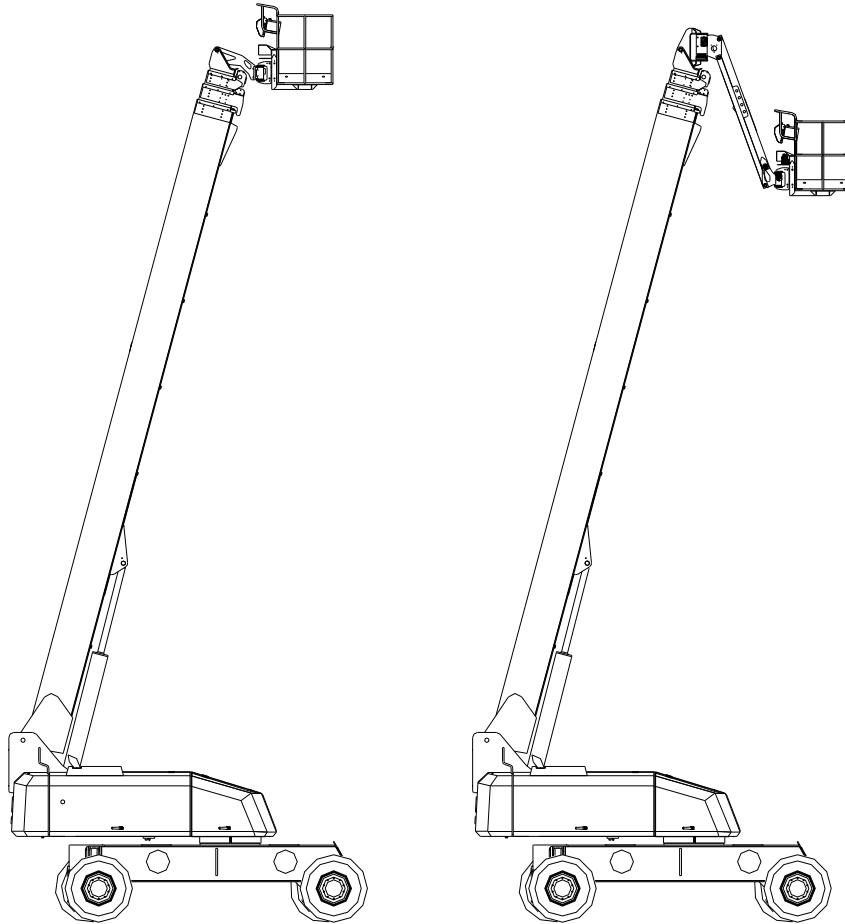




Hunan Sinoboom Heavy Industry Co.,Ltd.

Operator's Manual

GTBZ-40 & GTBZ-42



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1. Safety Rules



Danger

It will cause death or serious injury if failed to obey the instructions and safety rules in this manual.

Do NOT operate unless:

- You understood fully and operated the safe operation rules in this manual.
 - 1、 **Avoid dangerous situations.**
 - Knew and understood the above rules before going to next steps**
 - 2、 Inspect the machine before operation.
 - 3、 Test the functions before operation.
 - 4、 Inspect the workplace before operation.
 - 5、 Only use the machine as per its design intention.
- Should read, understand and obey the instruction and safety rules by manufacturer—safety manual, operation manual and the pasted labels on the machine.
- Should read, understand and obey the operator's safety rules and workplace rules.
- Shall read, understand and obey all the applicable rules by the related government.
- You are trained about the safe operation to the machine.

1.1 Electrocution Hazard

This machine is NOT insulated, and it provides NO electrocution protection.



Keep away from the power lines and machine according to the governmental regulars and the instructions in the table below.

Voltage (phase to phase)	Min. safety distance (m)
0 to 300V	NO touch
300V to 50KV	3.05
50KV to 200 KV	4.60
200KV to 350 KV	6.10
350KV to 500 KV	7.62
500KV to 750 KV	10.67
750KV to 1000 KV	13.72

When operating the machine, it should take the machine and platform movements into account, as well as the effect on the safety distance by the cables swing or loosen in the strong wind or gusty wind.

Please keep away from the machine if the machine is connected to the live cables. No touch by the persons on the ground and NO operation by the persons in the platform before the power are cut off.

Do not use the machine to weld, unless the machine is installed the weld line options to the platform and installed correctly.

1.2 Tip-over Hazard

It shall not exceed the max. platform capacity for the persons, devices and materials.

Platform capacity max.	
	250kg(Unrestricted)
GTBZ40	480kg(Restricted)
	250kg(Unrestricted)
GTBZ42	480kg(Restricted)
Persons allowed max. 3	

The boom can only be lifted or extended when the machine is on the solid and flat ground.



Do NOT regard the tilt alarm as the level indicator. The tilt alarm on the platform will sound when the machine is severely tilted..

If the tilt alarm sounds:

- ※ Do not extend, rotate the boom or vary its amplitude.
- ※ Move the machine to the solid and horizontal ground.
- ※ Carefully enough stow the boom and drop down the platform if the tilt alarm sounds as the platform is lifting.
- ※ Do NOT rotate the boom during the dropping process. Move the machine to the solid and horizontal ground before lifting the platform.
- ※ Do NOT use the platform controller to release the platform when it is

tripped, clipped or hindered its normal movements by other nearby objects. If the platform is planned to be released by the ground controller, it shall be not operated until all people leave the platform.

※ Do NOT operate the machine in strong or gusty wind. Do NOT increase the area of the platform or loads which is exposed in the wind, otherwise it will reduce the stability of the machine.



※ When stowed, it shall be driven extremely carefully and slow down the drive speed on the uneven or steep slope areas, unstable or slippery ground with gravel or near the cave, etc.

※ When boom raised or extended, it shall NOT be driven on or near the slope, unstable ground or other dangerous conditions.

※ Do NOT change, or forbid using the limit switch.



Do NOT push or pull any objects outside the platform.

Max. allowable force

Manual force — CE

400N

※ Do NOT change, or forbid adopting any components which may influence the safety and stability.

※ Do NOT adopt the components which vary the weight or specifications from the key components to replace them, which may influence the stability.

※ Do NOT modify or amend the aerial work platform without the written
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permission by the manufacturer. It will increase the platform weight and platform surface area or loads if some additional devices which are used to place tools or other materials are installed on the platform, footswitch or guardrails.



※ Do NOT lay or tie some overhung loads on any parts of the machine.

※ Do NOT place the ladders or scaffoldings inside the platform, or any parts close to the machine.

※ Do NOT use the machine on the moving vehicles or other moving ground. Be sure that all tires are in good condition and slotted bolts are screwed tightly.

1.3 Falling Hazard



Every person to enter the platform shall wear the safety belt or use other security devices in accordance with the governmental regulations. And all the lacing wires shall be tied at some fixed points on the platform.

※ Do NOT sit in, stand on or climb the guardrails on the platform. Persons in the platform shall stand steadily on the bottom plate at any time.



When lifting the platform:

Do NOT climb down the platform or boom.

Keep NO barrier on the bottom plate of the platform.

Lay down the mid-rail of the platform guardrails or lock the entrance gate before operation.

1.4 Crush Hazard



It should pay attention to the objects in the range of visibility and blind spots.

When rotating the turntable, please take care of the position of the boom and the tailswing of the turntable.

Inspect the working area, to prevent bumping heads on the barriers or other possible crush hazard occurred.



Beware of the danger of being squeezed when gripping the guardrails of the platform.

Observation and use: there are circular and square marks and arrows in red and yellow indicating the driving and steering directions on the control panel of the platform controller and drive chassis.

Operators shall obey the related rules for operators to use life security devices, working place rules and governmental regulations.

Do NOT dangerous driving or making fun on operation.

Do NOT operate the boom on any crane route unless the crane controller has been locked and/or taken precautions to prevent any potential crush hazard.

It cannot lift down the boom until there is NO person or barrier in the area underneath.



It shall limit the travel speed according to the ground condition, crowdedness, slope grade, person position and other possible factors may cause crush accident.

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1.5 Damage Hazard to the Parts

Do NOT adopt any battery or charger over 24V to start the engine.

Do NOT use the machine as earth wire for welding.

1.6 Explosion and Fire Hazard

Do NOT start the engine if any liquefied petroleum gas(LPG),gasoline, diesel fuel or other explosive materials are smelt or detected.

Do NOT fill the fuel when running the engine.

It shall not fill the fuel and charge the battery unless it is in the open and well-ventilated area which is also away from fire sources such as sparkle, flame and lit cigarettes etc.

Do NOT use the machine in the area which is dangerous or full of flammable or explosive gas or particles.

Do NOT jet the ethyl ether into the machine with glow plug engine.

1.7 Damage Hazard to the Machine

Do NOT use the damaged or faulty machine.

For each work transferring, it should fully check the machine before operation and test all the functions. The damaged or faulty machine should be marked and no operation allowed.

Be sure that it has completed all the maintenance operation according to this manual and related maintenance manual.

Be sure that all the labels are in correct position and easy to be indentified.

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

1.8 Body Injury Hazard

Do NOT operate the machine if it leaks the hydraulic oil which may sink into or burn the skin.

Keep the machine always operated in the well-ventilated area to prevent the carbon monoxide poisoning.

It will cause bad injury by touching any parts under the broad plate by error. Only the trained maintenance people can check the bulkheads. Suggestion: the operators can inspect and repair the machine only when doing the

inspection to the machine before operation. During the inspection, all the bulkheads shall be closed and locked.

1.9 Safety of the Weld Line to the platform

It should read, understand and obey all the attached warnings and instructions for the welding devices.

It can contact the weld lines or cables only when the welding devices are turned off through the platform controller.

It can be operated when the welding cables are correctly contacted.

Contact the positive conductor to the torsion lock connector on the turntable and platform.

Contact the negative conductor to the ground pole on the turntable and platform.

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2. Label Definition

Sinoboom labels, color codes and symbols indicate as following:



Safety warning symbol—to indicate the potential body injury. It shall obey all the safety tips of the label, to prevent the possible injury or death.



Red—to indicate the dangerous or urgent situation occurred, which would result in death or bad injury if it is not avoided.



Orange—to indicate the potential dangers existing, which would result in death or bad injury if it is not avoided.



Yellow and safety warning symbol—to indicate the potential dangers existing, which would result minor or some body injury if it is not avoided.

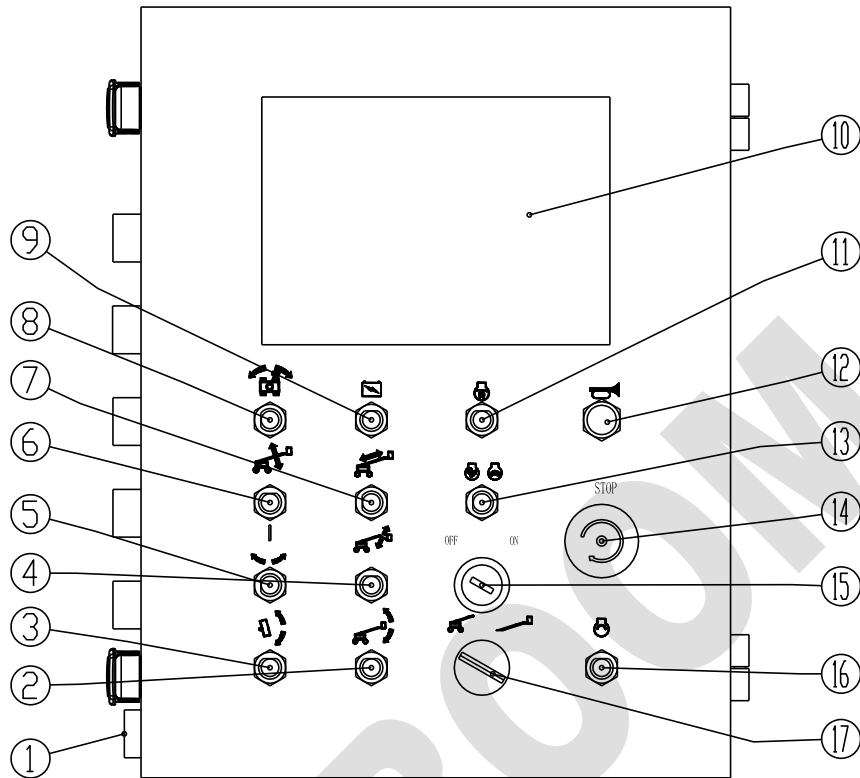


Yellow without safety warning symbol—to indicate the potential dangers existing, which would result in property



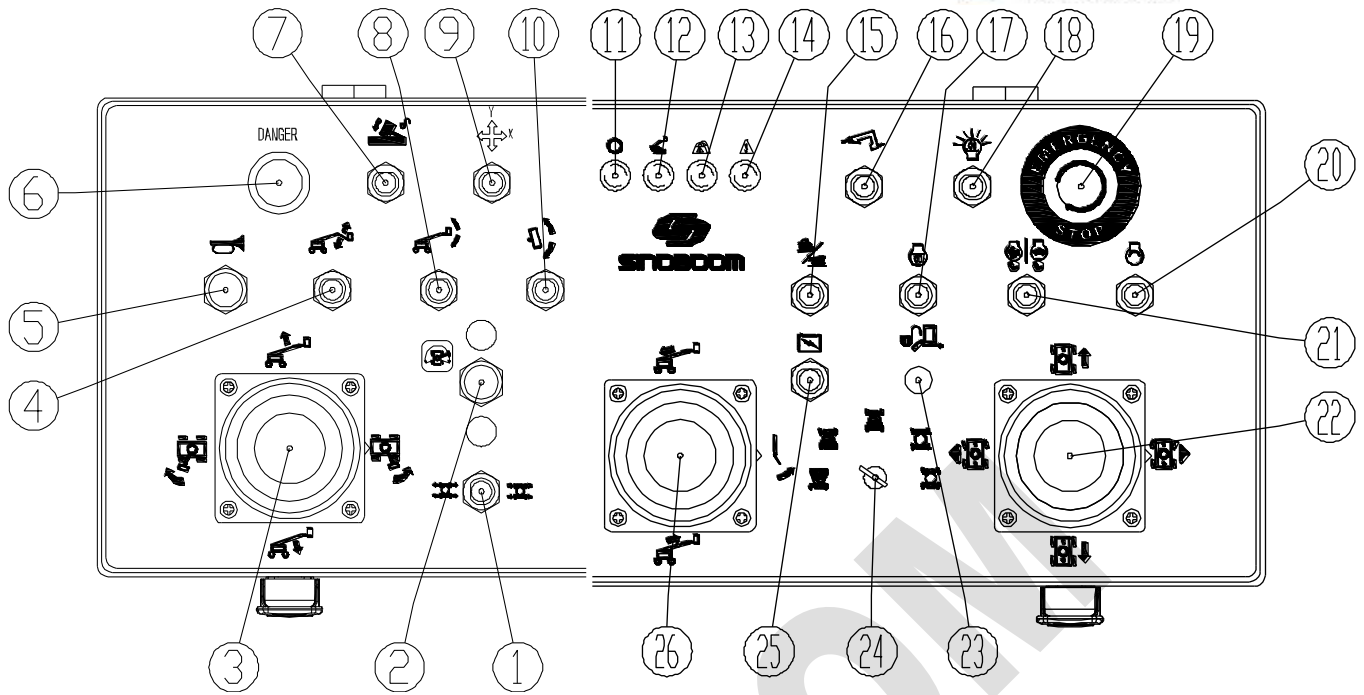
Green—to indicate the operation or maintenance instruction.

3. Control Panel



3.1. Controller Panel on the turntable

- | | |
|--------------------------------|---|
| 1. Buzzer | 9. Switch for auxiliary power |
| 2. Switch for platform level | 10. display |
| 3. Switch for platform rotary | 11. Engine start preheating switch |
| 4. Switch for jib level | 12. Horn button |
| 5. Switch for jib rotary | 13. Engine high/low speed switch |
| 6. Switch for boom up/down | 14. Emergency stop button |
| 7. Switch for boom extent | 15. Power key switch |
| 8. Switch for turntable rotary | 16. Engine start switch |
| | 17. Switch for turntable and platform control shift |



3.2 Controller Panel on platform

- | | | | |
|--|---|---|----------------------------|
| 1. Indicator light for rear area | 6. buzzer | 11. Power light | 16. Generator start button |
| 2. Indicator light for rear area | 7. Mandatory collection vehicles switch | 12. Uneven light frame | 17. Generator start button |
| 3. Control handle for up/down and steering | 8. Platform leveling switch | 13. Overload light | 18. Work light switch |
| 4. Switch for jib up/down | 9. X and Y linear motion switch | 14. Malfunction indicator light | 19. Emergency stop button |
| 5. Horn button | 10. Platform rotaty switch | 15. Switch for driving high/low speed shift | 20. Engine start button |

21. Switch for high/low speed shift 22. Control handle for driving and steering

23. Soft touch buttons 24. Mode rotary switch 25. Auxiliary Power switch

26. Control handle for boom extend-retract and jib left-right rotaty

4. Inspection before operation



Do NOT operate, unless:

- ✓ You have known and practiced the safe operation rules in this manual.
 1. to avoid dangerous situation occurred.
 - 2. always to inspect before operation**
to understand and know clearly the rules above before next steps.
 3. Always to do the function tests before operation.
 4. to inspect the work place.
 5. Only to use the machine as per its design intention.

4.1 Basic procedures

It is every operator's responsibility to inspect before operation and regular maintenance.

It is an intuitive process to inspect before operation and shall be carried out by operators before every shift. It aims to check whether there are obvious problems in the machine before operators test functions.

It can be sure whether the regular maintenance procedures are needed via inspection before operation. It can be only carried out the regular maintenance procedures by the operators.

Please search the list in the following page to check whether there is any part changed, damaged, loosened or missed in every item and position.

It is not allowed to use the damaged or amended machines. It shall mark the machines and stop using when any difference or damage is found from its release.

Only the qualified technicians can repair the machines according to the rules by manufacturer. The operators shall inspect the machine before

operation again after the repair when testing the functions.

In accordance with the requirements by manufacturer and listed in the responsibility manual, it should be carried out the periodical maintenance and repair by the qualified technicians.

- Be sure the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.
- Be sure the operator's, safety and responsibilities manuals are complete, legible and in the storage container located on the platform.
- Check whether the engine fuel leaks or it is at a suitable level and fill it when required. Please see to the "maintenance" part.
- Check whether the hydraulic oil leaks or it is at a suitable level and fill it when required. Please see to "maintenance" part.
- Check whether the engine coolant oil leaks or it is at a suitable level and fill it when required. Please see to "maintenance" part.
- Check whether the battery fluid leaks or it is at a suitable level and fill the distilled water when required. Please see to "maintenance" part.

Check whether the following parts or areas are damaged and whether any parts are improperly installed, loosened or missed.

- Electric parts, connecting wires and cables.
- Hydraulic hose, coupling, cylinder and counterbalance valve.
- Fuel and hydraulic tank.
- Travel motor and turning motor
- The rods and gaskets for the boom and axle.
- Tire and rim
- Engine and some related parts.
- Limit switch and horn
- Alarm and indicator light(if equipped)
- Nuts, bolts and other fastening items.
- The mid-rail or gate of platform access

Check the whole machine to find:

- Weld seam or the seam on the structural parts.
- Dents or damages on the machine
- Be sure that all the structural parts and other key parts are completed,

and all the related fastening items and dowels are in right position and screwed fully.

- Be sure that all the bulkhead covers are in right position and locked fully.

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5. Maintenance

Comply with and obey the following rules:

- ✓ The operators can only implement the routine maintenance items of this manual.
- ✓ According to the manufacturer's rules and specified requirements of this manual, the routine maintenance inspection must be completed by qualified maintenance technician.

5.1 Label Definition for Maintenance



NOTICE

The following signs are used in this manual to help explain the relevant meaning of usage expression. One or more signs appear in front of the maintenance procedure express different meaning as follow.



Indicate implementation of this procedure needs tools.



Indicate implementation of this procedure needs new spare parts.



Indicate the engine must be in cold status before implement this procedure.

5.2 Check the engine oil level



Keeping appropriate oil level is essential for maintaining good engine performance and service life. Operating the machines with inappropriate oil level will damage engine parts.

Shut down the engine and check oil level.
Check engine oil level gauge, add oil as required.

CUMMINS C80 ENGING	
Oil type	15W-40
Oil type-with low temperature	10W-30
Perkins engine	
Oil type	15W-40
Oil type-with low temperature	10W-30

5.3 Check the hydraulic oil level



Keeping appropriate hydraulic oil level is essential for the machine work. Hydraulic components will be damaged if hydraulic oil level is inappropriate. Inspectors can determine the position change of hydraulic oil level through routine inspections and this change may indicate problems occurred in hydraulic system.

To ensure the boom is in stowed status and then visual check the oil level gauge on the side of hydraulic oil tank.

Results: The hydraulic oil should be at the upside of oil level gauge within the scope of 10cm.

Hydraulic oil type	L-HM46
---------------------------	--------

5.4 Check the battery



Soundness Battery condition is essential for good engine performance and safe operation. Inappropriate electrolyte liquid level or damaged cables and wiring could lead to damage of engine parts and dangerous situations.

NOTICE

Risk of electric shock Touch an electric circuit could lead to death or serious personal injury. Remove all rings, watches and other accouterments.

WARNING



Risk of bodily injury There's acid in the battery. Please prevent overflow of acid in the battery and exposure of them. Neutralizing spilled acid from batteries with soda water.

- 1、 Wearing protective clothing and protective lens.
- 2、 Ensuring the connected wirings of battery cable is not corrosive.
- 3、 Ensuring the battery firmly fixed, and connected wiring of cable fastens well.
- 4、 Remove the ventilation cover of the battery.
- 5、 Check acid liquid level of the battery. Add distilled water to the bottom of the pipette of the batteries if needed. Please not to over-filled.
- 6、 Fitted with ventilation cover.

NOTICE

Adding terminal protectors and anti-corrosion sealant will help eliminate the corrosion on battery terminals and cable.

5.5 Check the engine coolant level and type



Keeping engine coolant at the appropriate level is essential for the life of the engine. Inappropriate coolant level will affect the engine's cooling capacity and damage engine components. Inspectors can determine the change of coolant liquid level through routine inspections, and this change may indicate problems occurred in cooling system.

Check the liquid level of the recycling coolant bins. Add coolant as needed.



Risks of body injuries: The liquid in the radiator is under pressure and very hot. Please be more careful when you remove the radiator cover and add liquid.

5.6 Periodical maintenance

Periodical maintenance must be implemented according to the procedures of this maintenance manual by qualified personnel who received related training.

The following described inspection and maintenance must be recorded by qualified institutions, and the records of all inspection and maintenance must keep records for four years.

If the machine has been standing idle for more than 3 months, it must undergo quarterly inspection before reuse.

5.7 Timetable

There are five types of maintenance inspection in accordance with the time schedule – daily inspection, quarterly inspection, six months' inspection, annual inspection and biennial inspection. Considering the duplicate procedures, "Scheduled maintenance procedures" and "maintenance inspection report" is divided into five sub-A, B, C, D and E. You can determine the necessary procedures combination according to the following table to implement scheduled inspections.

Inspections	Inspection table
Daily or every 8 hours	A
Quarterly or every 250 hours	A+B
Every 6 months or every 500 hours	A+B+C
Annually or every 1000 hours	A+B+C+D
Biennially or every 2000 hours	A+B+C+D+E

5.8 Maintenance & Repair Reports

Maintenance inspection report contains every type of periodical inspection checklist.

Maintenance inspection reports are copied for each inspection. The reports will be kept for three years.

6. Function Test



Do not operate the machine unless:

- ✓ You have mastered and practiced the safe operation rules of this machine in this operation manual.
 - 1、 To avoid dangerous situations
 - 2、 Always inspect the machine before operation.

Understand the above rules before your next step.

- 3、 Always implement function test before application.
- 4、 Check work place.
- 5、 Use the machine only according to the machine's design idea.

6.1 Basic Principle

The purpose of function test is to find faults before use the machine. Operators must follow explanations of every step to test all the function of the machine.

It is prohibit using machines with faults. The machine must be marked and stop using if any faults was found. According to the manufacturer's stipulation, only qualified technicians can repair the machine.

After the maintenance, operators must implement Inspections before operation and function inspection before using the machine.

- 1、 Choose a strong, horizontal region without barriers as test zone

6.2 For the Turntable Controller

Turn the key switch to the "ON" position

- 1、 Turn select switch to Turntable controller

- 2、 Pull out red “Emergency Stop” to “ON” position
 - **Results:** The combination of instruments will work and no error message display.
- 3、 Start the engine. (Please see to “Instruction of Operation”)

Test the “Emergency Stop”

- 4、 Press red “Emergency Stop” to “OFF” position
 - Results: Engine will be shutdown and no function can be run.
- 5、 Pull out red “Emergency Stop” to “ON” position and restart engine.

Test the machine functions

- 6、 Press Active Enable button and activate function buttons of every boom and platform.
 - Results: The function of all the booms and platform can work normally in a whole circle
- 7、 Turn select switch to the ground controller and shut down engine.

Test the auxiliary control

- 8、 Pull out red “Emergency Stop” to the “ON” position
- 10、 Press auxiliary power button at the same time and press function buttons of each boom or activate function button of each boom.

To save battery power, please test each function in the segment of the circle.

NOTICE

- Results: All boom functions should be run.
- 9、 Press the selected button of “idle engine” until the indicate light of high idle speed was on beside activated foot pedal.

Test the hydraulic oil return filter

- 10、 Find and check the status indicator of hydraulic oil filter
 - Results: When the oil filter run, the indicator light was off.

6.3 For the platform controller

Test the Emergency Stop

- 11、 Turn selective switch to platform controller.
- 12、 Turn red “Emergency stop” switch of platform to the “OFF” position
- 13、 Turn the switch to the platform controller
 - Results: The engine will shut down and no function will run.
- 14、 Pull out red “Emergency Stop” and the engine should be restart.

Test the horn

- 15、 Press horn button.
 - The horn will be ringing.

Test the footswitch

- 16、 Turn red “Emergency Stop” button to the “OFF” position
- 17、 Turn red “Emergency Stop” button to the “ON” position but do not start the engine.
- 18、 Press foot pedal and try to start the engine by press “start engine” button

Results: The engine could not be activated.

- 19、 Re-start the engine without pressing foot pedal.
- 20、 Test each function of machine without pressing foot pedal.

Result: All the functions of the machine will not run.

Test functions of the machine

- 21、 Press foot pedal
- 22、 Activated handles, buttons and plate of function.
 - All the functions can be implementing in a complete circle.

Test the steer function

- 23、 Press select steering button
- 24、 Press foot pedal
- The square end wheel should be rotated in accordance with the chosen direction of steering button.

Test the drive and brake

- 25、 Please press foot pedal.
- 26、 Please move drive/steering control handle slowly in accordance with the direction of yellow arrow on the control panel until the machine start to move, and then return the handle to the center place.
 - Result: the machine should be move in accordance with the direction of yellow arrow on the drive chassis, and then stop.
- 27、 Move drive/ steering control handler slowly in accordance with the direction of red arrow on the control panel until the machine start to move, and then return the handle to the center place.
 - Results: The machine should be move in accordance with the direction of red arrow and then stop.

NOTICE

The brake should stop the machine smoothly on any slope it can climb.

Test the weighing system

- 28、 The boom is full stowed with the lowest status. Add loading to the platform gradually.
 - Results: The overload indicator light starts flashing when the loading is more than 250 kg/480kg. The overload indicator light is on and horn is ringing when the loading is more than 250kg/480kg.

Test Activate drive system



- 29、 Press foot pedal and low the machine to the stowed status
- 30、 Rotate the turntable until the basic boom moves past one of the non-steer tires

- Results: The indicator light of Drive Activate should be on when the boom was locate in any position within the scope as showed in the table.
- 31、 Move drive/steering control handler until it deviate from the center location.
- Results: All the drive functions cannot be implementing.
- 32、 Press Drive Activate button and move drive/steering control handler slowly to deviate it from the center of handler.
- Results: The drive function should be able to run.

NOTICE

The machine can drive according to the opposite direction of the movement of Drive/Steering control handler when the Drive Activate system is run. You can confirm move direction by the color arrow direction on platform controller and drive chassis. If the Drive/Steering control handler does not move in two seconds after press Drive Activate button, the drive function cannot be implementing.

Test the limited drive speed

- 33、 Press the foot pedal.
- 34、 Raise the boom to the horizontal pole with 10 degrees.
- 35、 Move the drive control handler slowly to full-drive position.
- Results: The maximum drive speed should not exceed 0.3 M/s with the raised boom.
- Note: the move speed of the machine will be 12.2 meters per 40 seconds.
- 36、 Low the boom to the stowed status.
- 37、 Extend the boom to 1.2M.
- 38、 Move the drive control handler slowly to full-drive position.
- Results: The maximum drive speed should not exceed 0.3meter/second with the extended boom.
- Note: The move speed of the machine will be 12.2 meters per 40 seconds. If the drive speed exceed 0.3 meters per second with the raised boom or extended boom, the machine should be marked and stop using.
- 39、 Raise the boom to horizontal line and extend it as much as possible.

- 40、 Move the drive control handler slowly to the full drive position.
- Results: the maximum speed will not exceed 0.2meter per second with the full extended boom.
- Note: the move speed of the machine will be 12.2 meters per 70 seconds.

Test the Auxiliary control

- 41、 Shut down the engine.
- 42、 Pull out the red “Emergency Stop” button to the “ON” position.
- 43、 Please press footswitch.
- 44、 Press Auxiliary power button at the same time and activate control handler, button switch plate or button for each function.

NOTICE

To save battery power, please test each function in segments of the circle.

- Results: All the boom and steering function will be run. Machine equipped with auxiliary power drive options: Drive function should be able to run.

7. Inspect the Workplace



Do not operate unless:

- ✓ You have mastered and practiced the safe operation rules in this operation manual.
 1. To avoid dangerous situation
 2. Always check before operation.

Please understand the above rules before your next step.

3. Always implement function test before operation.
4. Check the work place
5. Using the machine only according to the machine's design idea.

Basic Principle

“Workplace Inspection” will help operations to determine whether the workplace is fit for the safe operation of the machine. Operators should be carried out this work prior to the machine move to the workplace.

It is the operator's responsibility to understand and remember the issue of risk in workplace. Operations may pay attention and avoid these problems when move, install and operate the machine.

Workplace Inspections

Be careful and avoid the emergence of the following dangerous situations:

- Steep slopes or caves.
- Protruding objects, ground barriers or debris.
- Air barrier and high-voltage wires
- Dangerous position
- Surface that cannot support all loads imposed by the machine.
- Wind and atmospheric conditions

- Emergency of unauthorized personnel
- Other unsafe situations that may occur.

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8. Operation Preconditions



Do not operate the machine, unless

- You've known about the safe operation rules stipulated in this operational manual and put it into practice already.
 1. To avoid dangerous cases
 2. Always conduct check-up before the operationKnow and understand the above rules before you go ahead with this manual.
- 3. Always conduct performance-test before the use.
- 4. To check up the work site.
- 5. Only use this machine as per its designed intention

Basic rules

“Operation Manual” provides detailed guidelines for each machine performance. It's the operator's duty to obey the operational manual and safety guidelines

Except for sending human and tools to the height, all the others purpose is not safe and will lead to danger situations.

Only well trained and authorized people can be permitted to operate the machine. If more than one people in different working shift operate the machine in different working time, then all of them must be qualified operator and to obey all the operational manual and all the safety guidelines, which means the checking up before start, performance test and checking up work site should all be done before each operator starts the machine.

Start engine

- Turn the key to “ON” position on the rotation controller.

- Ensure the red “Emergency Power Offer” button, both on the rotation controller and platform controller, was pulled out to “ON” position
- Press the switch to start the engine. If engine failed to start or down, then press the start switch one more time, and the interval must be longer than three seconds.

If still failed 15 minutes after the starting, please define the root causes and fix any problems. Another 60 seconds should be waited before one more try of starting.

All models applied: when in extremely lower temperature, -30°C or even lower, the engine should be pre-heated for a 5-minuts to pretend the hydraulic system from ruining.

Emergency stop

Position to the red button of “Emergent Power Off” on ground or on platform to the “Off”, stop all the functions and power off the engine.

Auxiliary control

In case of any engine failure, please use the auxiliary power

- Turn the switch to ground or platform controller.
- Pull out the red emergency stop button to “ON” position.
- Step on the footswitch when operating the auxiliary controller.
- Press the auxiliary power button and start required function. The machine equipped with the auxiliary drive options can be operated the functions of the boom and platform.

Operation on the ground

- Turn the switch to ground controller.
- Pull the red emergency stop button to “ON” position.
- Start the engine.

Operation on the platform

- Turn the switch to platform controller.
- Step on the footswitch. Follow the instruction on the control panel, slowly move the function control joystick, or toggle switch, or the

related button.

Driving or steering function can not be achieved through platform controller.

Steering

- Press footswitch.
- Press steering button when selecting steering direction.

The colorful direction arrow on the platform controller and on the driven chassis helps to define the direction of steering.

Driving

- Press footswitch.
- To build up speed: press yellow or red arrow direction to driving.
- To lower down speed: to move toward central position or steering control joystick.
- Stop: turn the steering/driving control joystick back to the center position or release the footswitch.

To identify the machine heading direction is by the color direction on platform controller or driving chassis.

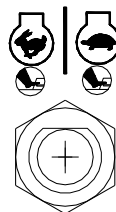
Machine driving speed will be restricted when boom lifting or extending.

Engine idle speed selection

Press selection button to select the engine idle (rotation/minute), the indicative lamp will turn on.

Symbol of Rabbit: high engine idle

Symbol of Tortoise: low engine idle



Check up engine indicative lamp

Upon the indicative lamp turning on, please check up the oil and cooling liquid for the engine.

Flashing buzzer and indicative lamp

- Flashing buzzer is constant on indicate the operator approaching the max. range or beyond lifting limit.
- “Indicative signs: when the lifting weight is above 250kg/480kg the overloading lamp will flash and the overloading lamp platform lifting limit
- Machine Un-leveling indicator: when the machine un-leveling indicator is on, the machine is positioned on a uneven ground. The boom extension and lifting more than 12° will be prohibited. Please move the machine to solid even ground.
- Platform Un-leveling indicator: when the platform un-leveling indicator is on, the platform is positioned un-leveling. Leveling the platform until the lamp is off.
- Fuel volume alarm indicator: this lamp will be on to indicate too little fuel. Add more fuel immediately.
- Circuit Failure indicator: the lamp will be on to indicate circuit failure or sensors problem.
- Power indicator: turn on the light, and then the lamp is constantly on.

Stop the engine

Press the red “Emergency Stop” button and turn the key to OFF position.

Every time after machine use

- Pause the machine in a safe place, could be solid leveling ground surface, without obstacles and busy transportation.
- Boom retracted and lowered to stowed position.
- Turn the rotation with the boom right between the non-steer tires.
- Turn the key to OFF position and un-plug the key, to avoid unauthorized usage.
- Lock the wheels.

9. Lifting and transportation

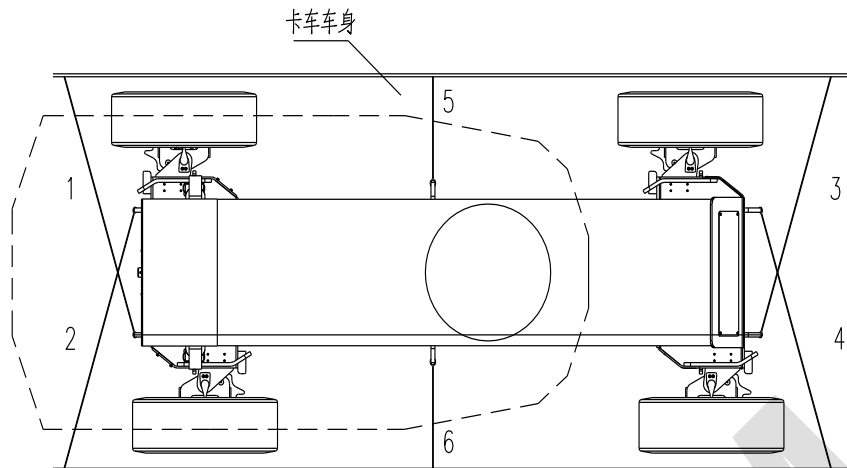


When being transported below rules must be followed:

- Transport vehicle must be paused on the leveling ground.
- When loading, the transport vehicle must be fixed to avoid rolling.
- Ensure the transport vehicle volume, loading surface, fasten belt or rigging enough to support the machine weight. (the weight refers to the specification)
- Ensure the front wheel has been locked by rotation lock; unlock when start to operate the machine.

Ensure safe transport by truck or trailer

- Using rotation lock when transport the machine every time.
- Always lock the machine wheels for transportation.
- Fixed the machine on the transport surface through the fastening point on the chassis.
- Use chain or belt strong enough.
- Turn the key to “OFF” position before transportation and un plug the key.
- Fully check the machine to ensure no loose nor unfixed parts.

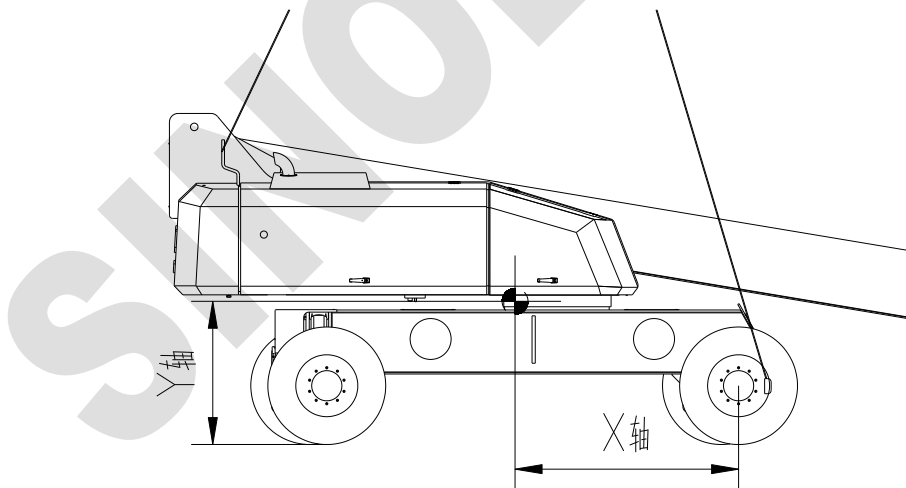


Lifting instructions

Completely lower and extract the boom.

Fix the rotation by locking the rotator

Attaching the rigging to appointed lifting hole, with two on the chassis, and two on the rotation.



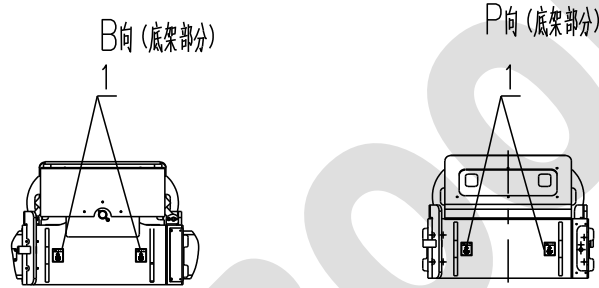
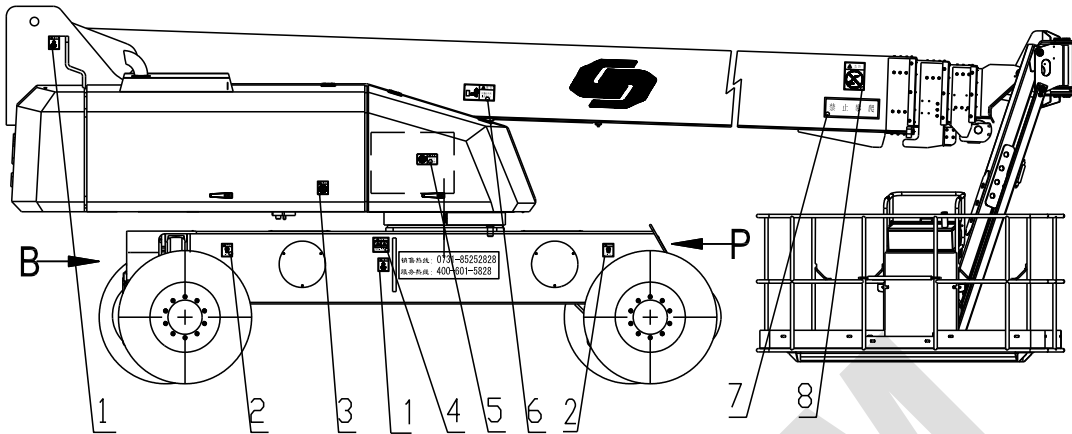
	X Axle	Y Axle
GTBZ40	2316mm	1401mm
GTBZ42	2194mm	1547mm

10. Label

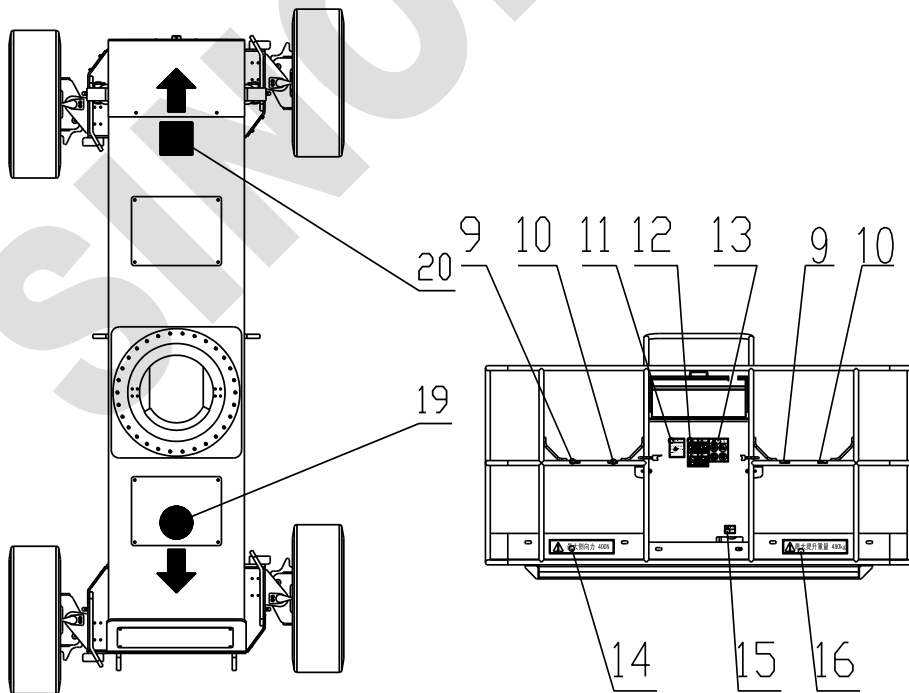
Check the label stick

Check the label stick properly or not as per below table and demonstration.

Serial	Description	Qty
1	Handling Lifting Division	8
2	No working on slope and max load for each tyre is 11120kg.	4
3	Keep away from circuit line when working	2
4	Turntable rotation warning	1
5	No Smoking and Flame	1
6	Lifting point No Standing under the boom Not insulated, keep away from circuit	1
7	No Climbing on the Alarm board	1
8	Traffic on the boom climb	1
9	Safety Belt	2
10	Safety Belt	2
11	Operation Direction	1
12	Keep away from circuit line when working, no operation when wind speed is above level-6 or 13m/s, observation on underside and flat ground surface is needed when lowering the platform	1
13	Ware glove, anti-slip shoe, safety helm, safety belt	1
14	Max Manual Force	1
15	Footswitch	1
16	rated load for platform	1
17	Maintenance Schedules	1
18	nameplate	1
19	Direction for machine moving rearward	1
20	Direction for machine moving frontward	

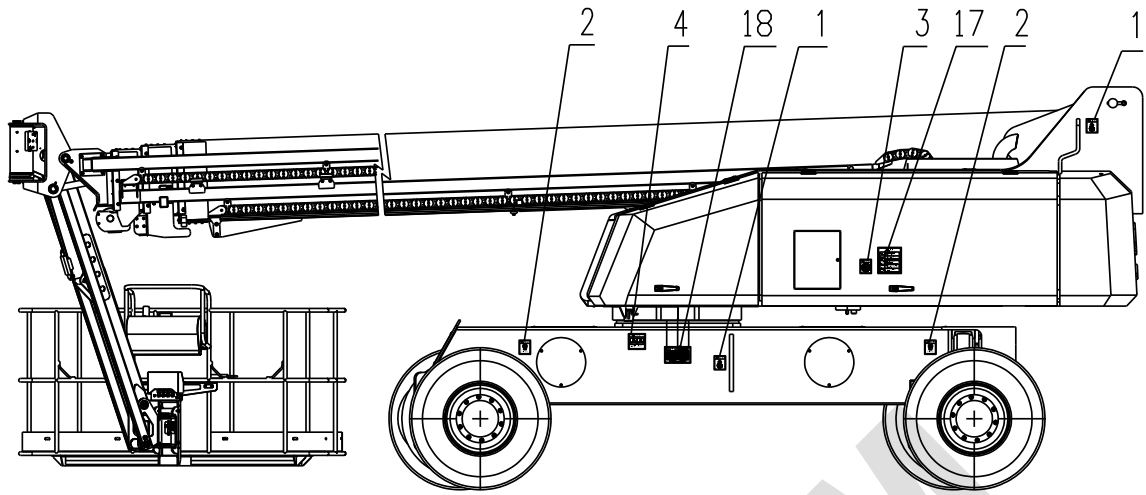


Tank side:



Chassis

platform



The control box side:

SINOBOOM

11. Specifications

GTBZ40		GTBZ42	
Max Working height	41.2m	Max Working height	43.3m
Max Platform height	39.4m	Max Platform height	41.6m
Max Height-Stowed	3.08m	Max Height-Stowed	3.08m
Max Horizontal reach	22.18m	Max Horizontal reach	24.38m
Width-Stowed	Axle retractive-2.49m Axle extended-3.81m	Width-Stowed	Axle retractive-2.49m Axle extended-3.81m
Length-Stowed	13.06m	Length-Stowed	12.28m
Max Platform Capacity	250kg(Unrestricted) 480kg(Restricted)	Max Platform Capacity	250kg(Unrestricted) 480kg(Restricted)
Wheelbase	3810mm	Wheelbase	3810mm
Turning	radius(outside) 6810mm	Turning	radius(outside) 6810mm
Turning	radius(inside) 4310mm	Turning	radius(inside) 4310mm
Turntable rotation	360° continuously	Turntable rotation	360° continuously
Turntable tail swing	Axle retracted 1680mm Axle extended 1020mm	Turntable tail swing	Axle retracted 1680mm Axle extended 1020mm
Driving Speed(Stowed)	4.4km/h	Driving Speed(Stowed)	4.4km/h
Driving Speed(raised or extended)	1.1km/h	Driving Speed(raised or extended)	1.1km/h
Control	EPEC	Control	EPEC
Platform size (LxWxH)	2.44m×0.91m×1.1m	Platform size (LxWxH)	1.83m×0.91m×1.1m
Platform leveling	Automatic-leveling platform	Platform leveling	Automatic-leveling platform
Platform rotation	160°	Platform rotation	160°
Max Hydraulic pressure (drive function)	28MPa	Max Hydraulic pressure (drive function)	28MPa
System voltage	24V	System voltage	24V
Tire size	1092mm×382mm	Tire size	1092mm×382mm
Grade ability(stowed)	40%	Grade ability(stowed)	40%
Ground clearance	300mm	Ground clearance	300mm
Fuel tank capacity	200L	Fuel tank capacity	200L
Weight	4WD-20600kg	Weight	4WD-20900kg