

## JAYGOVAN Gas Engine

# JAYGOVAN 15HP 420CC Gas Engine Instruction Manual

Model: Gas Engine

## 1. INTRODUCTION

Thank you for choosing the JAYGOVAN 15HP 420CC 4-Stroke OHV Horizontal Shaft Gas Engine. This industrial-grade replacement motor is designed for reliable performance in various applications. This manual provides essential information for the safe operation, maintenance, and troubleshooting of your engine. Please read it thoroughly before use to ensure proper handling and to maximize the lifespan of your product.

## 2. SAFETY INFORMATION

**WARNING:** Failure to follow these safety instructions could result in serious injury or death.

- Always operate the engine in a well-ventilated area to prevent carbon monoxide poisoning.
- Keep hands, feet, and clothing away from moving parts.
- Do not refuel a hot engine. Allow the engine to cool before adding fuel.
- Store fuel in an approved container in a cool, well-ventilated area, away from ignition sources.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves during operation and maintenance.
- Ensure the engine is securely mounted before starting.
- Keep children and pets away from the operating area.
- Always turn off the engine and disconnect the spark plug wire before performing any maintenance or adjustments.

## 3. PRODUCT OVERVIEW AND FEATURES

The JAYGOVAN 15HP 420CC Gas Engine is a robust 4-stroke OHV (Overhead Valve) engine designed for industrial applications. Key features include:

- **Powerful Performance:** Delivers up to 9700W of power with a rated speed of 3600rpm, ensuring strong performance for demanding tasks.
- **Durable Construction:** Features a camshaft made of high wear-resistance iron for stable and long-lasting

operation.

- **Fuel Efficiency:** Equipped with a high-precision carburetor to optimize fuel consumption ( $\leq 374\text{g/kw.h}$ ).
- **Oil Level Protection:** Automatically shuts down if oil levels are too low, preventing engine damage.
- **Extended Operation:** A large 1.72-gallon fuel tank allows for longer continuous use.
- **Effective Cooling:** Forced air-cooling system and ventilated heat sinks maintain optimal engine temperature, enhancing reliability and durability.
- **Reduced Noise:** High-quality silencers and an efficient air filter contribute to a quieter working environment.
- **User-Friendly Design:** Features an ergonomic starting handle and a general control area for easy starting and operation. The oil port has a cap sealing design to prevent leaks.



Image: The JAYGOVAN 15HP Gas Engine highlighting its large 1.72-gallon fuel tank for extended operation.

# Low Fuel Consumption



**OHV DESIGN**  
Reduce Carbon Buildup &  
Improve Fuel Savings



**CARBURETOR**  
Burn Fully



**AIR FILTER**  
Improve Air Filtration Performance  
& Reduce Wear

Image: Close-up view of the engine's OHV design, high-precision carburetor, and air filter, contributing to low fuel consumption and improved air purification.

# Detailed Information



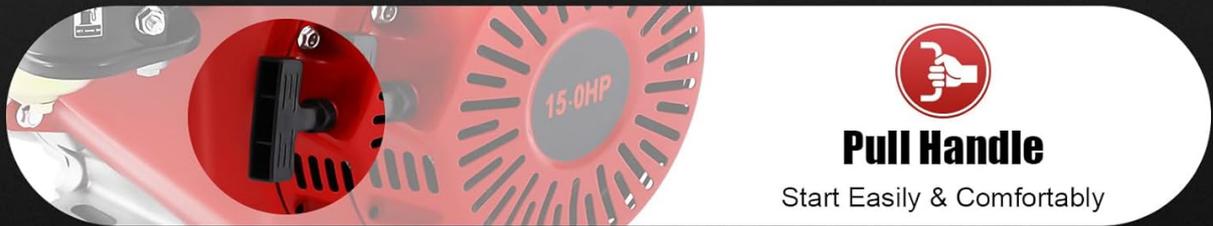
## Damper Handle

Increase Fuel Concentration



## Speed Lever

Easy to Change Speed



## Pull Handle

Start Easily & Comfortably



## Engine Switch

Easily Turn On and Off

Image: Detailed view of the engine's controls, including the damper handle, speed lever, pull handle for starting, and the engine switch.

# Multi-scenario Use



Image: The JAYGOVAN 15HP Gas Engine shown in multi-scenario use, including go-karts, high-pressure washers, trenchers, and water pumps.

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Video: An overview of the JAYGOVAN 15HP Gas Engine Horizontal Shaft, showcasing its design and features.

## 4. SETUP

Before operating the engine, ensure proper setup:

1. **Mounting:** Securely mount the engine to your equipment using appropriate hardware. Ensure all bolts are tightened to prevent vibration and detachment during operation.
2. **Add Engine Oil:** Fill the engine with the recommended type and amount of engine oil. Refer to the oil fill cap or dipstick for proper level indication. The engine will automatically stop if the oil level is too low.
3. **Add Fuel:** Fill the fuel tank with fresh, clean gasoline. Do not overfill. Ensure the fuel cap is securely fastened.
4. **Check Connections:** Verify all electrical and mechanical connections are secure and free from damage.

## 5. OPERATING INSTRUCTIONS

Follow these steps to start and operate your JAYGOVAN gas engine:

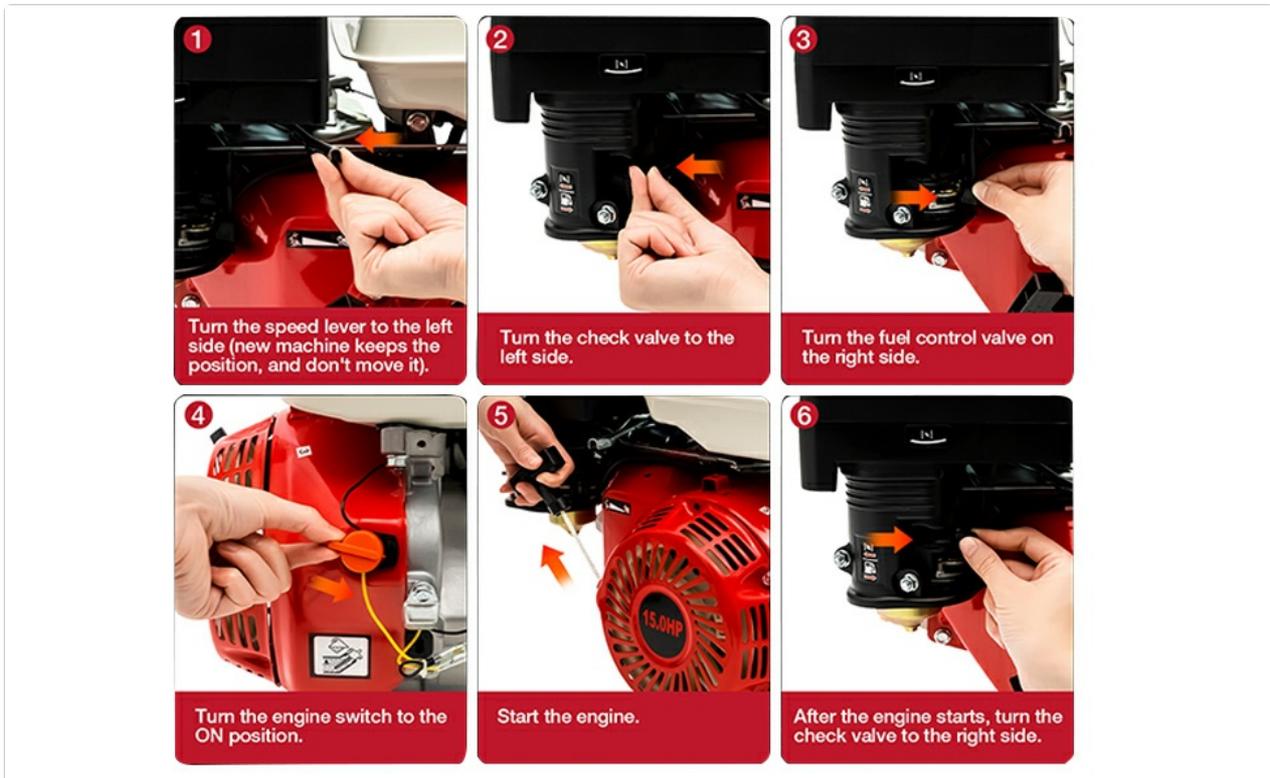


Image: Visual guide for the engine starting procedure.

1. **Set Speed Lever:** Turn the speed lever to the left side. For new machines, keep this position.
2. **Open Check Valve:** Turn the check valve to the left side.
3. **Open Fuel Control:** Turn the fuel control valve on the right side.
4. **Engine Switch ON:** Turn the engine switch to the 'ON' position.
5. **Start Engine:** Firmly pull the recoil start handle until the engine starts.
6. **Close Check Valve:** After the engine starts, turn the check valve to the right side.

Allow the engine to warm up for a few minutes before applying full load. To stop the engine, turn the engine switch to the 'OFF' position.

## 6. MAINTENANCE

Regular maintenance is crucial for the longevity and optimal performance of your engine.

- **Oil Change:** Check engine oil level before each use. Change the engine oil after the first 20 hours of operation, then every 50-100 hours or seasonally, depending on use.
- **Air Filter:** Inspect the air filter regularly. Clean or replace the air filter element as needed, especially in dusty conditions, to ensure proper air intake and prevent wear.
- **Spark Plug:** Inspect the spark plug annually. Clean or replace it if fouled or worn.
- **Fuel System:** Drain the fuel tank and carburetor if storing the engine for an extended period (over 30 days) to prevent fuel degradation and carburetor issues.
- **General Inspection:** Periodically check all fasteners for tightness. Inspect fuel lines for cracks or leaks. Clean the engine exterior to prevent debris buildup.

## 7. TROUBLESHOOTING

This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
Engine does not start	No fuel; Low oil level; Spark plug issue; Engine switch OFF	Add fuel; Fill oil to proper level; Clean/replace spark plug; Turn engine switch ON
Engine runs poorly/lacks power	Dirty air filter; Stale fuel; Carburetor issues	Clean/replace air filter; Use fresh fuel; Clean carburetor or consult service
Excessive vibration	Loose mounting bolts; Unbalanced load	Tighten all mounting bolts; Ensure equipment is balanced
Engine stops unexpectedly	Low oil level; Lack of fuel; Overheating	Check/add oil; Add fuel; Allow engine to cool, check cooling fins
Muffler/Exhaust issues	Loose bolts; Damage	Inspect and tighten muffler bolts. Replace damaged components.

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

## 8. SPECIFICATIONS

Detailed technical specifications for the JAYGOVAN 15HP 420CC Gas Engine:

- **Engine Type:** 4-Stroke, OHV, Single Cylinder
- **Displacement:** 420CC
- **Horsepower:** 15HP
- **Rated Speed:** Up to 3600rpm
- **Shaft Diameter:** 1 inch (25mm)
- **Start System:** Recoil/Pull Start
- **Fuel Tank Capacity:** 1.72 gallons (6.5 liters)
- **Fuel Consumption:**  $\leq 374\text{g/kw.h}$
- **Cooling System:** Forced Air-Cooled
- **Product Dimensions:** 15.94 x 12.6 x 17.32 inches (40.5 x 32 x 44 cm)
- **Item Weight:** 80.5 pounds (36.5 kg)
- **Manufacturer:** JAYGOVAN

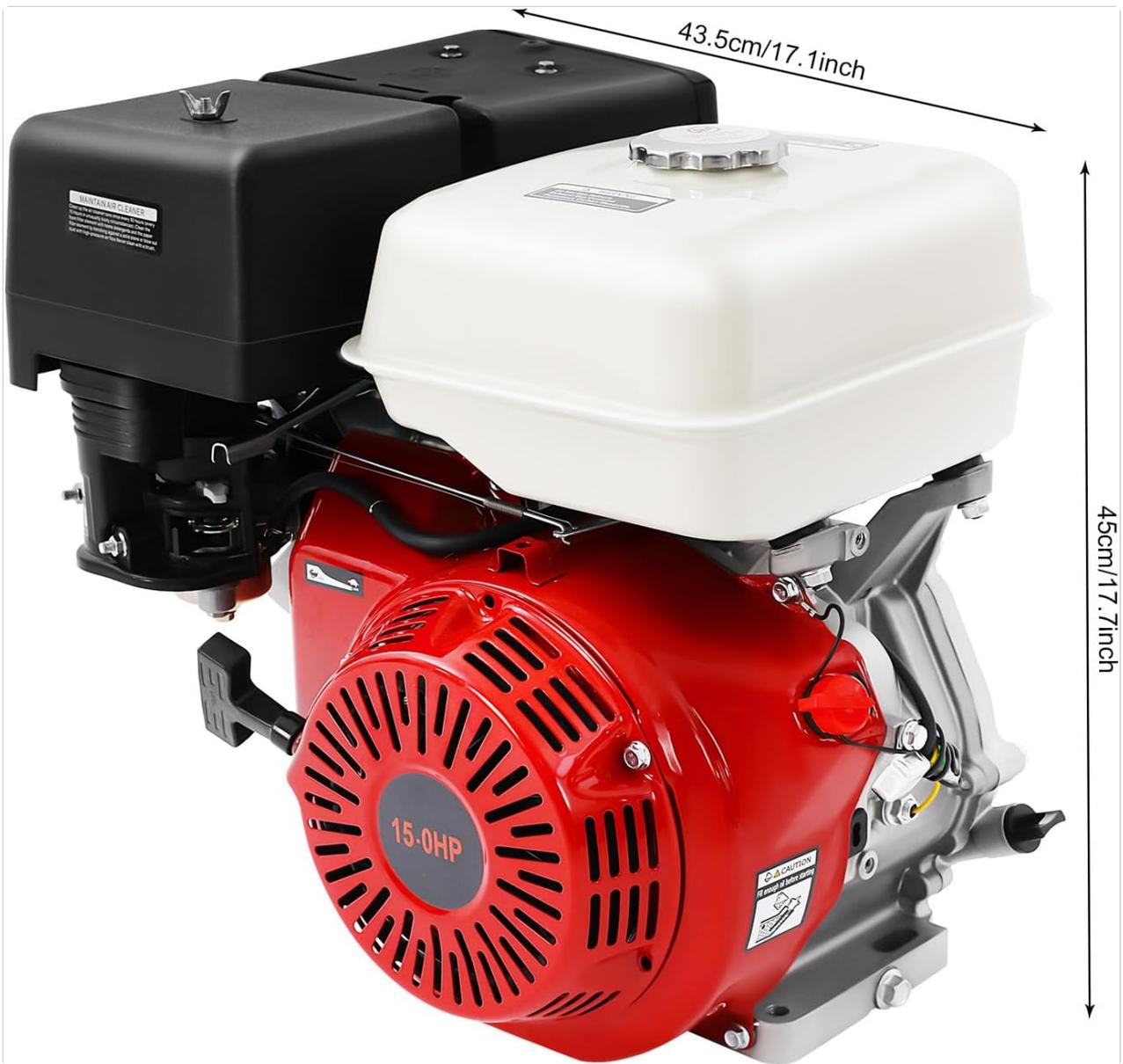


Image: The JAYGOVAN 15HP Gas Engine with key dimensions indicated.

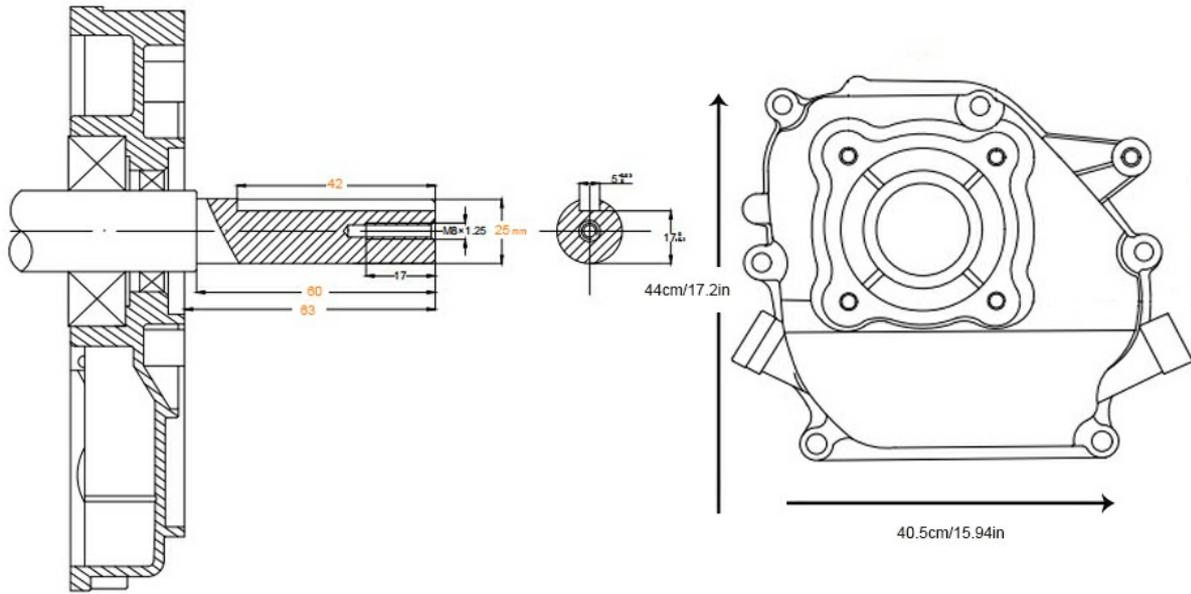


Image: Technical diagram illustrating the shaft dimensions and overall engine measurements.

## 9. WARRANTY AND SUPPORT

For warranty information or technical assistance, please contact JAYGOVAN customer support. Refer to your purchase documentation for specific warranty terms and contact details. The seller, PGGOVAN, also provides customer support for this product.