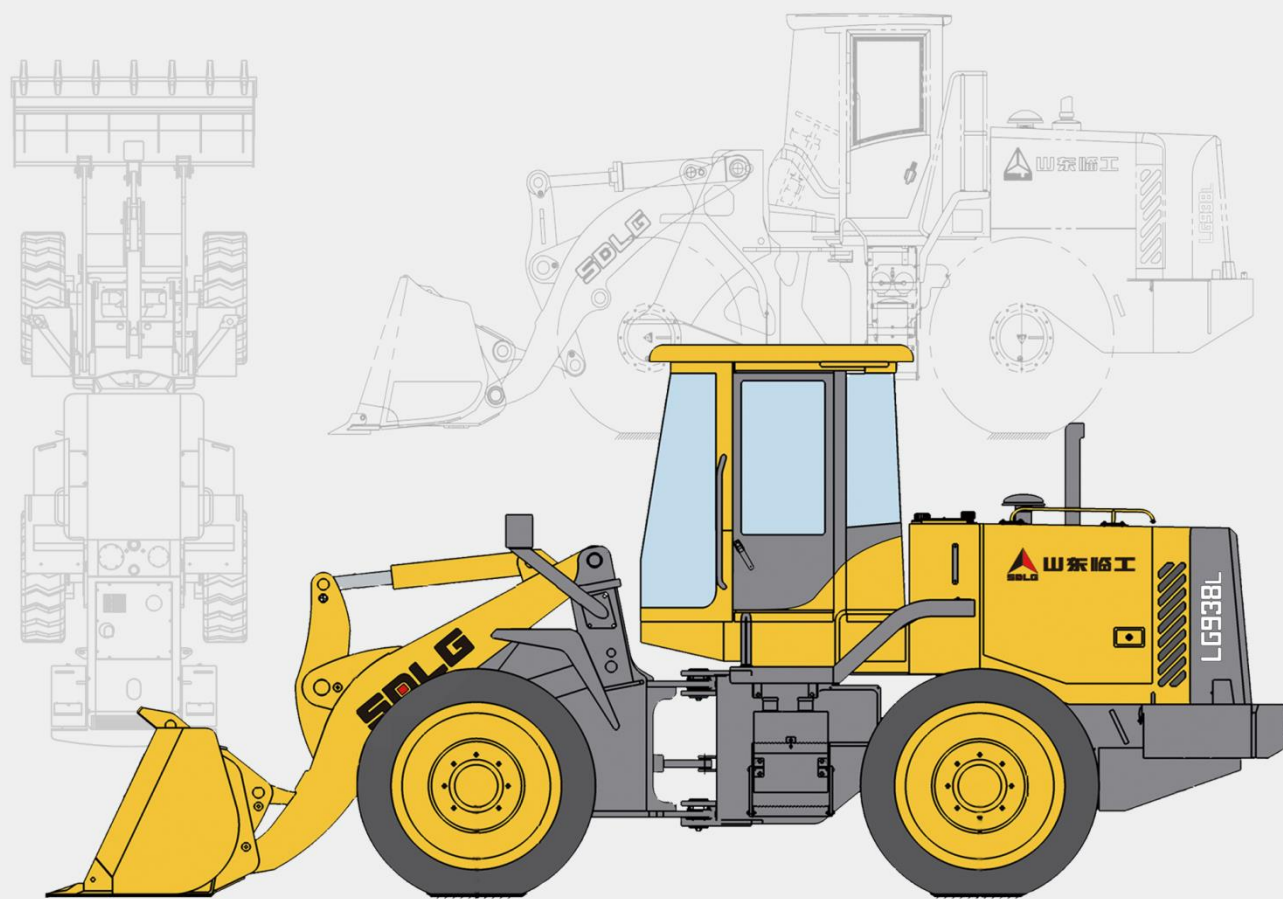




# SERVICE MANUAL

# LG938L



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# **Service Manual for LG938L Wheel Loader**

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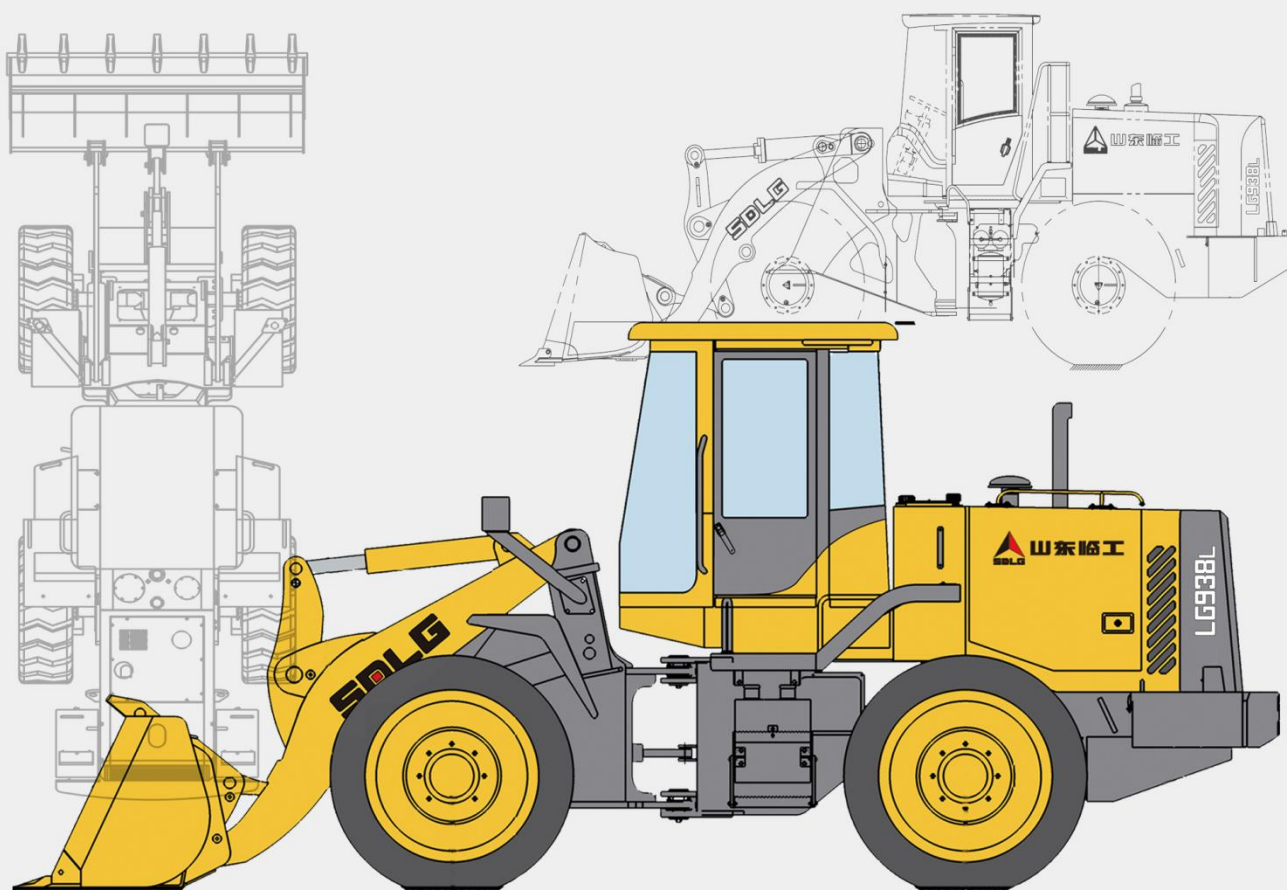
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# SERVICE MANUAL

# LG938L



Version:0001

Safety & Environment





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# Safety & Environment

## Preface

This booklet is a part of **Service Manual for LG936L Wheel Loader**. Please carefully read this part.

### **WARNING**

**Be sure to read “Safety” part in the manual before operating.**

### **Security Related to Everyone**

You should always comply with the instructions in **Operation and Maintenance Manual for LG936L Wheel Loader**.

SDLG is aimed at the design and manufacture of safety and efficient machines. However, if the operators do not carefully read the safety instructions, or do not comply with these provisions or use wrong tools for this operation, then our efforts will be wasted.

To keep the functions of machine safely and effectively, you must always use the appropriate spare parts designed for this loader (SDLG original authentic parts). If you use unauthorized spare parts, we will not be responsible for the damage of the loader, and also offer the free repair and compensation.

Staff should be with strong safety consciousness, and keep the loader well-maintained. In this way we

cannot only realize safety and efficiency, but also produce profit.

If the operators do not comply with safety instructions, and do not pay attention to warning instructions in this manual, they should ensure their methods of operation are safe and reliable. Otherwise, there is the risk of accidents, and even leading casualties.

### **Function Checking**

Please check the functions after safety-related electrical system operations are carried out, to ensure safety.

#### **Safety-related electrical systems**

Check the safety-related electrical system of the followings:

Parking brake

Service brake

Transmission box

Lifting function

Please refer to **Operation and Maintenance Manual for LG936L Wheel Loader** for details.

## Safety When Handling the Loader

Shandong Lingong Construction Machinery Co., Ltd. is responsible only for the following conditions:

- Properly use and maintain the loaders based on the instructions described in **Service Manual for LG936L Wheel loader** and **Operation and Maintenance Manual for LG936L Wheel Loader**.
- Carry out the required examinations and checking in specified interval.
- Comply with the provisions about lubrication of the machine in the manual.
- No security seal is opened by unauthorized persons.
- All maintenance and repair work is carried out by the way defined by SDLG.
- Only use original authentic parts, accessories and attachments required by SDLG.



### WARNING

**Operation personnel must fully understand and master the contents in *Operation and Maintenance Manual for LG936L Wheel Loader* before operating the machine.**

**It is essential that drivers should carefully read *Operation and Maintenance Manual for LG936L Wheel Loader* and follow its instructions.**

**Untrained personnel to drive the loader may cause serious injury or death.**

**Do not operate the loader if *Operation and Maintenance Manual for LG936L Wheel Loader***

is not in place.

**Be familiar with warning labels, symbols, and driving instructions on the machine before using it.**

## Several simple safety rules

- Resolve the safety problems and faults as soon as possible.
- Always wear protective items, such as helmet made of hard materials, safety glasses, gloves, boots, and security supplies for operation.
- When the engine is running, do not stand in front or rear of it.
- Ensure that the surface of the pedal, maintenance sites, handrails and anti-skidding parts are clean and without oil, diesel fuel, sludge and snow, etc., and ensure that if these parts are damaged or lost, timely replace and repair them.
- Check regularly whether all anti-skidding protection devices are secure. If not, firmly install or replace them.
- Always face the machine and use pedals and handrails when climbing on the machine. Always use the three-point contact, namely two hands and one foot, or two feet and one hand. Do not jump up and down!



Fig. 1 Entering/leaving the machine

Here are some important rules:

- Perform all safety inspection measures in **Operation and Maintenance Manual for LG936L Wheel Loader.**

## **WARNING**

**If you feel tired or influence of alcohol, drugs or affected by other drugs, do not**



Fig. 2 Read **Operation and Maintenance Manual for LG936L Wheel Loader** before operating the machine

## drive the machine.

- Before starting the engine, make sure there is adequate ventilation. The machine is equipped with diesel engine and the emission gas is harmful to your health. Therefore, do ensure adequate ventilation. If ventilation is insufficient, please avoid running the engine unless it is absolutely necessary.
- Before operation or maintenance on the machine, please read all signs and instructions as well as the contents in **Operation and Maintenance Manual for LG936L Wheel Loader**. Each sign contains information about safety, treatment and maintenance.
- Use the seat belt during operation.
- Always sit on the operator seat when starting the engine.
- Before the machine is used, make sure a ready for use, all functions should be intact and effective, and all the faults that may cause an accident should be ruled out.

## Seat belt

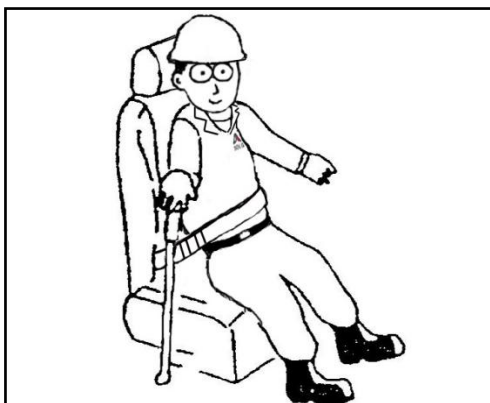


Fig. 3 Use the seat belt during operation

- If the seat belt is worn, or the seat belt has been subjected to force when the machine has an accident, then this seat belt should be replaced immediately.
- Modifications on seat belt and mounting parts are absolutely prohibited.
- Seat belt is designed for only one adult, and it cannot be used for a couple of people.
- When the belt is not in use, it should always be in rolled-up state.

### **When the engine is running**

- Pay attention to warning lights. For red one, apply immediate actions or pay special attention to it. Refer to the gauge part in **Operation and Maintenance Manual for LG936L Wheel Loader** for details.
- Before using the parking brake button, confirm attachment/attachment brackets have been placed on the ground.
- Be sure all the levers and handles are in the neutral position, and gear shifting handle is in the neutral position before leaving the machine.



### **WARNING**

#### **Risk of serious injury**

- Do not stand near the hinged part between the front and rear frame, unless it is already locked with a locking lever frame.
- Before driving it on the road, empty the bucket.
- When leaving the machine and nobody watches it, it should be parked on level ground, and put the working device down on the ground, turn off the engine and remove the key.

### **When rollover danger is involved**

For the cab with ROPS, if there is a risk of rollover, on the premise firmly fastened seat belt, and do grasp the wheel. Do not jump!

### **Cab emergency exits**

The cab has two emergency exits, namely, the door and the right window.

### **Safety Regulations for Maintenance**

This section includes the general safety rules about inspection and maintenance.



Other rules, information and warnings are offered in **Operation and Maintenance Manual for LG936L Wheel Loader**.

Incorrect maintenance may be very dangerous.

Before starting any maintenance work:

Make sure you have maintenance certificate, the correct information, the right tools and equipment in good condition to correctly perform maintenance work.

## ★ ATTENTION

**Before mastering the correct knowledge about correct repair techniques and how to carry out maintenance on the machine, you are prohibited doing anything on the loader.**

## General

- If there is someone else to take over your maintenance work, ensure the person to get detailed information on the progress of work, how much has been done, and how much needs to be done.
- When you use high pressure tap to wash the machine, do not aim the nozzle directly at the coated anti-skipping surface or the signs attached on the vehicle.

## ⚠ WARNING

**Step on special pedals when walking up and down the machine; refer to *Operation and Maintenance Manual for LG936L Wheel Loader*.**

- When working on the machine, do not wear loose cloth that may be stuck, in order to avoid personal injury.
- Always wear protective caps, goggles, gloves,



Fig. 4 Do not step on the engine hood

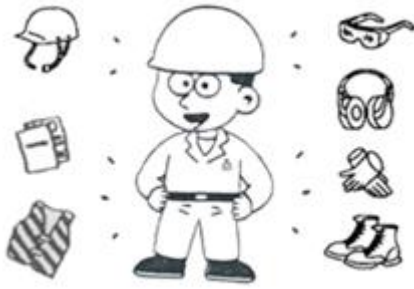


Fig. 5 Wear protective items

protective boots and other safety that your work needs.

- Always turn off the engine for maintenance unless the marking and signs of the vehicle or this manual have other instructions.
- Do not stand near the hinged frame, unless it is already locked with a locking lever frame.
- Before opening the engine cover, radiator tanks and similar parts, turn off the engine. Make sure that no tools or items that may cause damage left on the machine.
- When the engine is running and the machine is in operation, the engine cover should be kept closed.

## Maintenance Position 1

Stop the machine on a level and hard surface, as shown in the following figure:

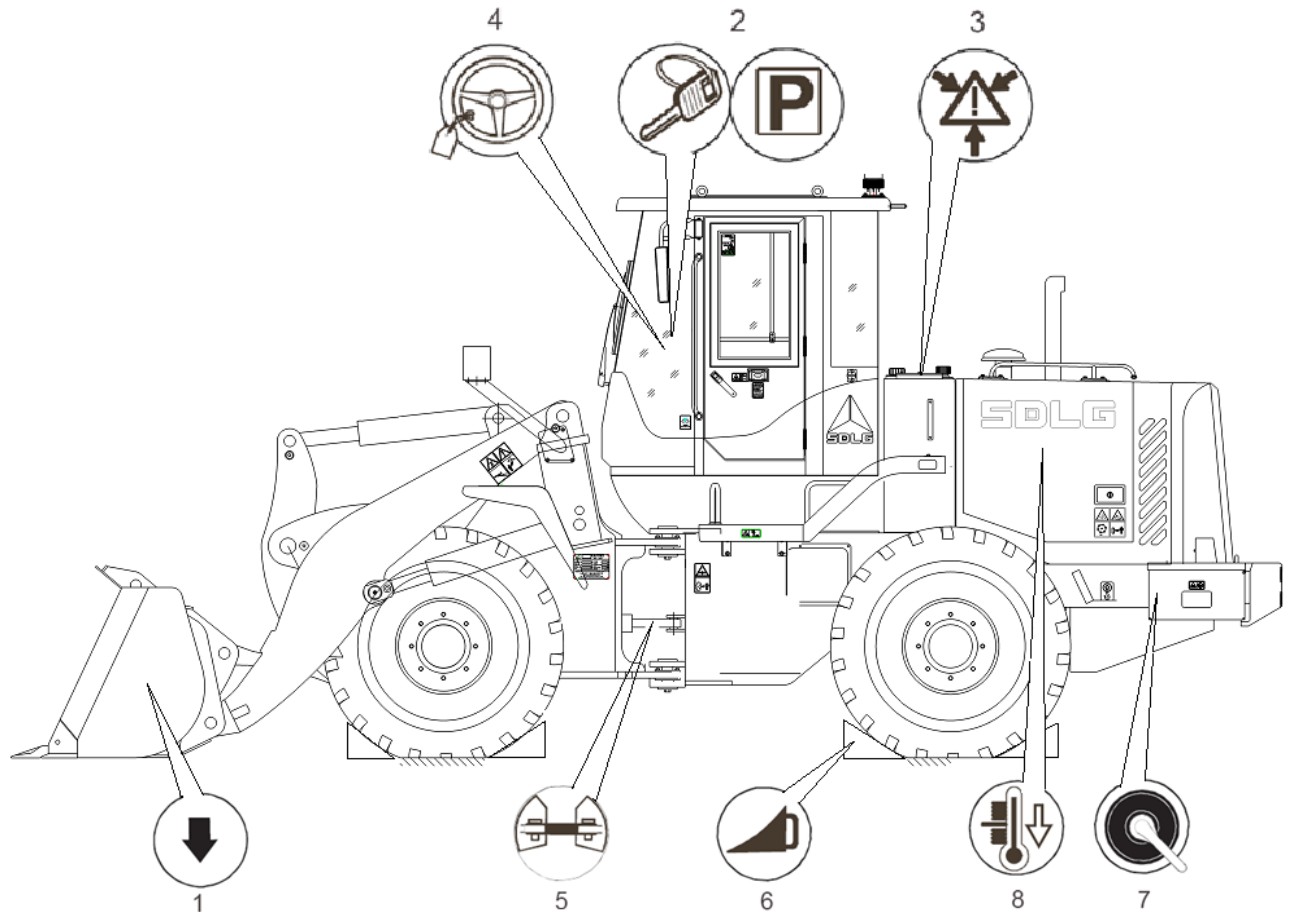


Fig.6 Maintenance position 1

1. Put attachments on the ground.
2. Turn off the engine and take down the ignition key.
3. Release the pressure in pressurized pipe and oil tank to prevent accidents.

### **WARNING**

**If the system pressure is not reduced before opening, oil will spray under high pressure, and may cause serious personal injury accidents.**

4. The steering wheel should be connected with yellow black warning flag (a red warning flag may be used in the United States).
5. Make sure the frame lock lever is connected.
6. Press the parking brake button, so that the vehicle is in the parking brake status and wedge the loader.
7. Battery cut-off switch is off.

8. Let the machine cool down.

## **WARNING**

**If you have to operate on the machine before it is cooled down, pay attention to hot liquid and components, in order to avoid burns.**

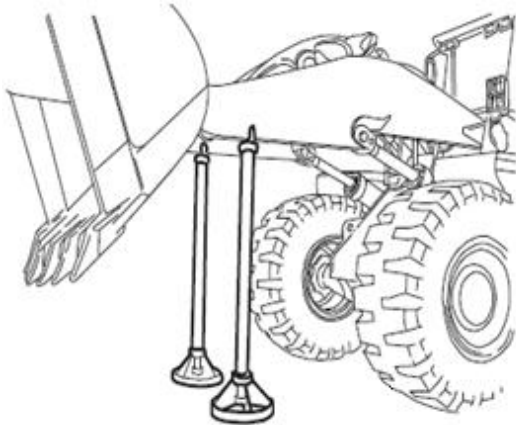


Fig. 7 Fix the boom firmly

## **Working under Elevated Boom**

Before starting operation, always use the support frame. Support frame must be mounted on a sturdy and flat surface.

## **WARNING**

**Pay attention to the exact location of the support under the boom.**

**If the support is placed too forward, it will be overwhelmed when the attachment fixator tilts forward.**

## **Fire Prevention Measures**

- Even if only the fire may happen, if circumstances permit, and remember your personal safety, you can take the following measures:
  - Start the machine, leaving the fire or hazardous sites.
  - Lower the lift arm to its lowest position, so that the attachments stay on the ground.
  - Turn the ignition key to turn off the engine.
  - Leave the cab.
  - Disconnect the battery switch.
  - Start to put out the fire, and call for the fire department when necessary.
- When fill the machine with oil, or when the fuel is exposed to air, the machine should not be

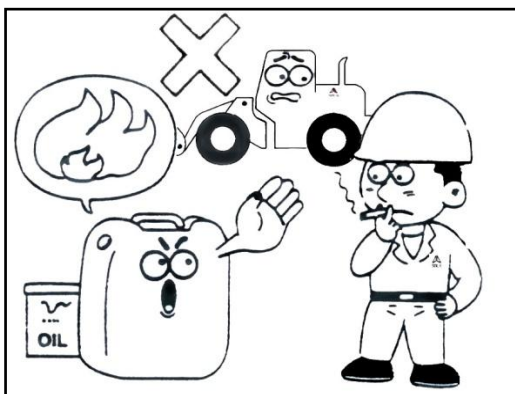


Fig. 8 When filling the fuel or the fuel is exposed to air, absolute prevention of fireworks is needed