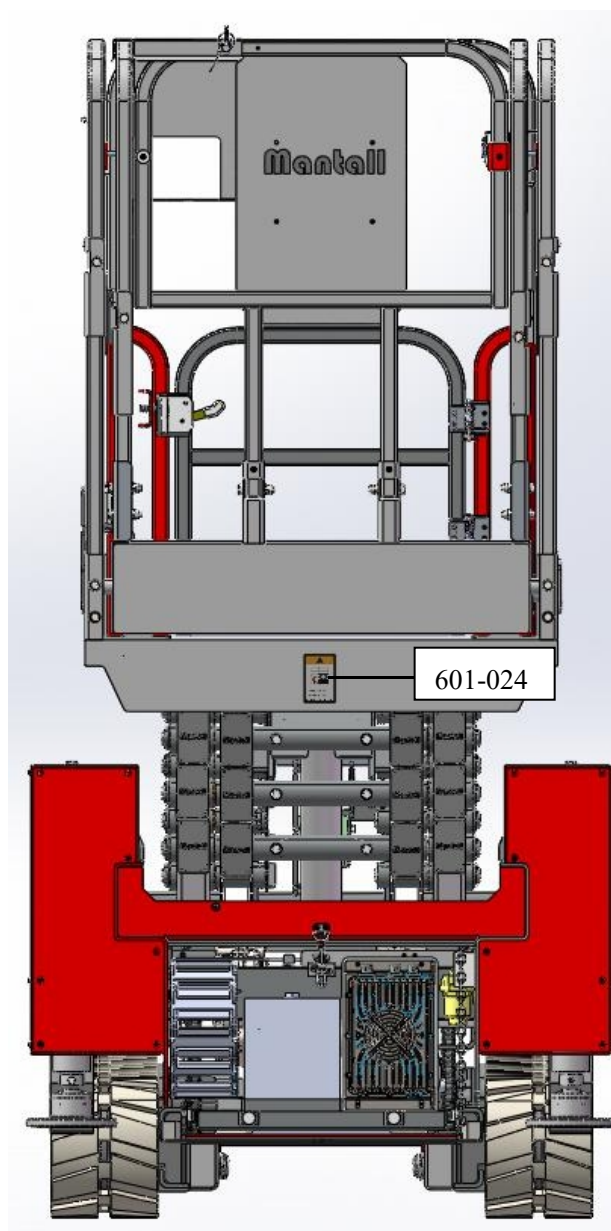
No	Material No.	Name		Size mm		XE80CT (Leg)
		Part No.	Part Name	W	H	
1	051005J094	601-001	Chinese (Dangerous, Danger of tipping over)	100	65	1
2	051005J159	601-001	English (Dangerous, Danger of tipping over)	100	65	1
3	051005J095	601-002	Chinese (Dangerous Risk of crushing)	118	70	2
4	051005J160	601-002	English (Dangerous Risk of crushing)	118	70	2
5	051005J096	601-003	Disable while charging	80	80	1
	051005J097	601-004	Upper power 220V	50	50	1
	051005J817	601-004-1	Upper power 110V	50	50	1
6	051005J098003	601-005	601-005 (Ground power 96V-265V) W70mm H60mm	70	60	1
7	051005J099	601-006	Electrolyte diagram (Chinese)	70	80	2
8	051005J161	601-006	Electrolyte diagram (English)	70	80	2
9	051005J101	601-008	Power supply prohibits external use and painting	70	80	2
10	051005J103	601-010	When the battery is exposed, the equipment is forbidden to use	80	70	2
11	051005J104	601-011	Forbid pedal	80	80	2
12	051005J106	601-013	Danger of Hand Injury	60	100	4
13	051005J107	601-014	Waterproof and electricity protection	80	80	2
14	051005J108	601-015	Be careful of hand	200	120	1
15	051005J109	601-016	Position of standard forklift hole	70	90	4
16	051005J112	601-019	Pay attention to the upper goods when lifting, thunderstorm days are prohibited	118	80	1
17	051005J114	601-024	Chinese(The lower end is not allowed to stand until the device is in use)	58	90	1
18	051005J162	601-024	It's not allowed to stand under the extended platform English	58	90	1
19	051005J990	601-040	601-040 Battery instructions Chinese	80	80	2
20	051005J990001	601-040	601-040 Battery instructions English	80	80	2
21	051005J904	601-033	(Hydraulic oil level) (Chinese)	51	65	1
22	05112QB850	601-033	(Hydraulic oil level) (English)	51	65	1
23	051005J900	601-034	Lifting	55	76	4
24	051005J901	601-035	traction	55	76	4
25	05J0001102	601-106	XE80CT(Leg) Load and tilt instruction (230kg 3° slider 115kg 6m)	160	100	1
26	051005J912	601-037	Emergency lowering	90	70	1

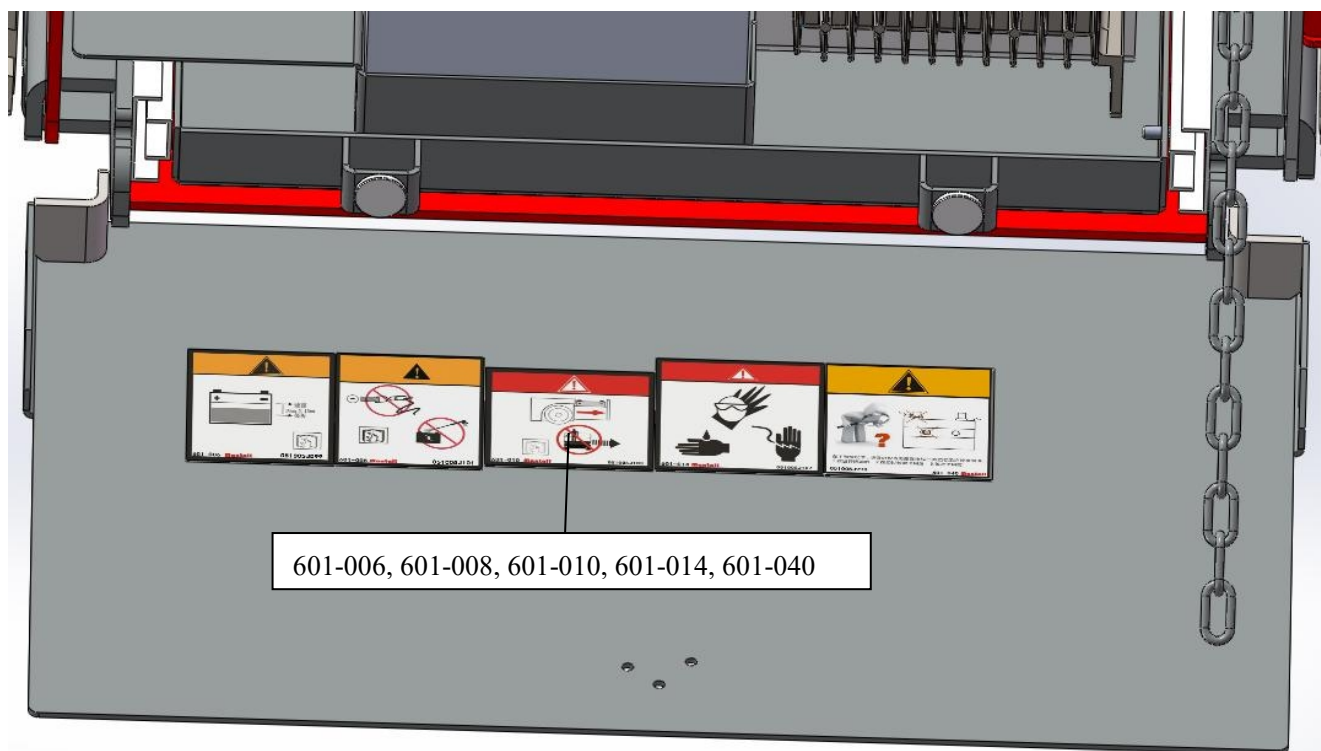
27	051108L055	601-101	Fill lubricating oil (Chinese)	35	15	<b>2</b>
28	051108L056	601-101	Fill lubricating oil (English)	35	15	<b>2</b>
	051108L076	601-108	Electric control side tighten crawler diagram	70	25	<b>1</b>
	051108L077	601-109	Electric control side tighten chain diagram	55	25	<b>1</b>
	051108L078	601-110	Non Electric control side tighten crawler diagram	70	25	<b>1</b>
	051108L079	601-111	Non Electric control side tighten chain diagram	50	25	<b>1</b>
29	05J0000731	601-094	Cut off the main power supply when the machine is in standby for a long time and overhauled (Chinese)	80	80	<b>1</b>
30	05J0000731001	601-094	Cut off the main power supply when the machine is in standby for a long time and overhauled (English)	80	80	<b>1</b>
31	05112QB374	QB003	QB003(Fasten safety belt)	75	20	<b>4</b>
32	051008Z019	CZ005	( Legs down )	54	54	<b>4</b>
33	051008Z021	CZ007	( Prevent presser foot )	54	54	<b>4</b>
34	051005J115002		Platform “Mantall”		100	<b>2</b>
35	05J0000770		Platform “XE80CT”		100	<b>2</b>
36	051005J777001		Chassis “Mantall”		60	<b>2</b>
37	05J0000771		Chassis “XE80CT”		60	<b>2</b>
38	051005J669003		Ground control panel decal(Including 10A fuse, brake release)	247	127	<b>1</b>
39	05J0001122		Upper control box decal(B system)	313. 5	171. 5	<b>1</b>
40	051003W096001		50*50 QR code	50	50	<b>2</b>

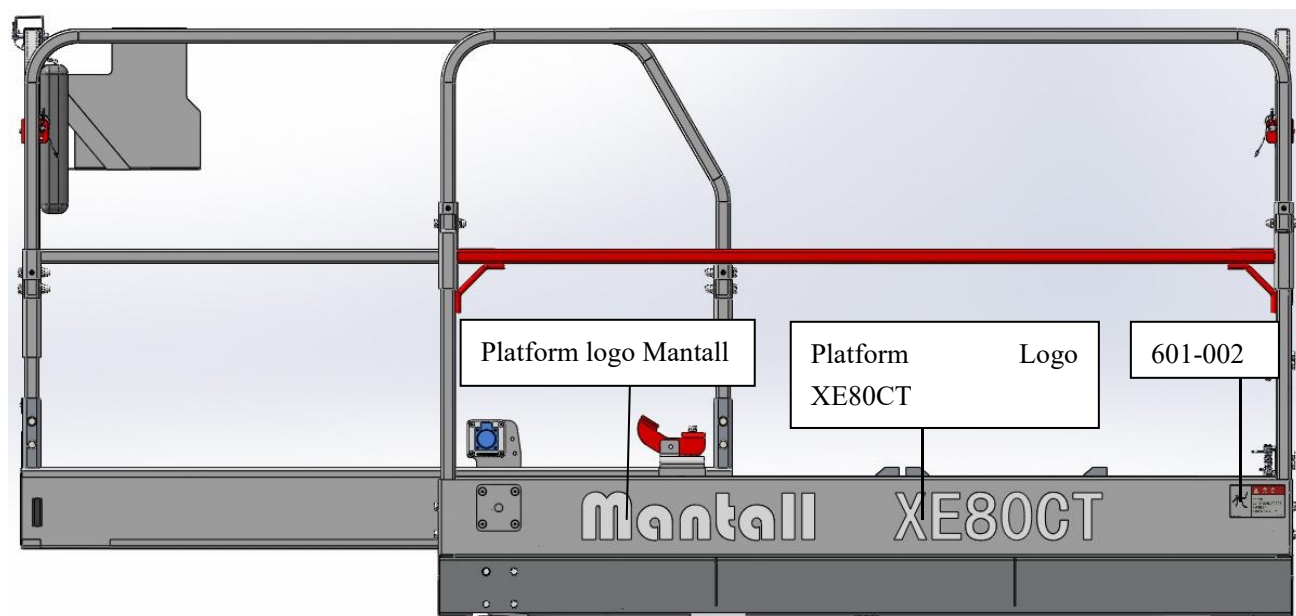
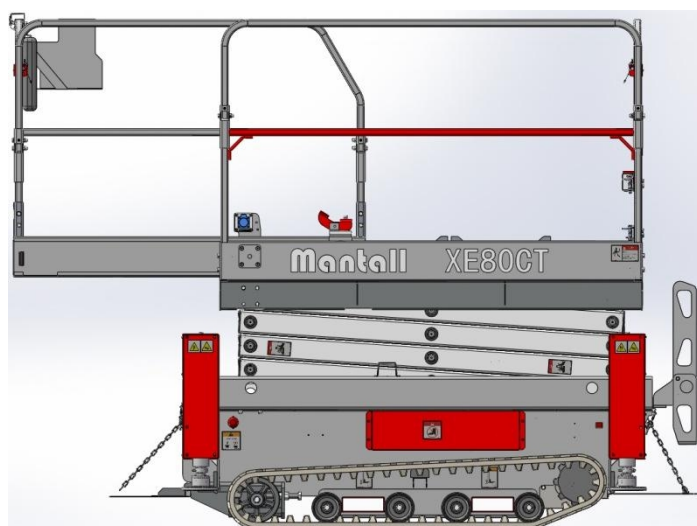


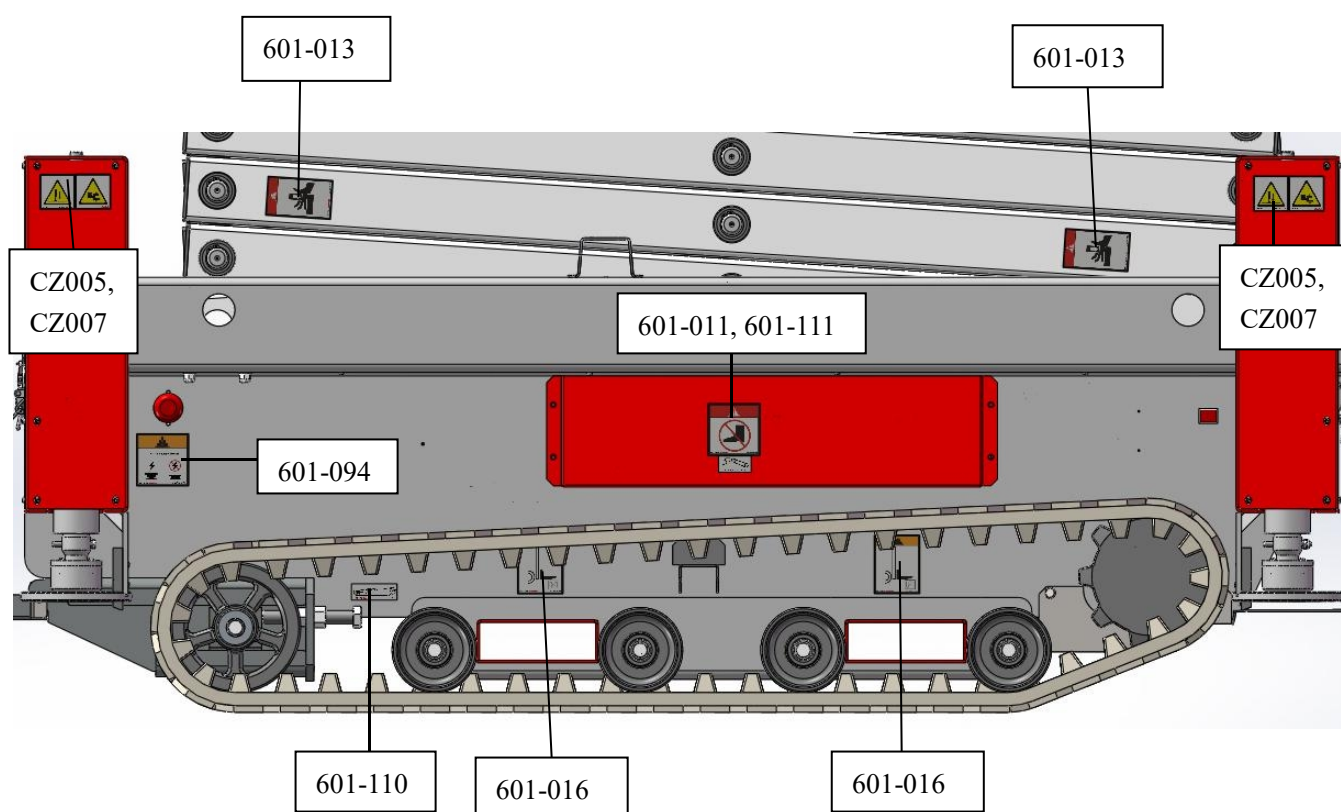




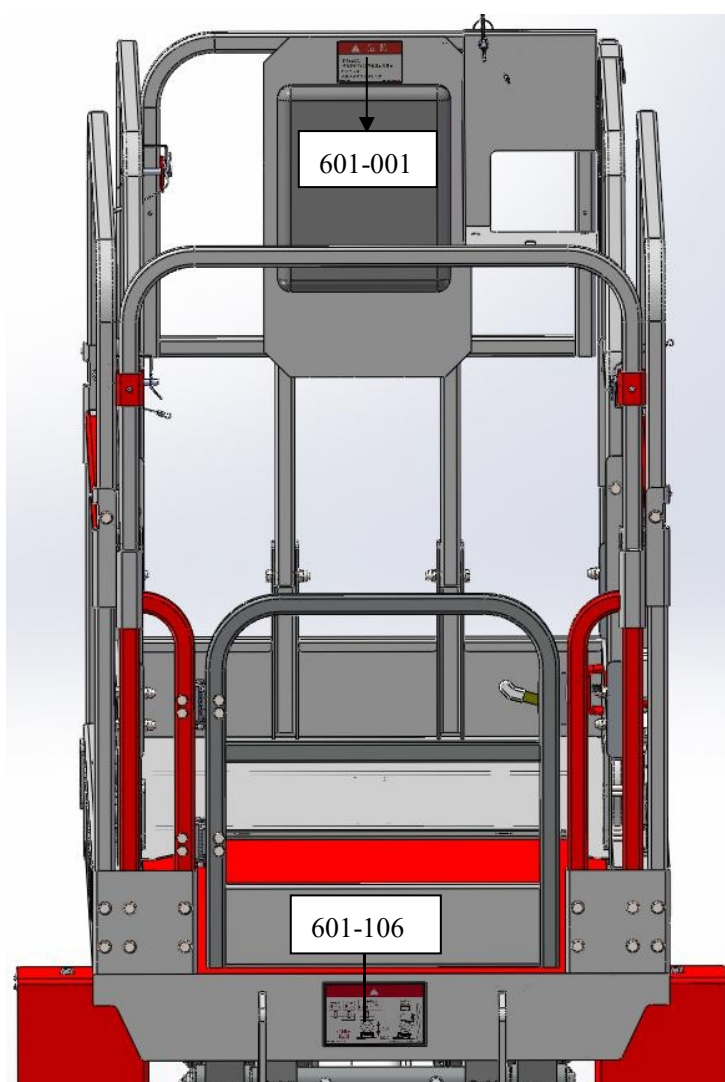
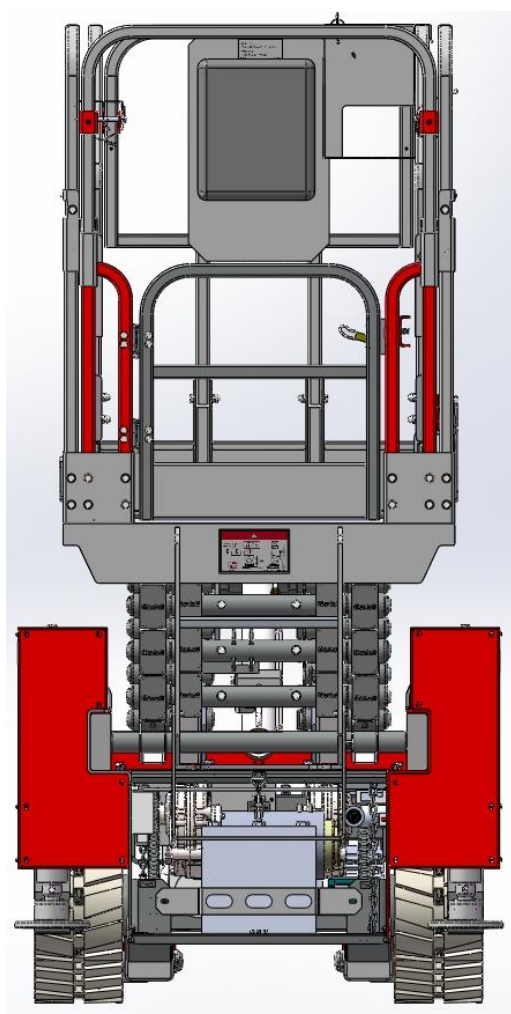


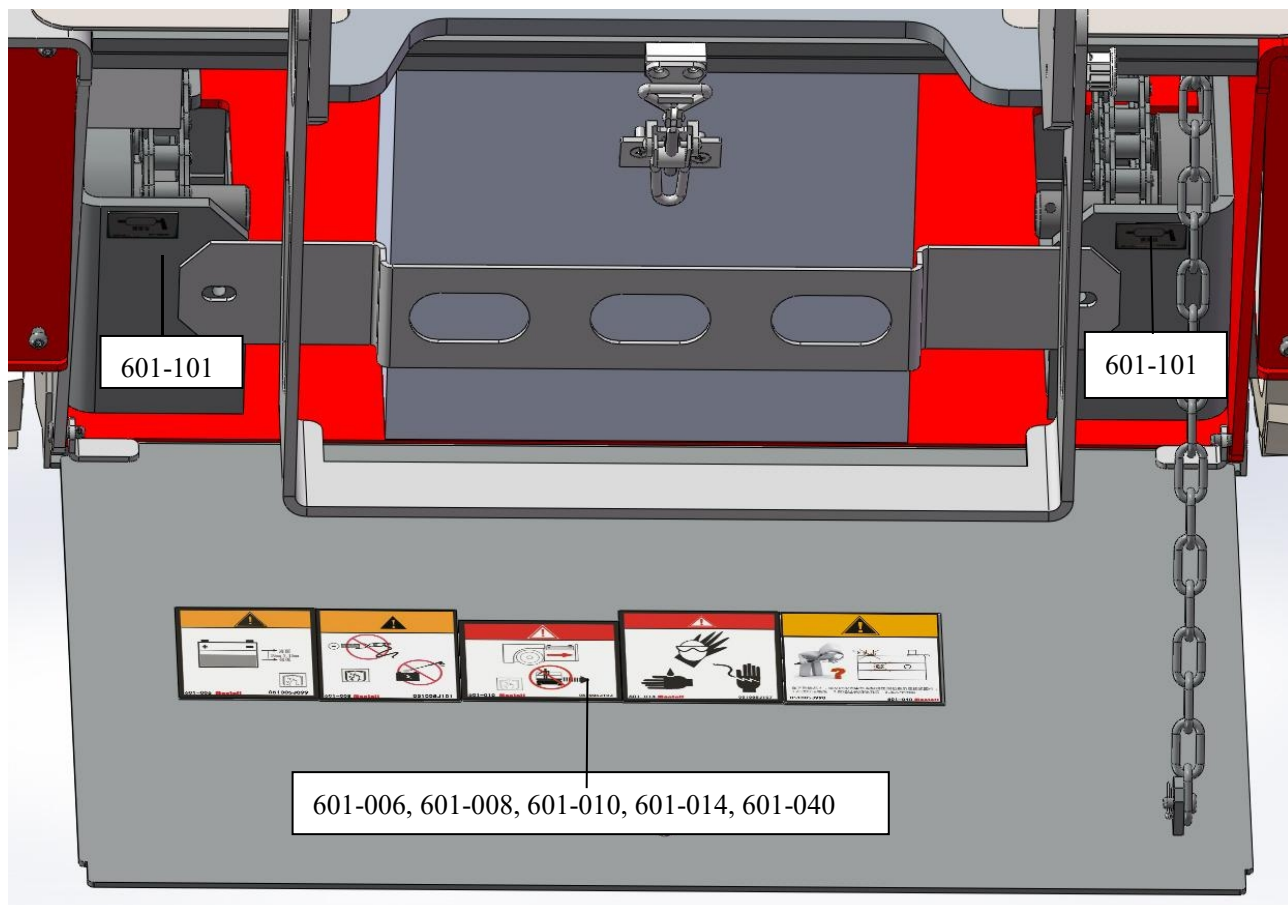












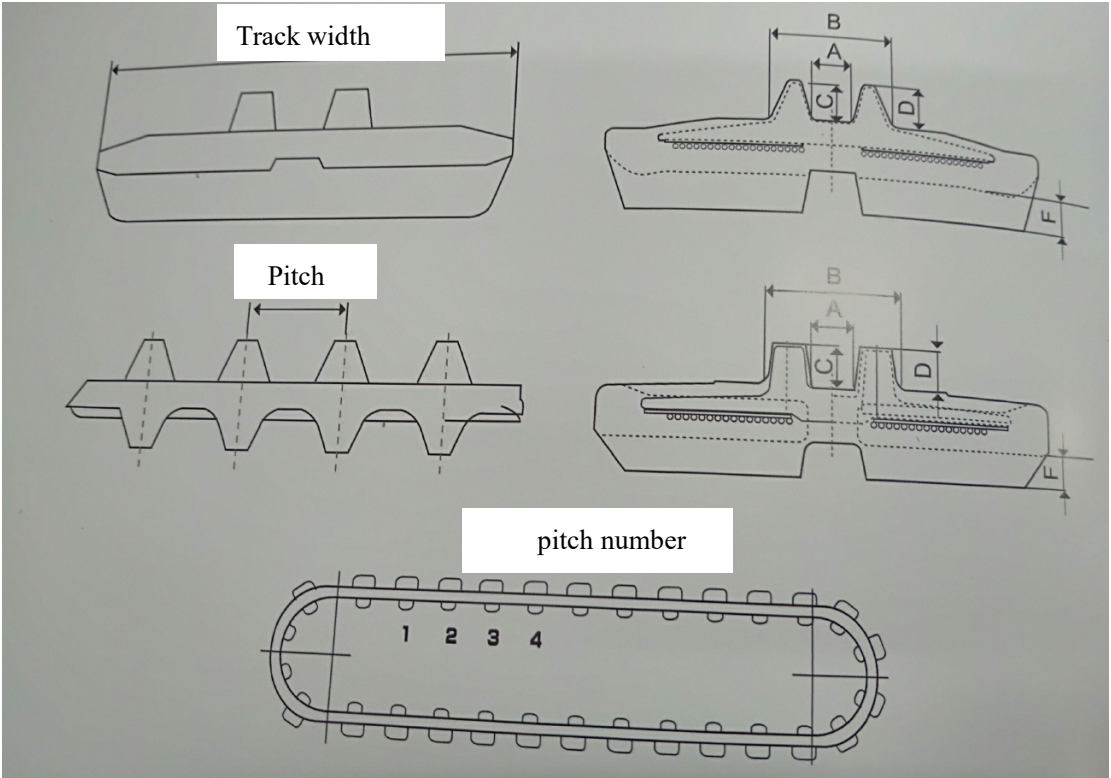


# Technical parameter

## Technical parameters of vehicle

No.	Item	Technical parameters
1	Max working height m H1	8
2	Max platform height m H2	6
3	Load KG	230
4	Weight KG	1205
5	Platform size m B*C*A	1.85*0.9*1.1
6	Skirt board height m	0.115
7	Stowed size (L*W)m E*F	2.05*1.0
8	Stowed height m D	2.1
9	Hydraulic tank capacity L	7
11	Vertical tilt	2°
12	Lateral tilt	3°
13	Load number max	2
14	Raised time S/Lowering time S	32/28
15	Power source	24V/225Ah
16	Crawler size	200*72 AB-A1
17	Drive speed	Fast speed 10m/18.34s
18		Low speed 5m/32s
19	Gradeability	30%/40% both can

Crawler technical parameters



Model Width*Pitch	Pitch number	A	B	C	D	F	Mode
Y200*72	49	24	64	28.5	29.5	12	BK

## Inspection and maintenance records

Date	Remark