Goudergo 186FA

Goudergo 10HP 418CC 6300W Single Cylinder Air-Cooled Diesel Engine

Model: 186FA

Brand: Goudergo

Introduction

This manual provides essential instructions for the safe and efficient operation, maintenance, and troubleshooting of your Goudergo 10HP 418CC 6300W Single Cylinder Air-Cooled Diesel Engine, Model 186FA. Please read this manual thoroughly before operating the engine to ensure proper use and to prevent injury or damage.

This powerful 4-stroke diesel engine is designed for various applications, including farmland operation, garden irrigation, drainage, emergency repair, and small engineering machinery. Its robust design and efficient performance make it suitable for micro-tillers, pasture management machines, drainage and irrigation machines, generator sets, small transport vehicles, and small walk-behind tractors.

Safety Information

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

- Always wear protective gear, such as safety glasses and sturdy shoes, when operating or servicing the engine.
- Keep hands and feet away from all moving parts of the engine.
- Ensure the engine is placed on a stable and level surface before operation.
- Do not operate the engine near people, pets, or power lines. Maintain a safe distance from others.
- Always stop the engine and wait for all parts to come to a complete stop before performing any servicing, adjustments, or maintenance.
- Use only approved diesel fuel and never overfill the fuel tank. Ensure the fuel cap is securely fastened.
- Store the engine in a cool, dry, and well-ventilated area, away from any ignition sources.

Product Overview and Features

The Goudergo 186FA Diesel Engine is engineered for reliability and performance. Key features include:

- **Powerful and Efficient:** Delivers up to 6.3kW of power with a rotation speed of 3600rpm, ensuring high productivity.
- **Easy to Use:** Features a manual recoil start method and an ergonomic design knob for speed control. Includes a throttle cable mounting bracket for remote speed control.
- **Large Fuel Tank Capacity:** A 1.45-gallon fuel tank allows for extended operation without frequent refueling.
- **Good Heat Dissipation:** Equipped with a forced air-cooling system and dense cooling holes to quickly dissipate heat, prolonging engine life.
- **Pressure Reducing Valve:** Helps control air pressure within the cylinder, protecting the engine from damage.
- **Stable Engine Design:** Utilizes a single-valve direct fuel injection system to improve fuel utilization efficiency and reduce engine wear. Includes a quality air filter to efficiently filter impurities.
- **Quality Silencer:** Designed to effectively reduce noise during operation.
- **Oil Dipstick and Drain Screw:** For easy checking of oil levels and timely discharge of oil-water mixture.

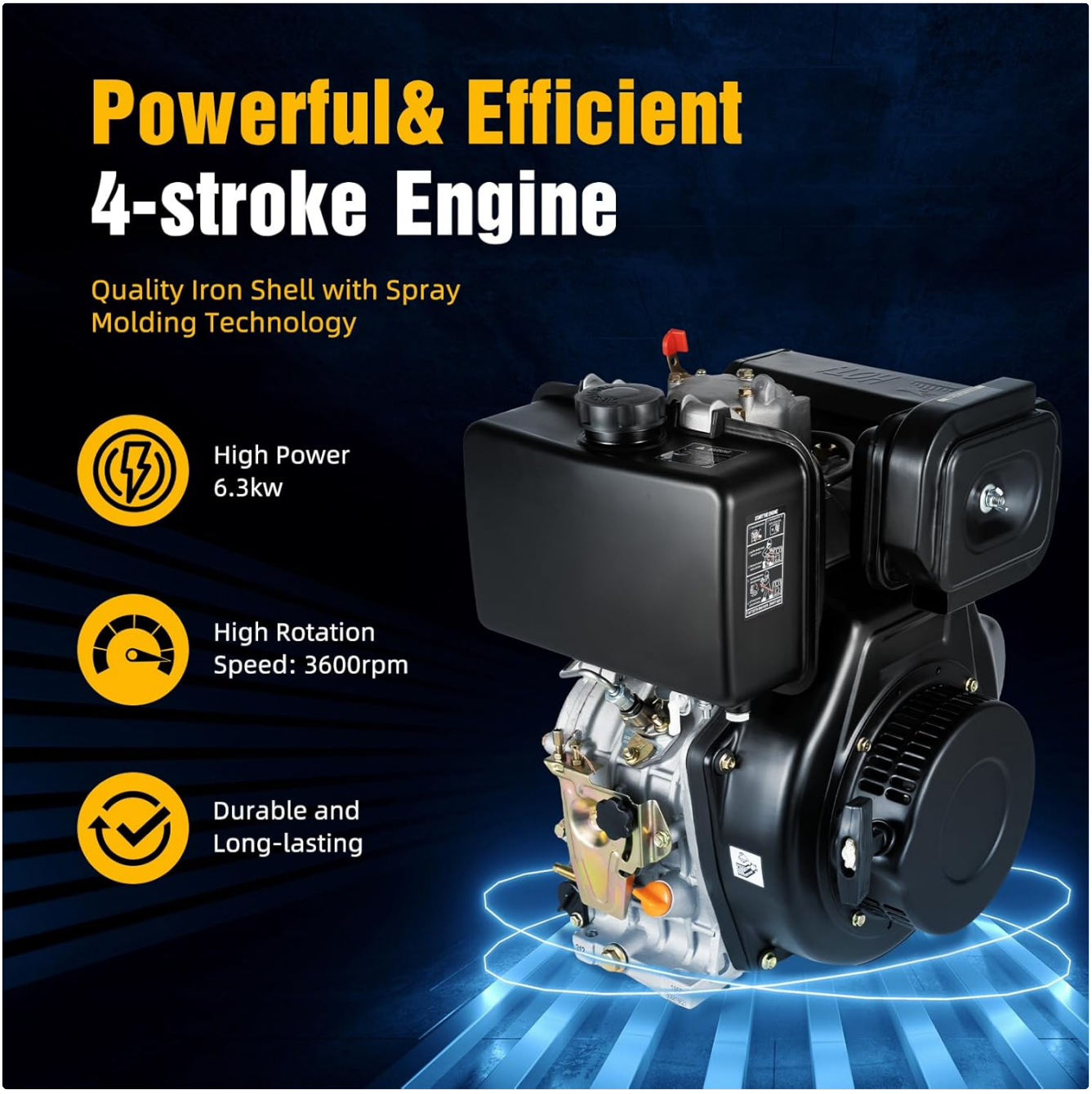

Image: The Goudergo 186FA engine highlighting its powerful 6.3kW output and 3600rpm speed, built with a quality iron shell and

spray molding technology for durability.

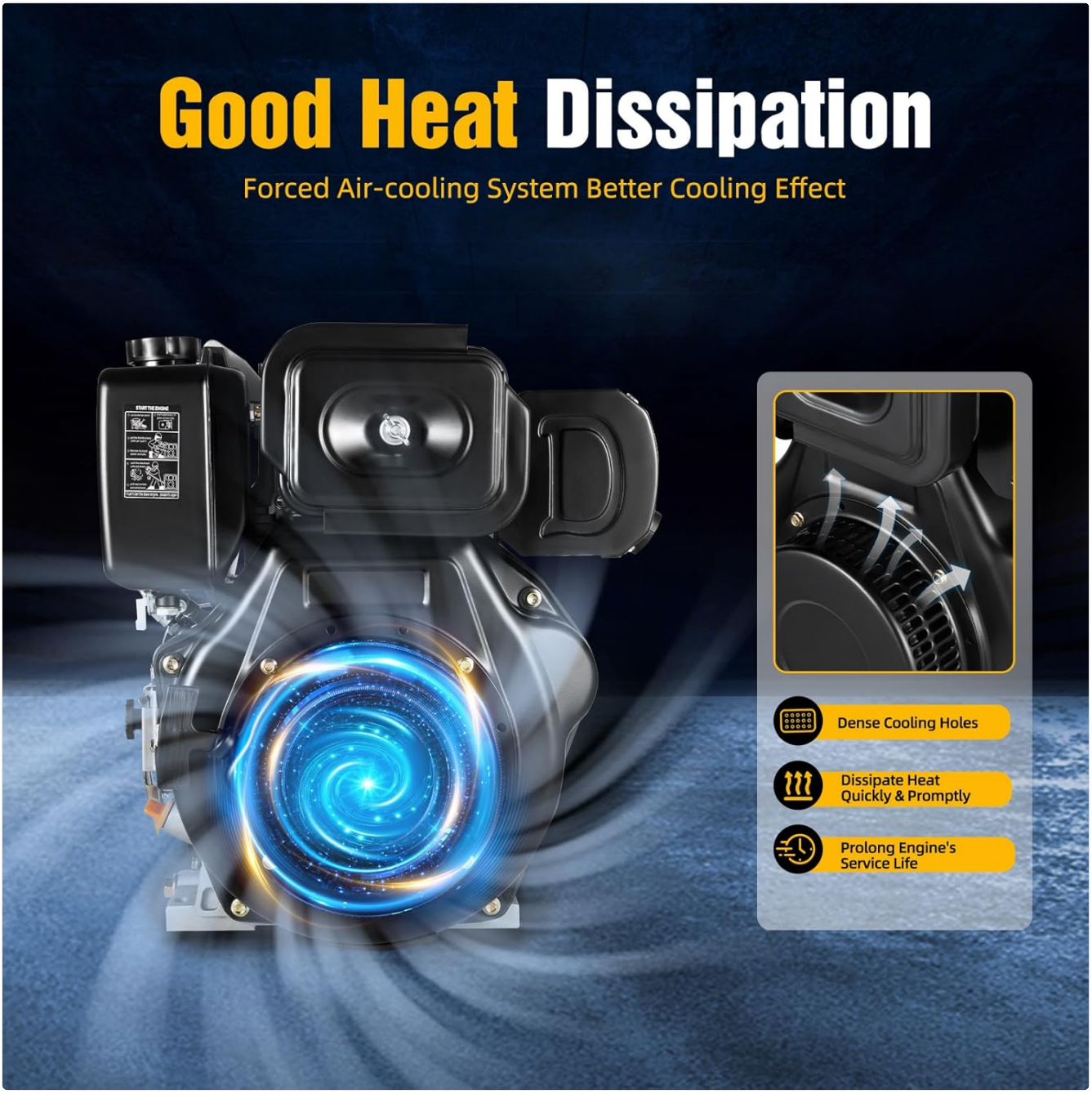

Image: Illustration of the engine's forced air-cooling system with dense cooling holes, designed for prompt and efficient heat dissipation to extend service life.

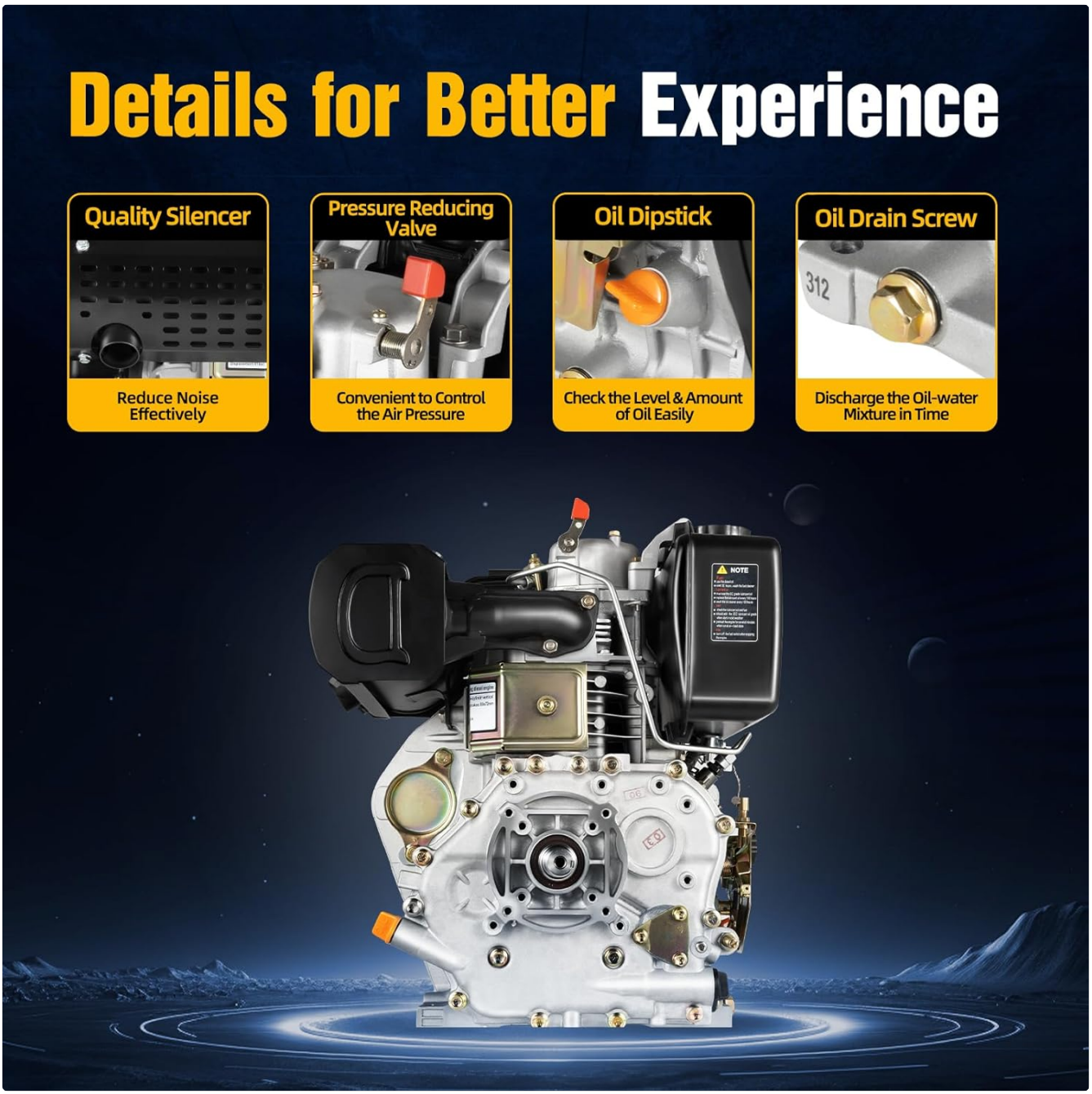

Image: Close-up view of engine components including the quality silencer for noise reduction, pressure reducing valve for air pressure control, oil dipstick for level checks, and oil drain screw for maintenance.

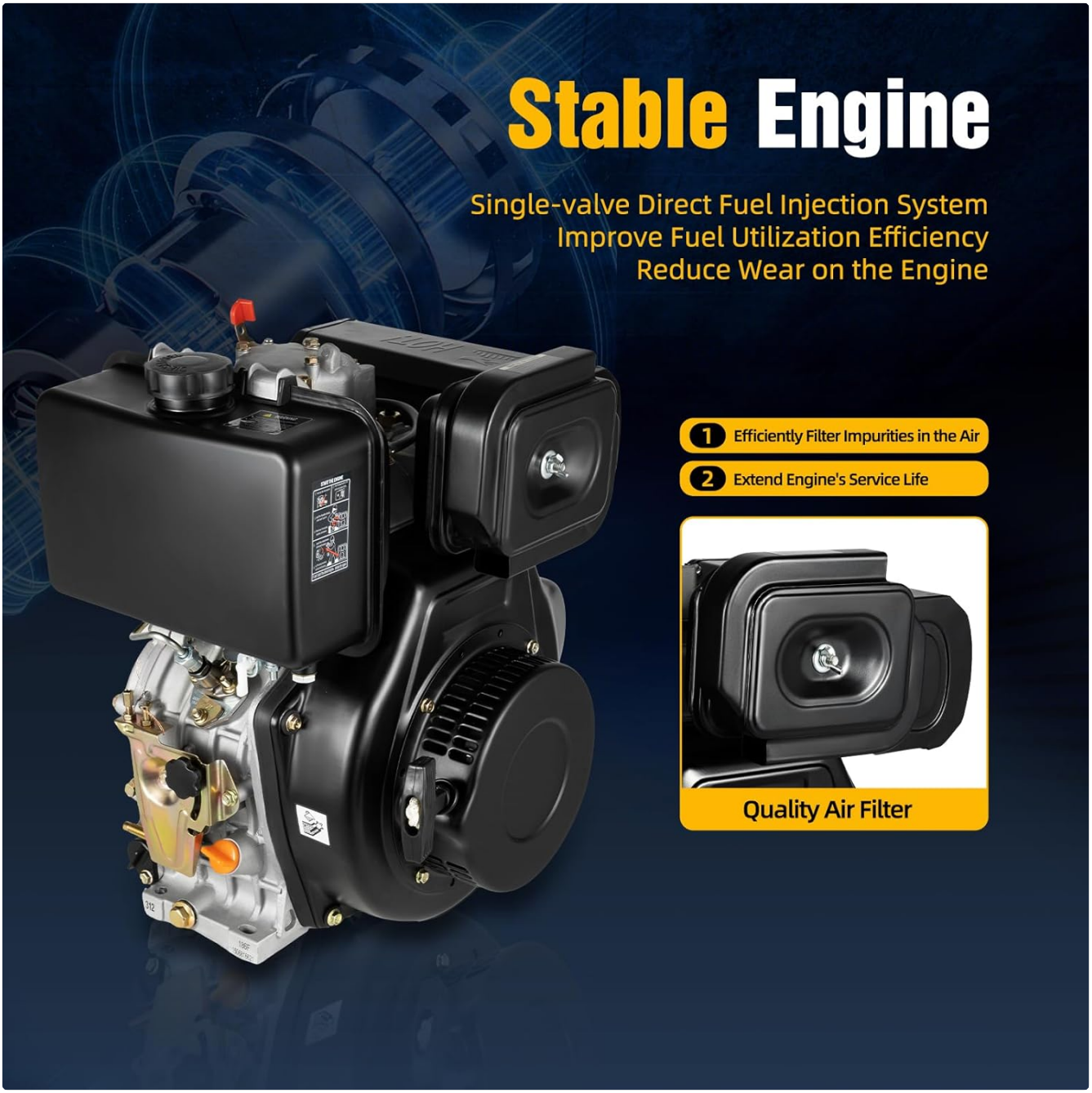

Image: The engine showcasing its stable design with a single-valve direct fuel injection system and a quality air filter to prevent impurities and extend engine life.

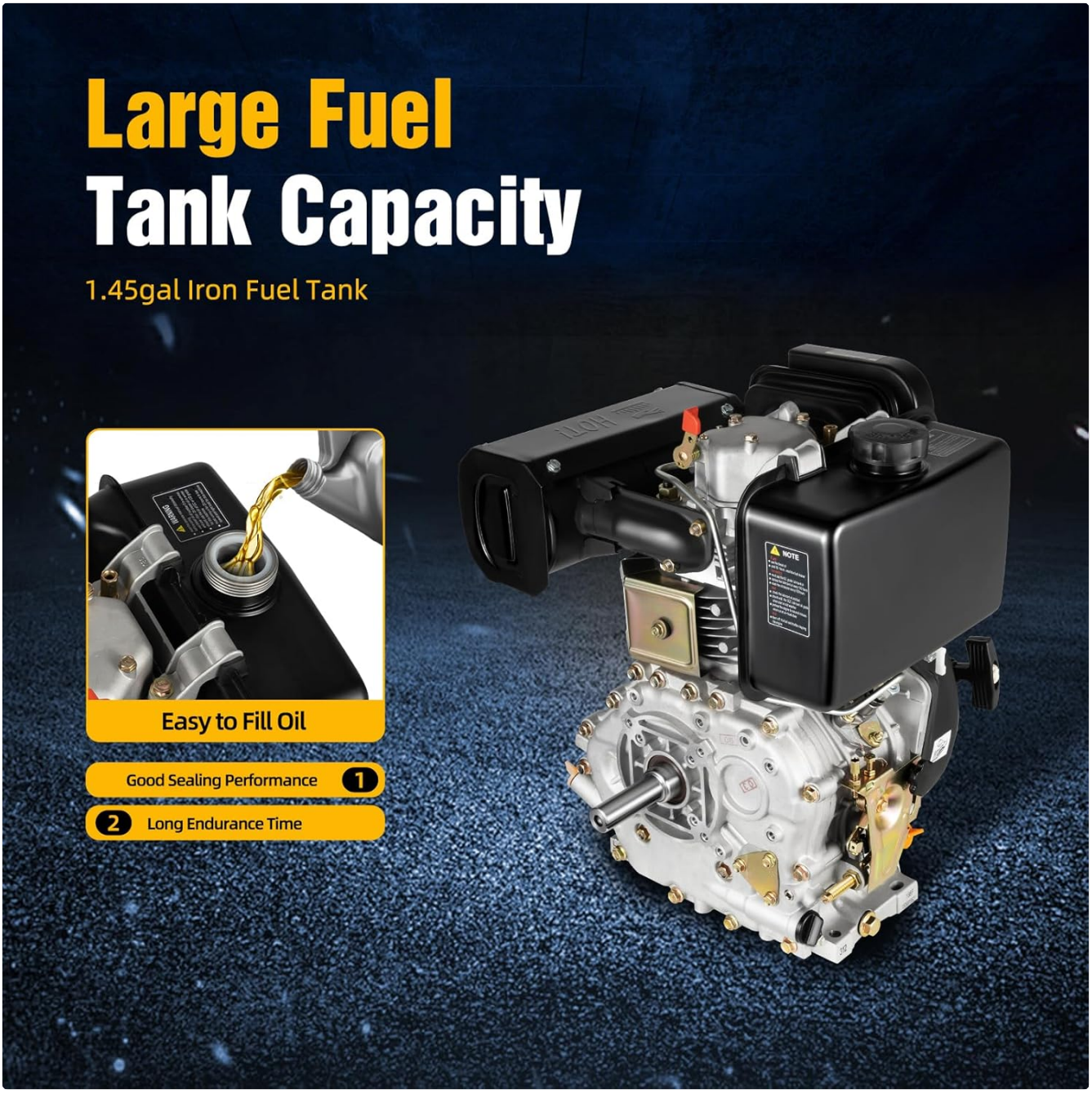

Image: The engine's 1.45-gallon iron fuel tank, designed for easy oil filling, good sealing performance, and long endurance time.

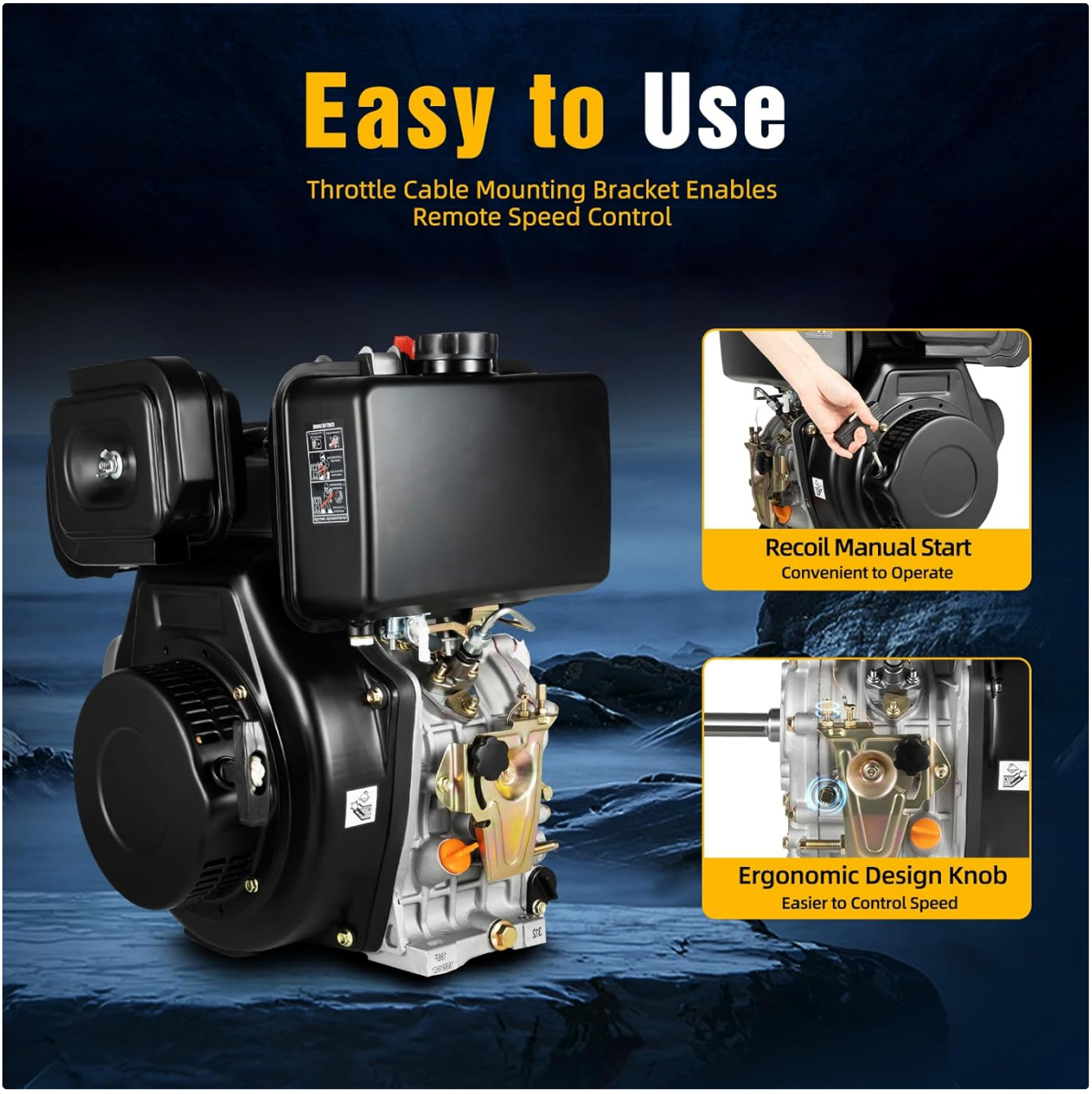

Image: Features illustrating the engine's ease of use, including the recoil manual start for convenient operation and an ergonomic design knob for easier speed control, along with a throttle cable mounting bracket.

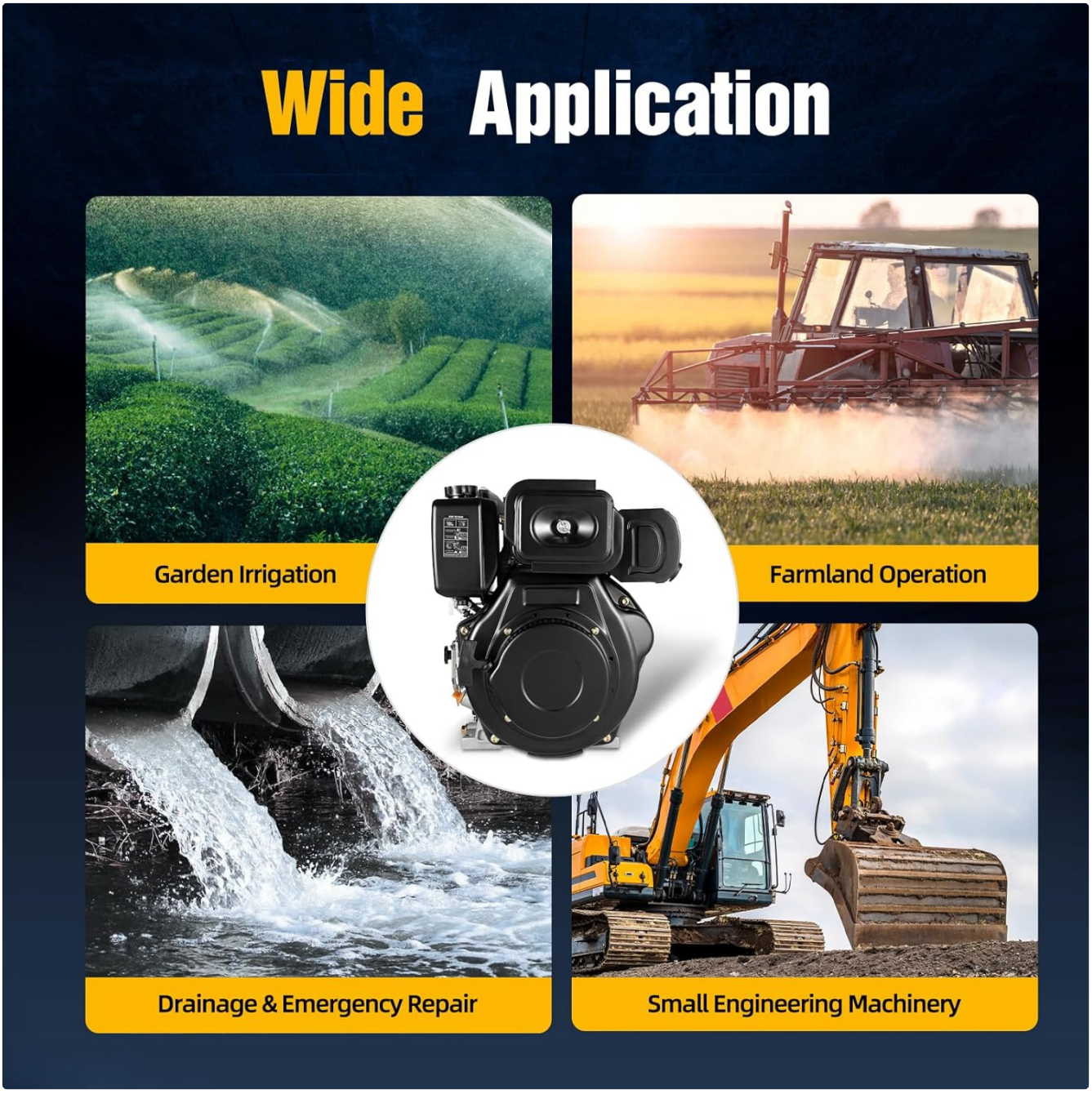

Image: Visual representation of the engine's wide range of applications, including garden irrigation, farmland operation, drainage & emergency repair, and small engineering machinery.

Setup

Before starting the engine, ensure it is securely mounted and all connections are tight. Fill the fuel tank with approved diesel fuel and check the engine oil level. It is crucial to properly bleed air from the fuel system before the first start or after running out of fuel.

Bleeding Air from the Fuel System

Follow these steps to remove air from the diesel engine's fuel system:

1. Locate the fuel injection pump area.
2. Slightly loosen the fuel line nut at the injector or fuel pump, but do not unscrew it completely.
3. Turn the fuel tank switch to the "ON" position and ensure the throttle is in the "DOWN" (idle) position.

4. Press the decompression lever (if present) and pull the recoil starter handle 5-6 times. You should see fuel (or oil, as described in the video) coming out from the loosened connection.
5. Once a steady stream of fuel without air bubbles is observed, tighten the fuel line nut securely.
6. Release the decompression lever. The engine is now ready for starting.

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Video: This video demonstrates the process of bleeding air from the diesel engine's fuel system, a critical step for initial setup and after refueling.

Operating Instructions

Once the engine is set up and fuel system is bled, you can proceed with starting and operating the engine.

Starting the Engine (Manual Recoil Start)

1. Ensure the fuel tank switch is ON and the throttle is at the idle position.
2. Engage the decompression lever (if applicable) to reduce compression for easier pulling.
3. Pull the recoil starter handle firmly and smoothly until the engine starts. Do not let the rope snap back; guide it gently.
4. Once the engine starts, slowly release the decompression lever.
5. Adjust the throttle to the desired operating speed using the ergonomic knob or the remote throttle cable.

Stopping the Engine

1. Reduce the engine speed to idle by moving the throttle to the "DOWN" position.
2. Turn the fuel tank switch to the "OFF" position.
3. Allow the engine to run until it runs out of fuel and stops. This helps prevent fuel system issues.
4. Alternatively, if an engine stop switch is present, use it to shut down the engine.

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Video: A demonstration video showcasing the general operation of the Goudergo diesel engine, including starting procedures.

Maintenance

Regular maintenance is crucial for the longevity and optimal performance of your diesel engine. Always ensure the engine is turned off and cooled down before performing any maintenance.

- **Oil Level Check:** Check the engine oil level before each use using the oil dipstick. Add recommended diesel engine oil if the level is low.
- **Oil Change:** Change the engine oil after the first 20 hours of operation, and then every 100 hours or annually, whichever comes first. Refer to the oil drain screw for easy oil discharge.
- **Air Filter Cleaning/Replacement:** Inspect the air filter regularly, especially in dusty conditions. Clean or replace the air filter element as needed to ensure proper engine breathing and prevent contamination.
- **Fuel Filter Maintenance:** Periodically check and clean or replace the fuel filter to prevent contaminants from reaching the fuel injection system.
- **Cooling System:** Ensure the cooling fins and air intake areas are free from debris to maintain effective air-cooling.

- **General Inspection:** Regularly inspect all nuts, bolts, and fasteners for tightness. Check for any signs of leaks or damage.

Troubleshooting

This section provides solutions to common issues you might encounter with your diesel engine. For problems not listed here, please contact customer support.

Problem	Possible Cause	Solution
Engine does not start	No fuel, air in fuel system, low oil, faulty recoil starter, decompression lever not engaged.	Check fuel level, bleed air from fuel system (see Setup), check oil level, inspect recoil starter, ensure decompression lever is used correctly.
Engine runs poorly or stalls	Clogged fuel filter, dirty air filter, incorrect throttle setting, low quality fuel.	Clean/replace fuel filter, clean/replace air filter, adjust throttle, use fresh, clean diesel fuel.
Excessive smoke	Incorrect fuel-air mixture, worn engine components, low quality fuel.	Ensure air filter is clean, use recommended fuel, consult a qualified technician for inspection.
Engine overheating	Blocked cooling fins, low oil level, operating in high ambient temperatures.	Clean cooling fins, check and top up oil, operate in well-ventilated areas.

Specifications

Detailed technical specifications for the Goudergo 10HP 418CC 6300W Single Cylinder Air-Cooled Diesel Engine (Model 186FA):

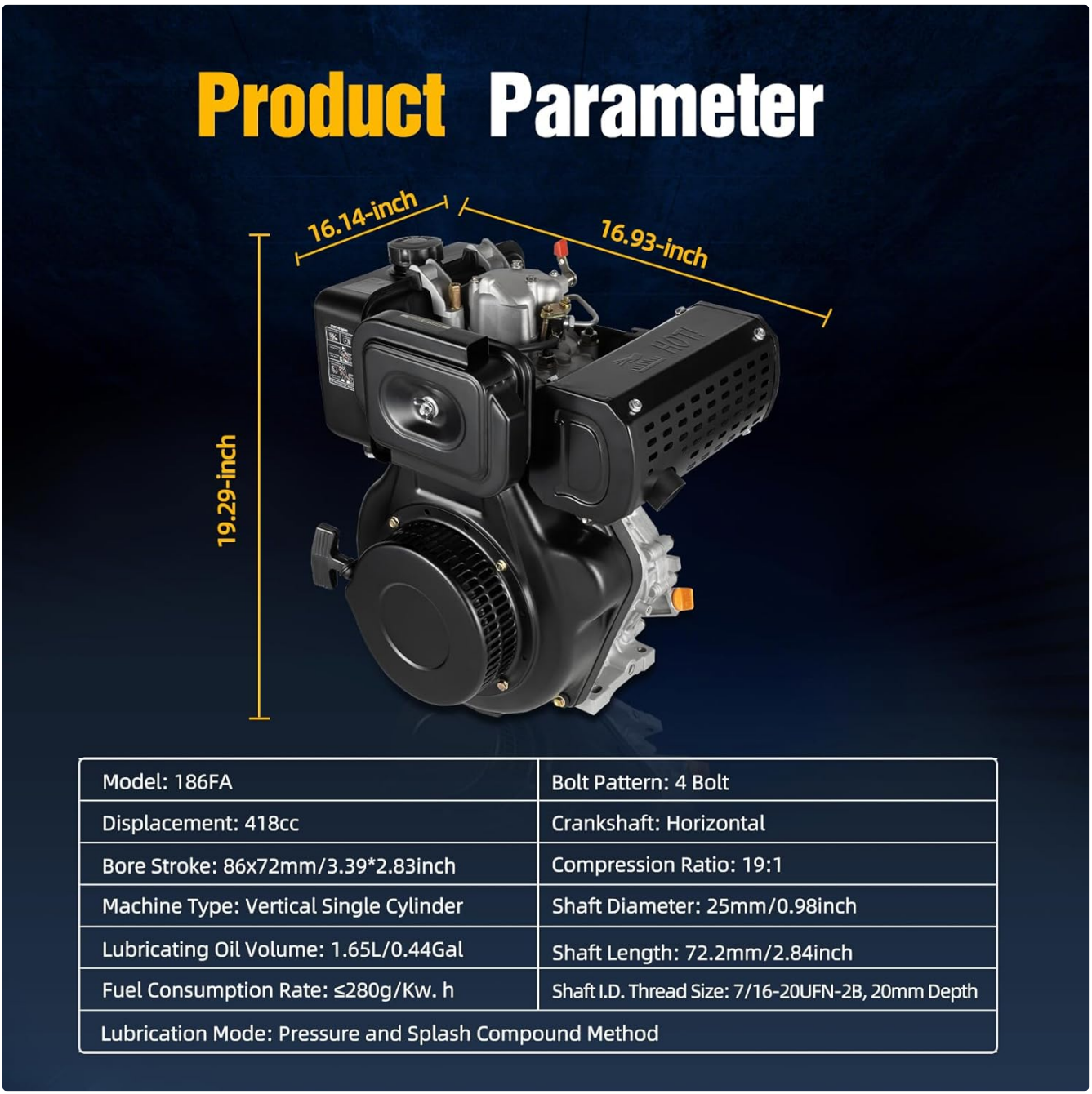

Image: A diagram illustrating the key product parameters and dimensions of the Goudergo 186FA diesel engine.

Specification	Value
Brand	Goudergo
Model Number	186FA
Manufacturer Part Number	BI-MLLCR-144
Power Source	Diesel
Engine Type	4 Stroke, Single Cylinder, Air-Cooled
Displacement	418CC
Power Output	6.3kW (10HP)
Rotation Speed	3600rpm
Fuel Tank Capacity	1.45 Gallons

Specification	Value
Product Dimensions (D x W x H)	16.93"D x 16.14"W x 19.29"H
Item Weight	92.3 Pounds
Material	Aluminum, Iron
Operation Mode	Manual Recoil Start

Warranty Information

This Goudergo diesel engine is covered by a manufacturer's warranty. Please refer to your purchase documentation or contact the seller for specific warranty terms and conditions, including duration and coverage details. Keep your proof of purchase for any warranty claims.

Support

For technical assistance, spare parts, or any questions regarding your Goudergo 186FA Diesel Engine, please contact your retailer or the manufacturer's customer service. When contacting support, please have your model number (186FA) and purchase details ready.
Manufacturer: TTOCTE