

## EBERTH GG1-ER196-6,5-19,5E

# EBERTH 6.5 HP Gasoline Engine Instruction Manual

Model: GG1-ER196-6,5-19,5E

## 1. INTRODUCTION

---

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your EBERTH 6.5 HP Gasoline Engine, Model GG1-ER196-6,5-19,5E. Please read these instructions carefully before using the engine to ensure proper function and longevity.

## 2. SAFETY INSTRUCTIONS

---

Always prioritize safety when operating or maintaining the engine. Failure to follow safety guidelines can result in serious injury or equipment damage.

- **Read the Manual:** Familiarize yourself with all controls and proper operating procedures.
- **Ventilation:** Operate the engine in a well-ventilated area. Exhaust fumes contain carbon monoxide, which is a colorless, odorless, and deadly gas.
- **Fuel Handling:** Handle gasoline with extreme care. It is highly flammable. Store fuel in approved containers away from ignition sources.
- **Hot Surfaces:** The engine and exhaust system become very hot during operation and remain hot for a period after shutdown. Avoid contact to prevent burns.
- **Moving Parts:** Keep hands, feet, and clothing away from rotating parts.
- **Engine Shutdown:** Always turn off the engine before performing any maintenance, adjustments, or refueling.
- **Children and Pets:** Keep children and pets away from the engine, especially during operation.

## 3. PRODUCT OVERVIEW

---

The EBERTH 6.5 HP Gasoline Engine is a robust 4-stroke, single-cylinder engine with a 196 ccm displacement, designed for various applications such as karts, lawnmowers, generators, and more. It features both electric and manual pull-start options, along with a low oil safety shutdown.



Figure 3.1: Side view of the EBERTH 6.5 HP Gasoline Engine.



Figure 3.2: Engine side showing the pull start mechanism and control panel.

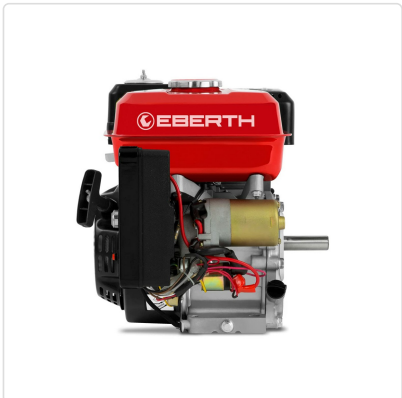


Figure 3.3: Engine side displaying the EBERTH logo and electric start motor.

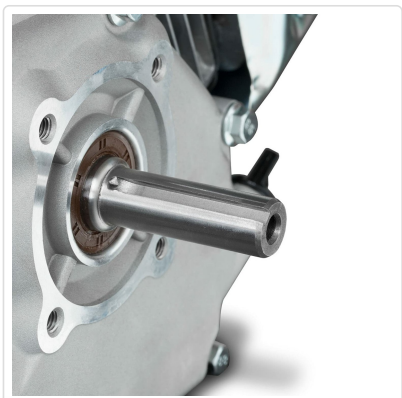


Figure 3.4: Detail of the 19.05mm diameter output shaft.

## 4. SETUP

---

### 4.1 Unpacking and Inspection

Carefully remove the engine from its packaging. Inspect for any signs of damage during transit. Ensure all included components (engine, user manual, toolkit, 7Ah 12V battery, two ignition keys) are present.

### 4.2 Adding Engine Oil

The engine is shipped without oil. Before first use, fill the crankcase with the recommended engine oil (e.g., SAE 10W-30) up to the upper mark on the dipstick. The oil capacity is typically around 0.6 liters. Do not overfill.

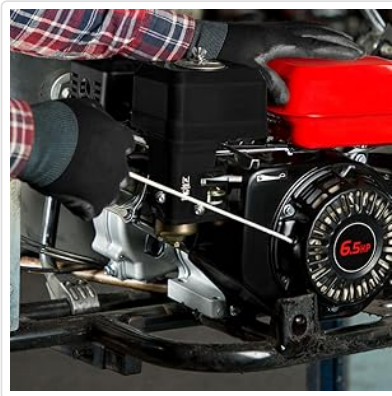


Figure 4.1: Checking the oil level using the dipstick.

### 4.3 Adding Fuel

Fill the fuel tank with unleaded gasoline. The tank capacity is 3.6 liters. Do not fill above the red indicator or the bottom of the filler neck to allow for fuel expansion. Ensure the fuel cap is securely tightened after refueling.

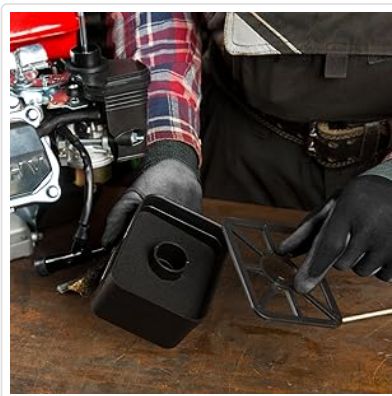


Figure 4.2: Filling the fuel tank.

### 4.4 Connecting the Battery (Electric Start Models)

For models equipped with electric start, connect the provided 7Ah 12V battery. Ensure correct polarity: positive (+) to positive, negative (-) to negative. The battery recharges automatically during engine operation.



Figure 4.3: Battery connection for electric start.

## 4.5 Mounting the Engine

Mount the engine securely to your equipment (e.g., kart, lawnmower) using appropriate bolts and fasteners. Refer to the technical drawing for mounting dimensions and ensure proper alignment with the driven component.



Figure 4.4: Example of engine mounting on a kart.

## 5. OPERATION

---

### 5.1 Starting the Engine (Electric Start)

1. Ensure the fuel valve is open.
2. Set the choke lever to the 'CHOKE' position if the engine is cold.
3. Turn the engine switch to the 'RUN' position.
4. Insert the key into the ignition and turn it to the 'START' position. Release the key once the engine starts.
5. Gradually move the choke lever to the 'RUN' position as the engine warms up.

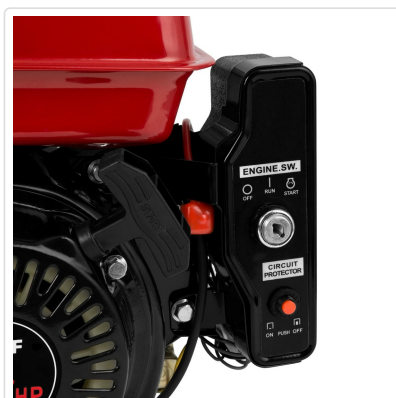


Figure 5.1: Engine control panel for

electric start.

## 5.2 Starting the Engine (Manual Pull Start)

1. Ensure the fuel valve is open.
2. Set the choke lever to the 'CHOKE' position if the engine is cold.
3. Turn the engine switch to the 'RUN' position.
4. Pull the starter grip slowly until resistance is felt, then pull firmly and quickly. Do not let the rope snap back; guide it gently.
5. Repeat until the engine starts.
6. Gradually move the choke lever to the 'RUN' position as the engine warms up.

## 5.3 Stopping the Engine

1. Move the throttle lever to the 'IDLE' position.
2. Turn the engine switch to the 'OFF' position.
3. Close the fuel valve for storage or extended periods of non-use.

## 5.4 Low Oil Shutdown Feature

This engine is equipped with a low oil safety feature that automatically shuts down the engine if the oil level drops below a safe operating threshold. This protects the engine from damage. If the engine stops unexpectedly, check the oil level and refill if necessary before attempting to restart.

# 6. MAINTENANCE

---

Regular maintenance is crucial for the performance and lifespan of your EBERTH engine.

## 6.1 Oil Level Check

Check the engine oil level before each use. Ensure the engine is on a level surface. Unscrew the dipstick, wipe it clean, reinsert it without screwing it in, then remove and check the oil level. Add oil if it is below the lower mark.

## 6.2 Air Filter Maintenance

Clean the air filter regularly, especially when operating in dusty conditions. A dirty air filter can reduce engine performance and increase fuel consumption. Remove the air filter cover, take out the foam element, and clean it with warm, soapy water. Rinse thoroughly, let it dry completely, and then lightly oil it with engine oil before reassembling.

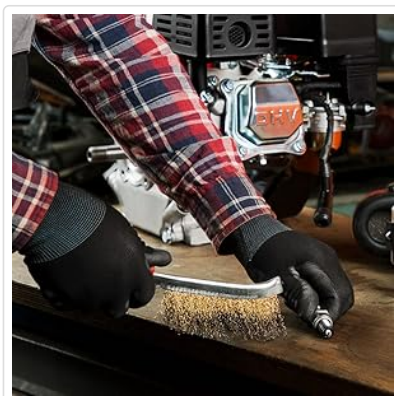


Figure 6.1: Cleaning the air filter.

## 6.3 Spark Plug Maintenance

Inspect the spark plug periodically. Clean any carbon deposits with a wire brush and adjust the gap if necessary according to specifications in the technical data. Replace the spark plug if it is heavily fouled or damaged.



Figure 6.2: Cleaning the spark plug.

## 6.4 Storage

For long-term storage, drain the fuel tank and carburetor, or add a fuel stabilizer. Change the engine oil. Clean the engine exterior. Store in a dry, clean area.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter with your EBERTH engine.

Problem	Possible Cause	Solution
Engine does not start	No fuel, old fuel, low oil, spark plug issue, choke setting incorrect, battery low (electric start)	Check fuel level, replace old fuel, add oil, inspect/clean/replace spark plug, adjust choke, charge/check battery.
Engine runs poorly/lacks power	Dirty air filter, old fuel, incorrect spark plug gap, carburetor issues	Clean air filter, use fresh fuel, check spark plug, consult service for carburetor.
Engine stops unexpectedly	Low oil shutdown activated, lack of fuel, overheating	Check oil level, refill fuel, allow engine to cool, ensure proper ventilation.

If you encounter problems not listed here or if solutions do not resolve the issue, please contact EBERTH customer support or a qualified service technician.

## 8. SPECIFICATIONS

Technical data for the EBERTH 6.5 HP Gasoline Engine.

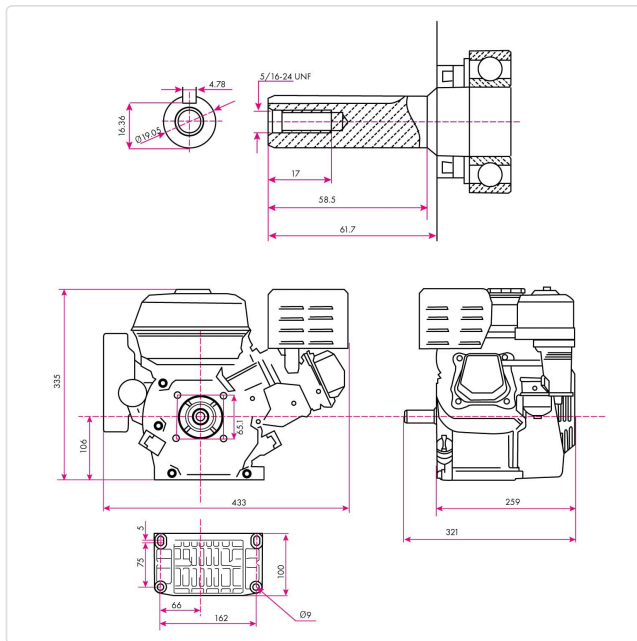


Figure 8.1: Engine dimensions and technical drawing.

Feature	Specification
Model	GG1-ER196-6,5-19,5E
Engine Type	4-stroke, 1-cylinder, air-cooled
Displacement	196 ccm
Power Output	6.5 HP / 4.8 kW
Max Speed	3600 rpm
Shaft Diameter	19.05 mm
Start System	Electric start (12V battery) and Manual pull start
Fuel Type	Unleaded gasoline
Fuel Tank Capacity	3.6 L
Oil Safety	Low oil shutdown
Material	Aluminium
Product Dimensions (L x W x H)	40 x 33.5 x 38 cm
Weight	16 kg
Country of Origin	China

## 9. WARRANTY

The EBERTH 6.5 HP Gasoline Engine comes with a **2-year manufacturer's warranty**. Please retain your proof of purchase for warranty claims. The warranty covers defects in materials and workmanship under normal use and service.

## 10. SUPPORT

---

For technical assistance, spare parts, or warranty inquiries, please contact EBERTH customer service. EBERTH maintains a large stock of spare parts to ensure quick availability and delivery. For more information, visit the official EBERTH website or contact your local dealer.