MULTIFUNCTIONAL WHEEL LOADER
GG940 USER MANUAL

FOREWORD

Thank you for choosing the multifunctional machine from the "Günter Grossmann" brand. To ensure proper operation and maintenance of the machine, we have prepared this manual.

This manual has been created by "Günter Grossmann Polska Sp. z o.o." (hereinafter also referred to as the manufacturer).

This manual applies to the GG940 multifunctional machine.

This manual is intended to assist the user in the safe and efficient operation of the machine. When reselling or renting the machine, the manual must be provided at the same time.

This manual contains information, instructions, and everything deemed necessary to understand, properly use, and routinely maintain the GG940 multifunctional machine.

The contents of the following sections do not constitute a complete description of the various components or a detailed explanation of their operation. The user will find what is considered helpful for proper maintenance of the machine and safe working conditions. The machine's operation and service life depend on adherence to the instructions contained in this manual.

The user manual is a fundamental tool for the operator to carry out various tasks, such as:

- Transporting or relocating the machine
- Operating the machine
- Maintaining the machine

SECTION 1

Safe Operating Instructions and Precautionary Measures

FOREWORD

Read this manual carefully, especially the parts related to safety rules should be read with the utmost attention. The buyer will train the worker in the proper use and periodic maintenance of the machine. Familiarize yourself with the safety devices of operators and precautions in case of general accidents.

Picture. 1.1

ATTENTION

Pay attention to the triangular symbol, it indicates some danger, see figure 1.1

WARNING

It is strictly prohibited to use the machine or any attachments before reading and fully understanding this manual.

- The manufacturer assumes no responsibility for any damage resulting from failure to follow or lack of knowledge of the instructions contained in this manual.
- The manufacturer is not liable for any potential damage caused by misinterpretation of this manual.
- The user manual is an essential part of the machine and must be kept with it at all times.
- The manual should be stored in a safe and easily accessible location on the machine.
- Throughout the entire period of use, the user must keep the manual in good condition and accept any updates to it.
- In case the manual is lost or damaged, the user should request a replacement copy from the manufacturer.
- Due to the manufacturer's continuous improvements and development, the specifications and performance of your machine may differ from those described in this manual.

SAFETY STANDARDS

SAFETY RULES

1. The machine must be operated by a qualified or authorized person. It is strictly prohibited to allow operation of the machine by an inexperienced person or anyone in a poor mental state.
2. All safety rules and precautionary measures must be followed during the operation or maintenance of the machine.

1. Transporting people is strictly prohibited. It is also forbidden to use the boom to lift people or objects. Do not stand under the boom when it is raised.
2. The operator must have a clear field of view from the seat; if visibility is insufficient, lights should be turned on.
3. Regularly clean the control panel, joysticks, steering wheel, operator's seat, etc., to avoid difficulties during operation. Do not get on or off the machine while it is running.
4. All tasks must be performed while seated in the operator's seat. Always keep your head, hands, torso, and feet inside the cabin to minimize the risk of injury.
5. Do not leave the engine running in enclosed spaces. Exhaust gases are harmful and can be fatal.
6. Do not get on or off the machine while the engine is running. Turn off the engine after dismounting.
7. Keep labels and instructions for all used products. In case of ingestion of fuel, insecticide, or chemicals, immediately contact the emergency center and have the relevant labels and instructions ready.
8. Replace the engine exhaust pipe if it is worn or excessively noisy.
9. Comply with regulations in the country where the machine is used regarding the use and disposal of products used for cleaning and maintenance.
10. Selected attachments may cause different loads on the telescopic arm and bucket. It is strictly forbidden to exceed the maximum load capacity specified in this manual.
11. Attachments used may affect road holding, braking, and steering.
12. Use only manufacturer-authorized sockets and attachments.
13. Always travel with the load in a horizontal position.
14. Cleaning, lubricating, or maintenance are prohibited while the machine is in operation; if necessary, these activities must be performed after stopping the machine, turning off the engine, and removing the ignition key.
15. Avoid touching moving parts of the machine.
16. If the machine is believed to be unsafe, seek intervention from qualified personnel.
17. Operate the machine on stable ground; exercise particular caution on slopes, wet, or slippery terrain.
18. When working near electrical lines, maintain a safe distance from the machine.
19. Keep your operating area under control and stay away from people and animals.
20. Battery acids are extremely dangerous. Use gloves and protective eye masks.

1. The user manual must be legible, memorized, and kept at all times—both during resale and until the machine is dismantled. In case the manual is lost or damaged, a copy should be requested immediately from the manufacturer.
2. Before starting the machine, fasten the seat belt and close the doors.

KEEP THE FIRE ALARM ACTIVE

1. Paliwo lub olej Fuel or engine oil can ignite when exposed to open flames; fuel is extremely flammable. Keep fuel or any other flammable liquids away from open flames.
2. Oil tanks, pipelines, or other flammable parts may wear out or become damaged, so smoking or lighting fires near these parts is strictly prohibited.
3. Turn off the engine before adding oil.
4. When storing or refueling with fuel or other oils, do so in a well-ventilated area.
5. If the machine is not equipped with a fire extinguisher, one must be placed in a clearly visible location inside the cabin. Ensure the extinguisher is full and the instructions are clear.
6. Fuel and all lubricants are flammable; therefore, welding on fuel or lubricant pipelines is strictly forbidden.
7. Fuels and lubricants can be flammable, explosive, and toxic; store them in their original containers out of reach of unqualified personnel.
8. If hot parts of the machine come into contact with any solid body, liquid, or gas, they may cause fire, burns, deformation, or explosion; therefore, take appropriate precautions.

GET IN/OUT OF THE MACHINE

1. Do not jump on or off the machine while it is running. Use the handholds and steps to get on the machine; do not grab any joysticks while climbing aboard.
2. Keep the machine and steps free of dust and oil stains.
3. Check fasteners daily, tighten any loose ones, and replace broken ones.
4. Do not keep any loose objects in the cabin, as they may catch on the control lever and cause serious accidents.

Picutre 1.2.4

5. Before getting off the machine, lower the boom, engage the parking brake, turn off the engine, and remove the ignition key.

LEAVE THE MACHINE

1. Before leaving the machine, retract the telescopic arm, lower the working arm, and place the attachment on the ground.
2. Turn off the engine, secure all relevant parts, and remove the keys.

HIGH TEMPERATURE PRECAUTIONS

1. Po długim czasie pracy, g After prolonged operation, when it is necessary to change the engine oil, hydraulic oil, and filters, first lower the machine's temperature to avoid injuries caused by hot oil or high pressure.
2. To prevent hot oil or water from spilling, turn off the engine, allow the oil and water to cool down, then gradually loosen the cap to release pressure, and finally open the cap. (To assess the actual water temperature, you can bring your hands close to the radiator and feel the air temperature, but do not place your hands directly on the radiator.)

Picture.1.2.5

3. Do not touch any heating parts after several hours of operation.

AVOID THE HAZARD OF EXTRUSION

1. Standing under the working arm is strictly prohibited.
2. Do not allow any part of your body to be caught between moving parts to avoid injury.
3. Repairs are not permitted while the machine is in operation.
4. If lifting the boom is necessary during repairs, use the cylinder support rod to secure the raised boom; otherwise, the boom may suddenly fall and cause serious accidents.

Picture. 1.2.6

SAFE TRAVELER

1. Do not remove the keys while the machine is running.
2. Sudden starts, stops, or turns are dangerous; avoid moving too fast and driving in a "Z" pattern.
3. If anything unusual occurs (e.g., noise, vibrations, smell, or abnormal readings), immediately move the machine to a safe place and inspect it.
4. Do not use any control levers while driving; if necessary, engage them slowly.
5. When traveling over uneven terrain, use low speed and avoid turning.
6. Try to avoid passing obstacles; if necessary, lower the working arm close to the ground and use low speed. The machine's tilt should not exceed 5°.

1. Exercise extreme caution when driving on slopes to avoid tipping over or slipping.
2. Keep buckets (or other attachments) 20-30 cm above the ground; if an emergency occurs, lower them and stop the machine.
3. Avoid turning or traveling sideways on slopes; this should only be done on smooth surfaces.
4. If the engine has been turned off on a slope, use the emergency brake, and the working arm should be lowered.
5. If the machine cannot move on muddy or soft ground, try increasing the accelerator gradually by slowly releasing the drive pedal and reducing speed.

SAFE TRANSPORT

1. The multifunctional GG940 machine can be transported by truck or similar trailers. Before loading, ensure that your transport vehicle has the appropriate load capacity. The platform onto which the machine is loaded must be flat to prevent movement.
2. The machine can be loaded or unloaded using suitable loading ramps. Make sure the ramps are strong enough and, if necessary, reinforce them with blocks. Move slowly on the ramps and keep the machine centered on the platform. The ramp angle must not exceed 10°.
3. The machine is equipped with hydrostatic traction and cannot move when the engine is turned off.
4. **Therefore, it must be positioned properly**
    1. Po załadowaniu maszyny After loading the machine, prevent any possible movement by using a joint locking rod (see Figure 1.2.8).
    2. Loading and unloading must take place on level ground and at a safe distance from ditches and road edges.
    3. After loading the machine, secure it by placing wheel chocks and engaging the handbrake.
    4. Immobilize the machine using ropes and chains anchored to designated tie-down points (two at the front and two at the rear).
    5. After transport, it is recommended to check that the machine's position does not pose a hazard before removing the ROPS, wheel chocks, and unloading the machine.

Picture. 1.2.8

SECTION 2
CHARACTERISTICS AND TECHNICAL SPECIFICATIONS

FOREWORD

WARNING

Failure to comply with the instructions in this manual, improper operation or misuse of the machine, as well as work performed by unauthorized personnel, will void the warranty.

The manufacturer disclaims all liability for direct and indirect damages resulting from the aforementioned points.

For repairs and inspections involving work of a specific complexity (engine, hydraulic system), please contact an authorized Service Center with specialized personnel or the manufacturer directly, who is available to provide prompt and accurate technical support to restore the machine to full working condition.

WARRANTY CONDITIONS

1. For a new machine, the manufacturer provides a warranty for a period of 12 months from the date of purchase or 200 operating hours, whichever occurs first.
2. The warranty covers free repair or replacement of parts deemed defective in origin by the manufacturer's technical department.
3. Repair or replacement of parts must be completed within the warranty period.
4. The warranty is valid provided that all conditions specified in the agreement have been met.

WARRANTY EXCLUSIONS

1. Electrical and electronic parts, as well as all parts subject to normal wear and tear, are not covered by the warranty. Transport to/from the workshop, machine downtime, and any resulting damages, along with all costs of transport, labor, and storage, are also excluded from the warranty.
2. The warranty becomes void:
    - If an accident occurs due to the operator's fault;
    - If the damage was caused by insufficient maintenance;
    - If the machine experiences vibrations or damage resulting from unauthorized user work or installation of non-original parts;
    - If operation is not carried out according to the instructions contained in this manual.

- In exceptional events.

1. Damages caused by negligence or improper use of the machine are not covered by the warranty

WARNING

2. Removal of safety devices will void the warranty and release the manufacturer from any liability.
3. The listed parts are not covered by the warranty.
4. The machine or its parts, even if returned under warranty, will be shipped on an EXW (Ex Works) basis.
5. Other warranty exclusions include:

- Tires;
- Tires and rims;
- Brakes;
- Undercarriage;
- Undercarriage parts more prone to damage;
- Muffler;
- Battery;
- Buttons and joysticks;
- Seat;
- Steering wheel;
- Cylinder seals;
- All accessories.

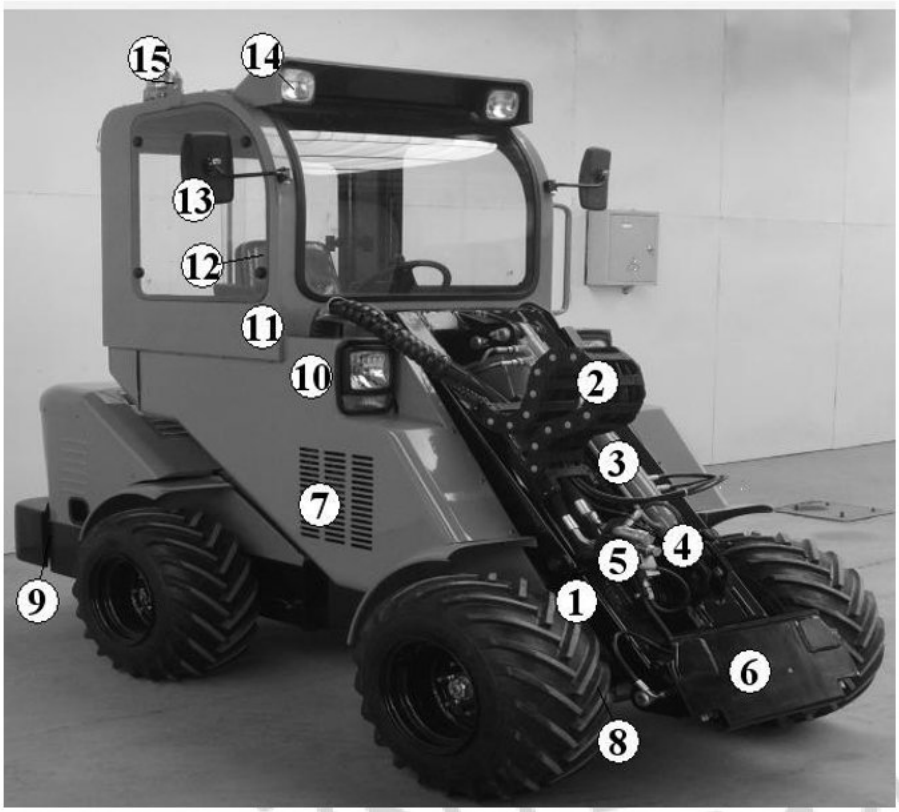
MACHINE IDENTIFICATION

1. Check that the machine is complete and intact upon receipt.
2. Any claims must be submitted in writing within 8 (eight) days of receipt.
3. Each machine has an identification plate. The machine's identification Date must be copied onto theback cover of the manual and provided every time spare parts or service work are requested.

The machine is delivered with:

- an operating manual;
- an engine operation and maintenance manual;

DESCRIPTION



Picture 2.3.1 A

1. **Lifting arm** — allows lifting and lowering of the equipment mounted on the mounting plate.
2. **Hydraulic circuit** — the hydraulic system controlling the machine's movements.
3. **Hydraulic cylinder** — controls the movement of the lifting arm.
4. **12V power supply** — provides electrical power to electrical components.
5. **Hydraulic outlet** — point of hydraulic fluid discharge.
6. **Interchangeable mounting plate** — allows mounting of different attachments.
7. **Air intake grille** — provides airflow to the engine or cooling system.
8. **Front chassis** — includes the operator's seat and telescopic arm.
9. **Rear chassis** — connected to the front chassis by a joint, contains the main engine, hydraulic pumps, oil and fuel tanks, battery, and rear wheels.
10. **Front road lights** — lighting for driving on roads.
11. Cab with ROPS structure — protects the operator in case of machine rollover.
12. **Driver's seat** — the proper position from which to operate the machine and use all controls.
13. **Rear reflector lights** — increase the machine's visibility from behind.
14. **Front work lights** — illuminate the work area in front of the machine.
15. **Rotating beacon** — signals the presence of the machine for safety.

Picture 2.3.1 B

16. Enclosed cabin (*Not applicable to all models).
17. Rear steering, rear light.
18. Fuel filler cap.
19. Rear cover.
20. Engine radiator.
21. Counterweight (92 kg / PC * 2 pieces). After removing the counterweight, it is possible to mount a 3-point hitch system (optional) for attaching equipment to the rear of the machine, combined with the corresponding rear hydraulic outlet.
22. Articulation: The steering joint connects the front and rear frames. The machine is hydraulically controlled by four hydraulic motors located in each independent wheel.
23. Rear hydraulic outlet (*Not applicable to all models).
24. Reverse light.

DESCRIPTION AND USE OF THE MACHINE

The multifunctional machine GG940 is CE marked. It is intended that the machine described in this manual will be operated by a single operator from the driver's seat. The machine's design consists of a front and rear frame connected by a central articulation joint. The machine features four independent drive wheels, making it especially powerful and stable.

If you need more translations or help, just let me know!

On the front frame, there is a lifting arm mounted with a pin, a removable mounting plate, hydraulic outlets, and a 12V power supply for equipment with electrical controls.

The diesel engine, located at the rear, drives the pump which, through the hydraulic circuit, enables all machine functions and transmits movement.
The use of innovative materials and high-quality solutions allows for the full utilization of the machine's capabilities.

The machine is intended for use in agriculture, green areas, horticulture, and gardening.

If you want me to help with anything else, just say!

DANGER

The machine is intended for professional use, and the operator must be qualified and able to read and understand the contents of this manual. Furthermore, the machine must be operated in accordance with current accident prevention regulations, usage conditions, and the characteristics of this machine.
The multifunctional GG940 machine described in this manual is designed to work on cultivated fields, green areas, construction sites, and roadworks.
Use of the machine on public roads is strictly prohibited unless it has type approval certifying compliance with regulations applicable in the country of use.
The GG940 multifunctional machine must not be used as a means of transport and/or towing, nor with non-original equipment.

DANGER

Używanie maszyny jest The use of the machine is prohibited in environments where flammable or explosive gas vapors may be present.
The user must verify that the equipment can be properly attached to the machine and that it complies with applicable regulations.

DANGER

Any other use not specified in this manual releases the manufacturer from any liability for damages caused to people, animals, or property.

INTERCHANGEABLE EQUIPMENT

Suitable interchangeable equipment can be mounted on the machine's quick-attach plate. For recommended interchangeable equipment, please contact your local dealer.

WARNING

The manufacturer is available to provide further clarification and to assist with the installation of additional equipment.

DANGER

Each attachment is subject to its own product standards. The tipping moment generated by the equipment installed on the machine must be lower than the moment produced by the loads indicated in the table. The weight of the equipment installed on the machine should be considered as the applied tool.

NOISE RISK

Noise level (antenna level) was detected when the machine is running. Here are the levels:

VERSION GG940

- Sound pressure level in driver's seat LpA ..... dB 86
- Sound power level LwA.....Db104

VERSION GG940

- Sound pressure level in driver's seat LpA ..... dB 86
- Sound power level LwA.....dB104

WARNING

The level indicates that the machine produces a high volume. It is mandatory to use soundproof protective tools during operation to avoid damage to the auditory system.

LOAD CHARTS

The tipping load is limited by the machine's tipping capacity. The load charts shown in Figure 2.4.3 illustrate the load inclination and maximum lifting capacity at various boom positions and distances from the machine.

The load charts refer to the machine in a stationary position, placed on a solid and flat surface, with a 90 kg operator seated in the driver's seat.

Any shift in the load's center of gravity will result in a change in the machine's lifting capacity.

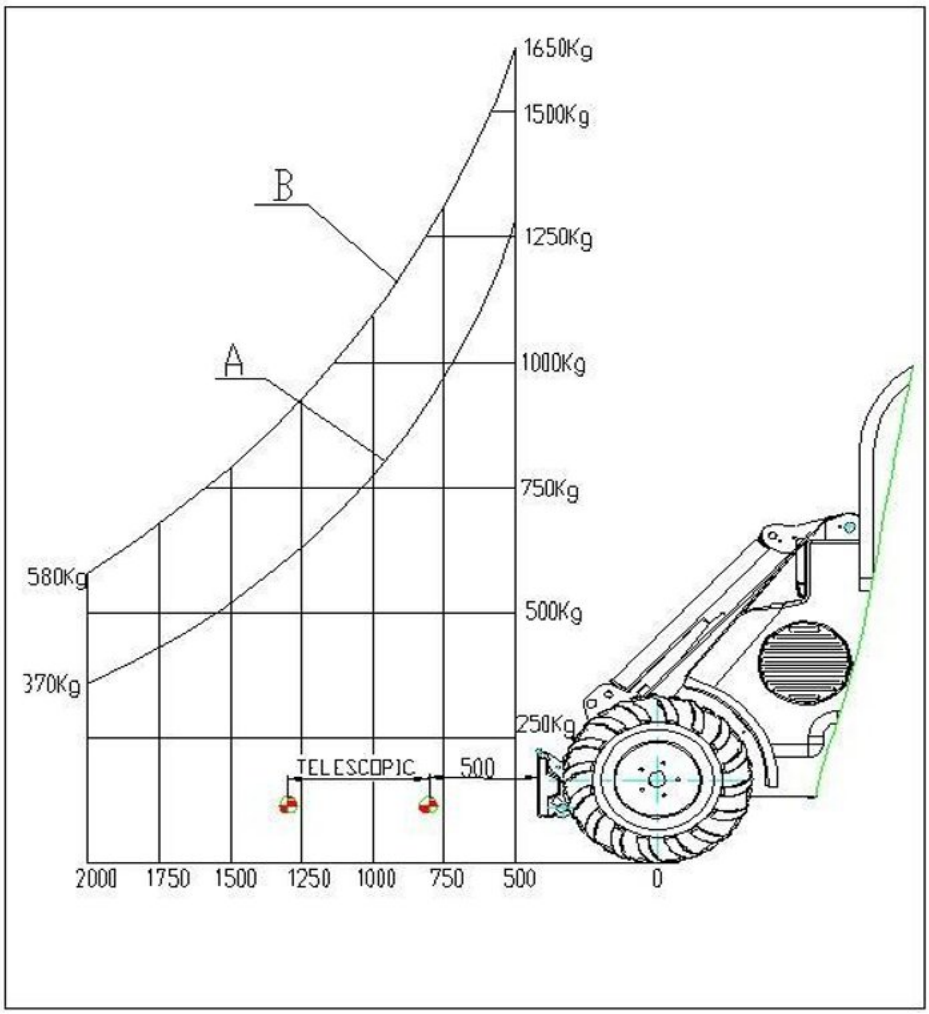
The specified lifting capacity includes the weight of the attached accessory; therefore, the net lifting capacity is determined by the value shown in the chart minus the weight of the accessory.

In the diagram, the load's center of gravity is positioned 400 mm from the mounting coupling plate, in accordance with ISO 14397-1 standards. When the boom is moved, the center of gravity shifts from its original position, and as a result, the machine's lifting capacity changes.

As shown in Figure 2.4.3, the machine is in the position of maximum articulation. Although the centerlines of the front and rear frames are not aligned, the lifting capacity is accordingly reduced.

Curve A in the diagram indicates the machine's rated load capacity at various distances from the center of the load to the front wheel when the machine is in its maximum articulation position.

Curve B in the diagram indicates the corresponding tipping load at various distances from the center of the load to the front wheel.

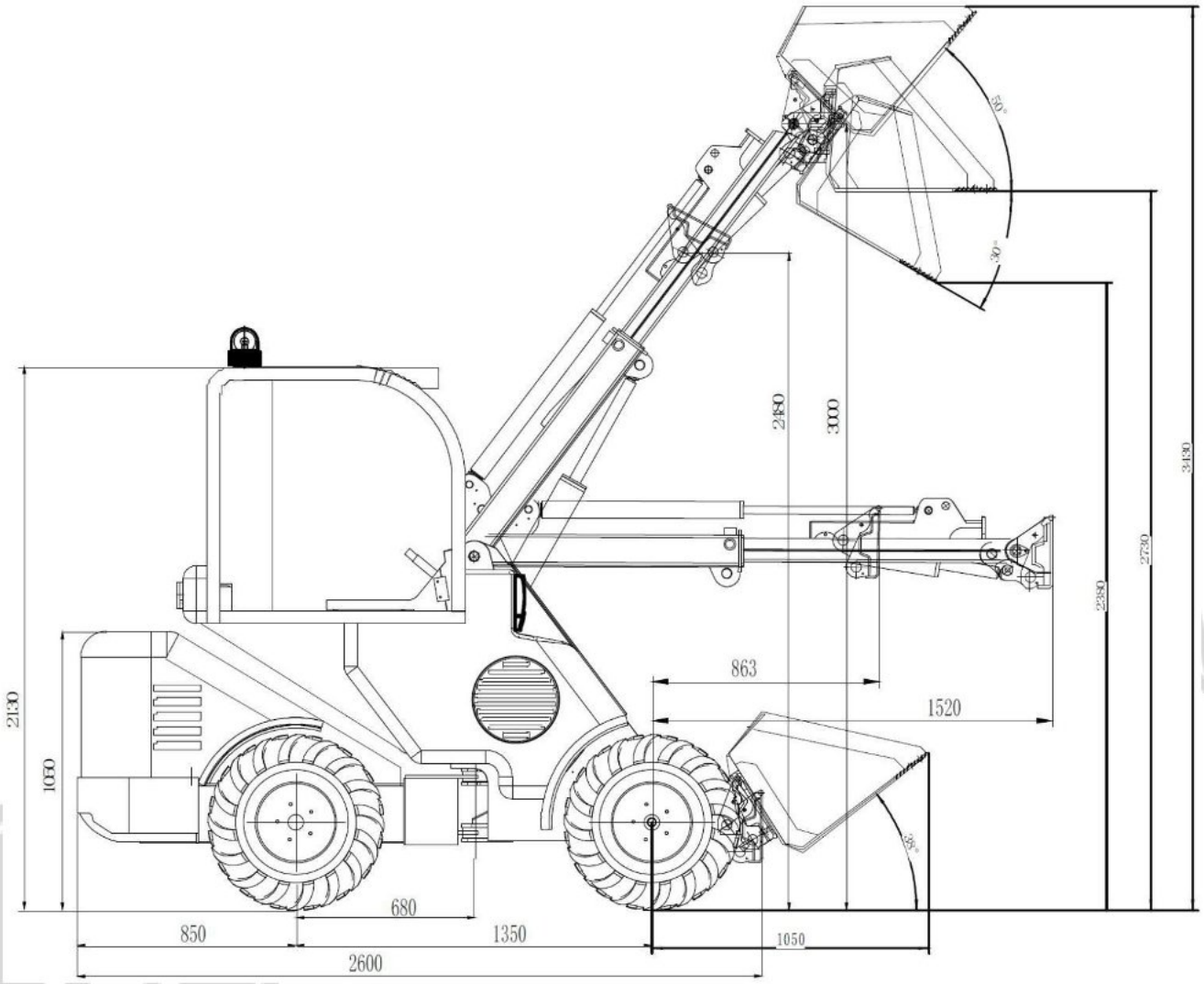


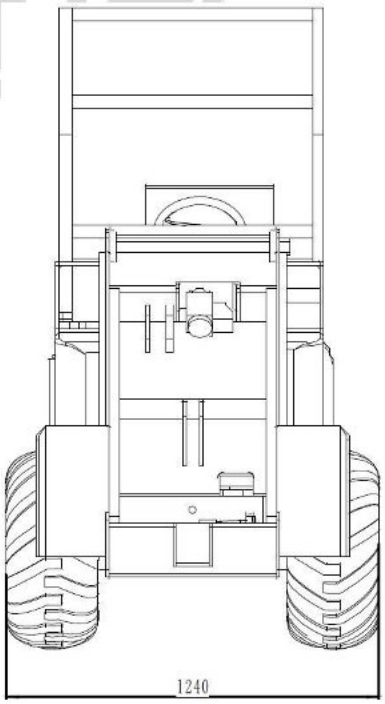
Picture 2.4.3

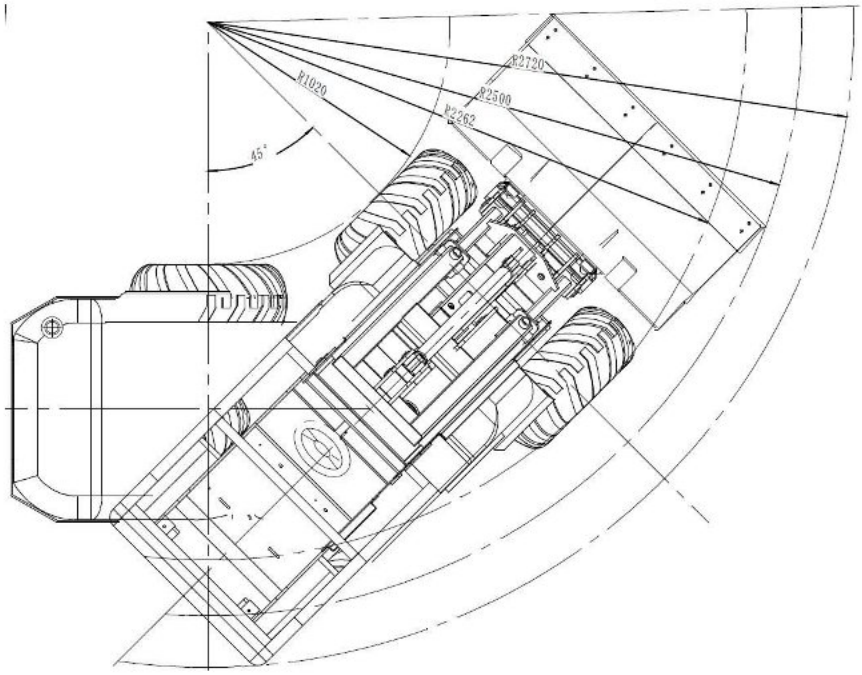
Specification

Model	GG940
Max. Reach (boom extended)	3000mm
Max. Reach (boom retracted)	2480mm
Min. Turning Radius	2480mm
Steering Angle	45°
Rated Load Capacity	850kg
Max. Lifting Height to Pin	3000mm
Travel Speed	10km/H
Transmission	4WD
Weight	1860kg
Standard Tire	26X12-12
Tire Pressure	2.8Bar
Oil Tank Capacity	40L
Hydraulic Pressure	190bar
Working Oil Flow	67L/min (Twin Pumps)
Oil Flow Tracking	78L/min
Oil Model (mineral oil)	L-HL46
Fuel Tank Capacity	23L
Battery Capacity	60Ah
Voltage	12V

DIMENSIONS







Picture 2.5.2

SECTION 3

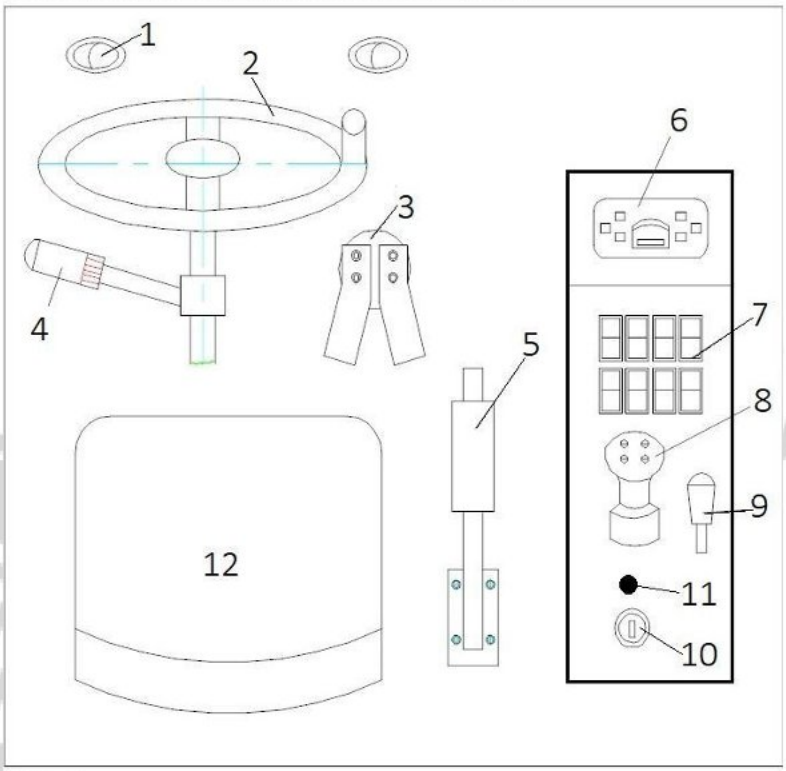
USE OF THE MACHINE

WARNING

Before starting the machine, check that everything is in order, that the safety devices and hood are installed and that all parts subject to wear and tear are fully functional.

COMMANDS AND CONTROLS

Diagram for different commands and control devices as below:



1. Warm air
2. Steering wheel
3. Forward / Reverse pedal
4. Combination switch
5. Parking brake handle
6. Instrument display
7. Rocker Switch
8. Joystick (Steering Lever)
9. Throttle Lever
10. Ignition Key
11. Engine Start Button
12. Driver's Seat

Functions of various controls and operating devices, as follows:

WARM AIR (*Closed cabin required, not applicable to all models)
When warm air is needed in winter, first open the warm air vent (Picture A), then turn on the warm air switch (Picture B).

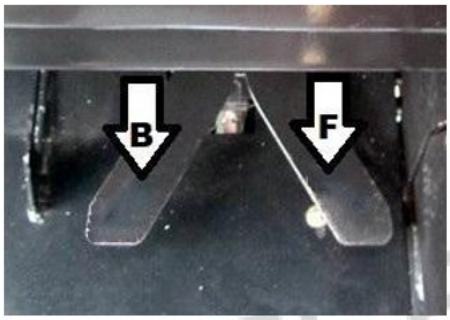
Picture A

Picture B

STEERING WHEEL

Turn the steering wheel to steer the machine to the right or to the left.

FORWARD/REVERSE PEDAL



Picture. 3.1.3

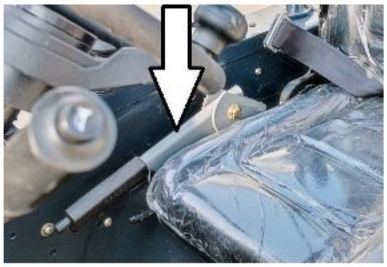
Press the right pedal indicated by arrow F, and the machine moves forward; press the left pedal indicated by arrow B, and the machine moves backward.

COMBINED SWITCH

Picture 3.1.4

Combined switch can control left/right turning, horn, wipers, and signal light adjustment.

PARKING BRAKE LEVER

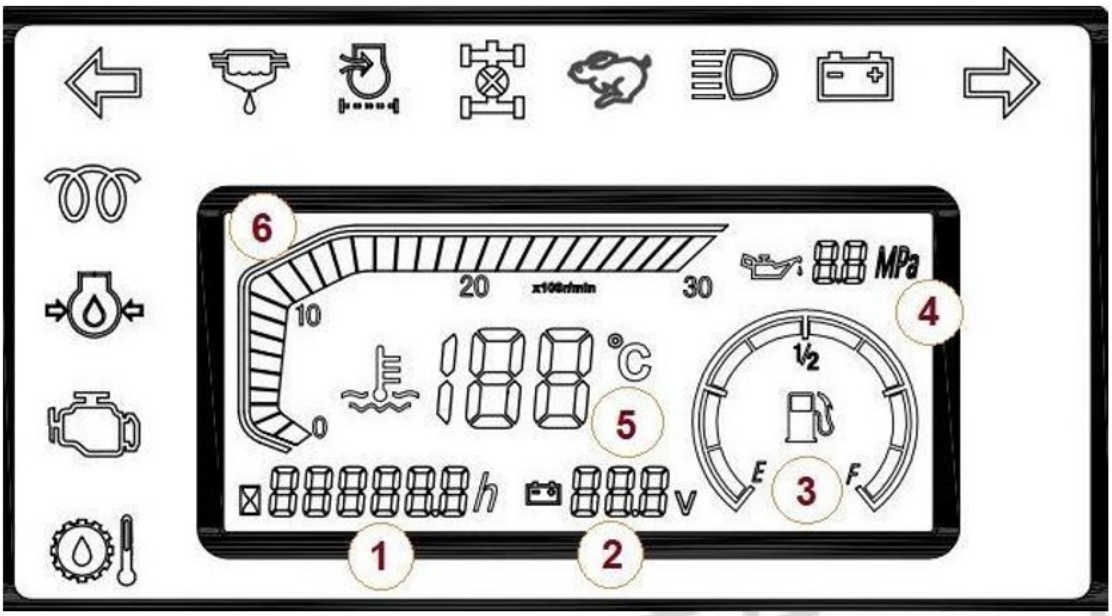


Picture 3.1.5

When the machine is stopped, pull the lever upward to engage the brake on the rear wheels, preventing them from turning. When the machine is moving, push the lever downward to release the brake.

DISPLAY PANEL (INSTRUMENT CLUSTER)

On the following picture, there is an instrument display, the meaning of each label is as follows::



Picture 3.1.6

Sign	Instructions	Sign	Instructions
	Turn left		Turn right
	Oil and water separator*		Oil contamination alarm*
	Anti-slip		High/low speed*
	High beams		Battery charging
	Preheating		Engine oil pressure warning
	Engine failure*		Water temperature warning
1	Hour meter / engine fault code	**2**	Voltage
3	Fuel level	**4**	Engine oil pressure
5	Water temperature	**6**	Engine speed

*** Not for all models.**

ROCKER SWITCH

The image below shows the rocker switch. The function of each rocker switch is as follows:

Picture. 3.1.7

J1. **Lights:** Turn on this switch to activate the lighting system, and you can adjust the lights using the combined switch (Picture 3.1.4).

J2. Hazard lights switch.

J3. Rotating beacon light switch.

J4. Warm air switch (*Not for all models).

J5. Anti-slip switch.

J6. Hydraulic PTO (Power Take-Off) clutch switch. Turn on this switch to enable PTO flow via two pumps (only turn on this switch if the attachment has an engine).

J7. Electric output switch. This is an optional switch used when two-way electric output is required.

JOYSTICK

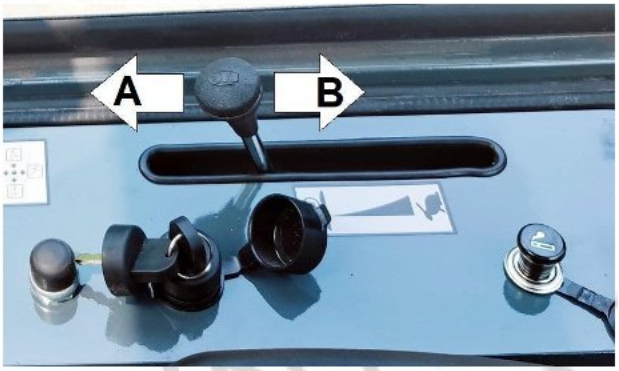
Picture. 3.1.8

1. Push the joystick forward to position <<A>>, the arm will lower.
2. Moving the joystick back to position <<B>>, the arm will lift up.
3. Move the joystick to the right <<C>>. Push the handle forward until the detent position engages the floating boom, and the mounting plate tilts downward.

4. Move the joystick to the left <<D>>, the mounting plate tilts upward.
5. Telescopic boom extension button (red button 1).
6. Telescopic boom retraction button (red button 2).
7. Hydraulic output (PTO, rocker switch 3): Push forward or backward to provide hydraulic oil flow from a single pump for attachments. If the attachment does not require hydraulic output, make sure this switch is in the middle position.

THROTTLE LEVER

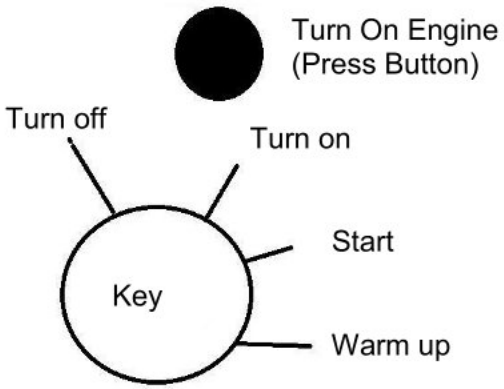
Pulling the lever up or down increases or decreases the engine speed range. When positioned at the front edge, the engine speed is at its minimum level.



Picture 3.1.9

IGNITION KEY AND ENGINE START BUTTON

Turning the key to the right switches on the power; turning it all the way to the right activates the preheating of the glow plugs and lights up the corresponding indicator. Then, press the engine start button to start the engine. Once the machine is running, release the button. To turn off the machine, turn the key to the left.



Picture. 3.1.10

DRIVER'S SEAT

The driver's seat can be adjusted longitudinally. Its firmness can also be adjusted to provide the best comfort according to the operator's weight. It is equipped with a foldable armrest and a seat belt.

BEFORE USE

WARNING

Familiarize yourself with the control devices and their functions.

- Ensure that all safety guards and covers are properly installed.

Before starting the machine:

- Check the battery condition. If necessary, try to charge or replace the battery.
- Check the engine oil level (see engine manual).
- Check the fuel level (see Picture 3.1.6 on the instrument display).
- Check the hydraulic oil level. The correct level should be around "4" on the oil level indicator.

WARNING: When using new attachments with cylinders or hydraulic motors, the hydraulic oil level may drop.

Picture. 3.2

TURNING ON THE MACHINE

Before starting the machine, fasten the seat belt and close the doors. Exercise caution when starting the machine for the first time; keep the engine at low RPM.

After all checks, start the machine by:

- Sitting in the driver's seat;
- Turning the ignition key to the right to activate the electrical power. Turning it further right activates the glow plug preheating (Picture 3.1.10);
- Pressing the cylindrical button to start the engine.
- After the engine starts, release the key and allow the engine to warm up;
- If the engine does not start, wait a few seconds and try again;
- The original antifreeze mixture allows the machine to operate down to -20°C;
- If the outside temperature is below 0°C and the heater is not powered by the antifreeze mixture, drain the water and refill the radiator with the appropriate antifreeze mixture;
- When the machine is not operating, the operator must remain seated in the driver's seat.

WARNING

BEFORE LEAVING THE MACHINE, THE OPERATOR MUST LOWER THE LIFTING ARM AND ATTACHED EQUIPMENT, STOP THE ENGINE, ENGAGE THE PARKING BRAKE, TURN OFF THE ENGINE, AND REMOVE THE IGNITION KEY.

SHUTTING DOWN THE MACHINE

To stop the machine:

- Ensure the ground where you intend to stop the machine is level;
- Move all control elements to neutral;
- Set the throttle lever to the low position (Picture 3.3), turn the ignition key to the off position, and remove it.

Never leave the machine while it is running.

- Engage the parking brake and stop the engine;

MOUNTING PLATE

The machine is designed to work with various attachments that can be installed on the front arm of the machine and attached to the mounting plate (Picture 3.5 A).

The hydraulic outlets (Picture 3.5 B) are located on the front arm. Upon request, they can be installed at the rear of the machine to connect other attachments.

The 12V electrical socket on the boom is ready for use.

The machine is equipped with coupling holes for additional attachments.

Picture. 3.5 A

Picture. 3.5 B

WARNING

Before attaching, detaching, or using the attachments, read the relevant operating instructions, set the accessory aside, and stop the engine.

Attachments must be properly secured.

To assemble the equipment, follow these steps:

- Drive the machine close to the equipment

Gradually approach the equipment, rotate the mounting plate, and align the two plates parallel;

Hook the two pins on the plate onto the two upper attachment points;

Slightly lift the arm by moving the joystick to position (B) and, using the PTO rocker switch and the corresponding button on the handle, ensure that both pins are locked;

Connect the hydraulic hoses to the designated quick couplers and follow the instructions provided in the attachment's manual;

WARNING

To disconnect or replace attachments, follow the "mounting instructions" in reverse order.
Do not leave the machine with the arm raised and loaded; lower the arm after unloading.

DO NOT OPERATE THE MACHINE ON UNEVEN OR SLOPED GROUND!

MEASUREMENT INDICATOR

The machine's clearance can be adjusted according to the user's needs by adding spacers to the front wheels and changing the tire type.

- Spacers of 1 cm (maximum 3 per wheel), allowing the machine width to increase up to 130 cm;
- Spacers of 55 mm (maximum 1 per wheel).

To change the clearance, follow these steps:

- Remove the wheels;
- Insert or remove the spacer washers;
- Reinstall the wheels and tighten them securely.

WARNING

The clearance adjustment must be done using the same type of spacers.

SECTION 4
MAINTENANCE

GENERAL INSTRUCTIONS

WARNING

- Maintenance and adjustment operations must be performed only when the machine is turned off.
- Before starting any operation, ensure the machine is on a flat surface and place wheel chocks to prevent any movement.
- Keep the machine clean, as this helps detect damaged parts.
- Clean the machine carefully, avoiding direct high-pressure water jets on the radiator, heat exchanger, and engine compartment.
- Before injecting grease into the grease fittings, clean them to prevent contamination of the grease by mud, dust, or foreign particles, which could worsen or prevent proper lubrication.
- Lubricate every lubrication point thoroughly.
- When refilling or replacing oil, always use the same type of recommended oil.

WARNING

IN CASE IT IS NECESSARY TO WORK WITH THE MACHINE'S ARM RAISED, TO ENSURE SAFE OPERATION, INSERT THE LOCK LOCATED ON THE REAR SEAT OF THE LIFT.

ENGINE

When it comes to engine maintenance, the instructions provided in the engine's user manual must be followed precisely.

Air Filter

Periodically clean the air filter.

- Remove the filter cap and take the filter out of its housing.
- Clean it using a dry air stream at a pressure up to 3 kg/cm², directing the airflow along the entire inner surface of the filter element until all dust is removed. If compressed air is not available, simply tap the filter element with your hand. If the filter element has oily spots, wash it with warm water and mild detergent; then rinse it with running water from the inside out (pressure up to 2.8 bar). Allow the filter element to drain and dry at ambient temperature.

Before reinstalling the filter, inspect the element's condition. If it is damaged or worn out, replace it. The element should be replaced after 5–6 cleanings, or in any case every 12 months or 200 operating hours.

COOLING CIRCULATION

Check the radiator fluid level weekly. The level should be slightly below the cap located under the hood.

The fluid is a mixture of water and coolant, suitable for temperatures down to -10°C. In emergencies, only water should be used to top up the mixture until it is possible to restore the original proportions of water and coolant.

Periodically check that the radiator fins are clean (clean with an air stream if necessary).

TIRES

Check the tire pressure and condition weekly. If the tires are worn or damaged, replace them.

Before inflating the tires, always inspect the rims and the external tire surface for any bruises, cuts, gouges, or other defects.

Never exceed the recommended pressure for each tire type, and always ensure that the pressure in the right and left tires is equal.

HYDRAULIC CIRCUIT

To check the hydraulic oil level, raise the loader arm.

WARNING

When the arm is raised, it is necessary to insert the safety lift cylinder lock into the lift cylinder to ensure safe operation.

1. Check the oil level weekly.
2. Change every 200 operating hours.
3. Place a container with absorbent material under the lower drain plug at the back of the tank, remove the plug, and let the contents drain out.

- Clean and reinstall the lower drain plug.
- Fill the tank with new oil.
- Run the engine for a few minutes, then turn it off and check the oil level; add oil if necessary.
- Screw in the upper drain plug.

Never start the engine with an empty tank.
For information about the type of oil to use, see the table: RECOMMENDED LUBRICANTS.

ELECTRICAL CIRCUIT

The machine has an electrical wiring diagram which should be checked before commencing any wiring work.

BATTERY

-Located in the right rear under the hood of the engine compartment.

-Periodicially check that the electrolyte level is 10-15 mm above the top of the plates (for batteries with maintenance). Otherwise, restore the level with distilled water.

-Never use acids that can damage the battery, but only use distilled water. Keep the battery dry and clean to avoid harmful dissipation of electrical energy.

-If the device is not used for a long time, place the battery in a dry place and charge it monthly.

WARNING

The battery contains acid. Avoid contact with skin, eyes, and clothing. In case of contact, rinse thoroughly with water.

If it gets into the eyes, rinse with plenty of water and seek first aid immediately.

When replacing the battery, ensure the terminals are correctly connected. Incorrect connection can cause serious damage to the electrical system.

- When repairing the electrical system, disconnect the batteries from the ignition key to interrupt the power flow.

Disconnect both the battery and the alternator when welding on the machine is necessary.

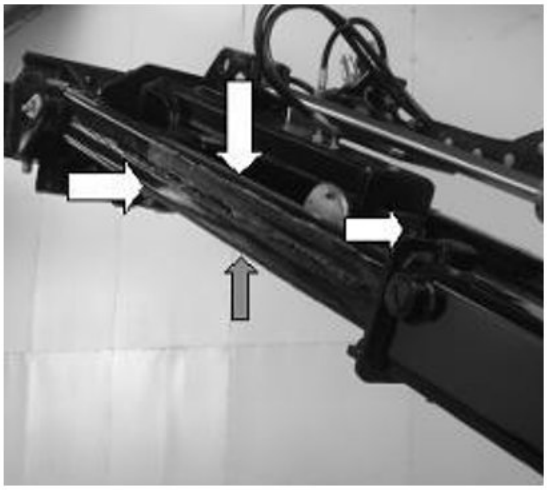
FUSES

The electrical circuit is protected by a series of fuses located under the driver's seat (Picture 4.7.2). In case of any fuse issues, check the electrical wiring.

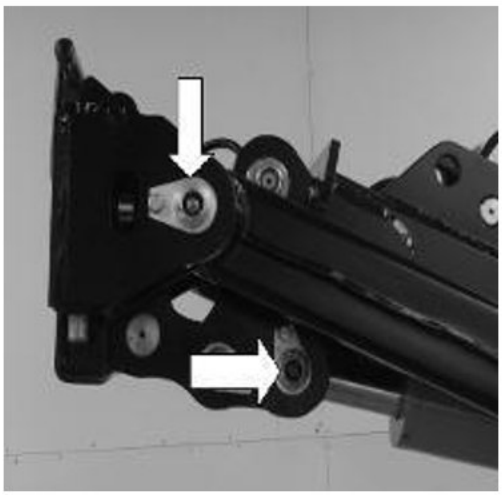
Picture. 4.7.2

1. LUBRICATION

The lubrication points are illustrated in the picture below.

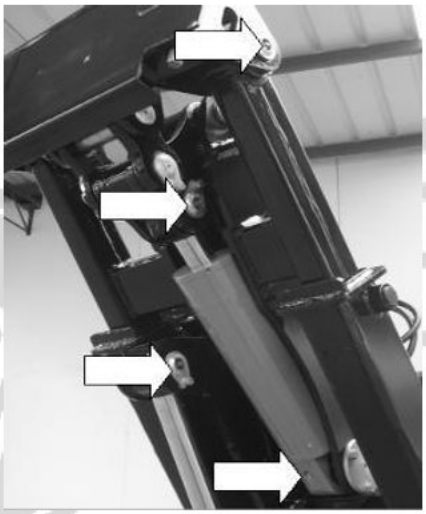


Picture 4.9.1 A

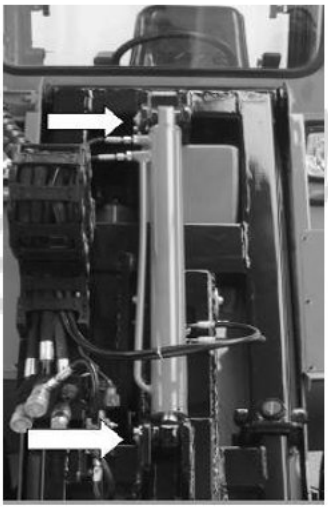


Picture 4.9.1 B

The lubrication points shown in Picture 4.9.1 A (contact points of the telescopic arm and blocks) and 4.9.1 B (mounting plate and tipping cylinder) should be lubricated weekly.



Picture 4.9.1 C



Picture 4.9.1 D

The lubrication points shown in Picture 4.9.1 C (pivot points of the cylinder) and 4.9.1 D (pivot points of the telescopic cylinder) should be lubricated once a week.

Picture 4.9.1 E

Pictureu 4.9.1 F

The lubrication points shown in Picture 4.9.1 E (pivot points of the auxiliary cylinder) and 4.9.1 F (chassis joint) should be lubricated weekly.

The lubrication points shown in Picture 4.9.1 G (wheel axles, a total of four) should be lubricated weekly.

Picture 4.9.1 G

RECOMMENDED LUBRICANTS

Cooling system: PAKELO RED ANTIFREEZE LONG LIFE;

Hydraulic systems: L-HV46 Anti-wear hydraulic oil;

WARNING: Choose a hydraulic oil with low condensation or without low condensation depending on the local air temperature conditions

PRESSURE TEST BINDING

On the machine, there are three connections for pressure tests, shown below:

Picture. 4.10

Pressure test connection 1: pressure of the following piston pump (usually 23 MPa).
Pressure test connection 2: pressure of the first gear pump (usually 18-20 MPa).
Pressure test connection 3: pressure of the second gear pump (usually 18-20 MPa).

Maintenance of the summary table

Elements	Daily	Weekly	Every 50 hours	Every 100 hours	Every 200 hours	Annually
Machine						
Clean the machine	O					
Check tires/tighten wheel nuts		X				
Check the battery		X				
Check the hydraulic oil level		X				
Replace the hydraulic oil filter			X		X	
Change the hydraulic oil					X	
Check the tightening of screws, wraps, etc.			X		X	
Check the pressure in the hydraulic system			O		X	X
Set the hydraulic system pressure			O		O	O
Lubricate joints, grease fittings	O	X				
Engine						
Check the engine oil level	X					
Change the engine oil					X	X
Clean the air filter		X			X	
Replace the air filter element					X	X
Replace the fuel filter						
Check belt tension				X		
Check coolant level		X				
Replace coolant						X
Clean the radiator		O				

X = Maintenance-related tasks

O = Only when necessary

For more information, please contact

the manufacturer's help center.

SECTION 5
Replaceable

Spare parts

Orders for spare parts must be placed with the supplier or directly with the manufacturer and must include the following information:

- Model, code, and serial number of the machine visible on the nameplate attached to each device.

Picture. 5.1

- Spare parts code number visible in the spare parts manual.
– Further description and quantity required.
– The transport of spare parts is at the customer's expense and risk.

Maintenance control 50 hours ***Note:*** Date:_____Labeling: _____	**Maintenance control** 250 hours ***Note:*** Date:_____Labeling: _____
Maintenance control 450 hours ***Note:*** Date:_____Labeling: _____	**Maintenance control** 650 hours ***Note:*** Date:_____Labeling: _____
Maintenance control 850 hours ***Note:*** Date:_____Labeling: _____	**Maintenance control** 1050 hours ***Note:*** Date:_____Labeling: _____
Maintenance control 1250 hours ***Note:*** Date:_____Labeling: _____	**Maintenance control** 1250 hours ***Note:*** Date:_____Labeling: _____