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> [Powerhorse OHV Horizontal Engine - 420cc, 12.5 HP, 1in. x 3 31/64in. Shaft User Manual](#)

## Powerhorse 3250136

# Powerhorse OHV Horizontal Engine - 420cc, 12.5 HP, 1in. x 3 31/64in. Shaft User Manual

Model: 3250136 | Brand: Powerhorse

## INTRODUCTION

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This Powerhorse OHV Horizontal Engine is an easy-to-install solution for small engine needs. With 420cc, 12.5 HP and 18 ft.-lbs. of torque, this 1000-hour engine provides enough power to run a wide range of equipment, including log splitters and pressure washers. Its patented design incorporates an industrial-strength cast iron cylinder sleeve, dual ball bearing forged-steel crankshafts and an internal oil splash enhancement system. Low-oil shutdown turns the engine off if it runs low on oil, preventing serious damage or failure. The recoil start has a compression release that helps you get running on the first pull. Combine these features with thorough U.S.-based testing, dedicated customer/tech support and incredible value, and you'll own one of the most reliable engines in the industry.

## KEY FEATURES

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- **Cast iron cylinder sleeve:** Reduces bore wear to extend engine life and reduces emissions and oil consumption.
- **Dual ball bearings:** Reduce friction for prolonged life.
- **Forged-steel crankshaft:** Provides superior strength in high PTO torque situations.
- **Recoil start with compression release:** Helps you start on the first pull.
- **Low oil shutdown:** Turns the engine off if it runs low on oil, preventing serious damage or failure.



Image: The Powerhorse 420cc OHV Horizontal Engine, showcasing its compact and robust design.

## SETUP

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Before initial use, ensure the engine is placed on a stable, level surface. Check all fluid levels, including engine oil and fuel, according to the specifications. Connect any necessary external components or equipment securely. Refer to the specific equipment manual for detailed connection instructions.



Image: Underside view of the Powerhorse engine, highlighting the shaft connection point for equipment integration.

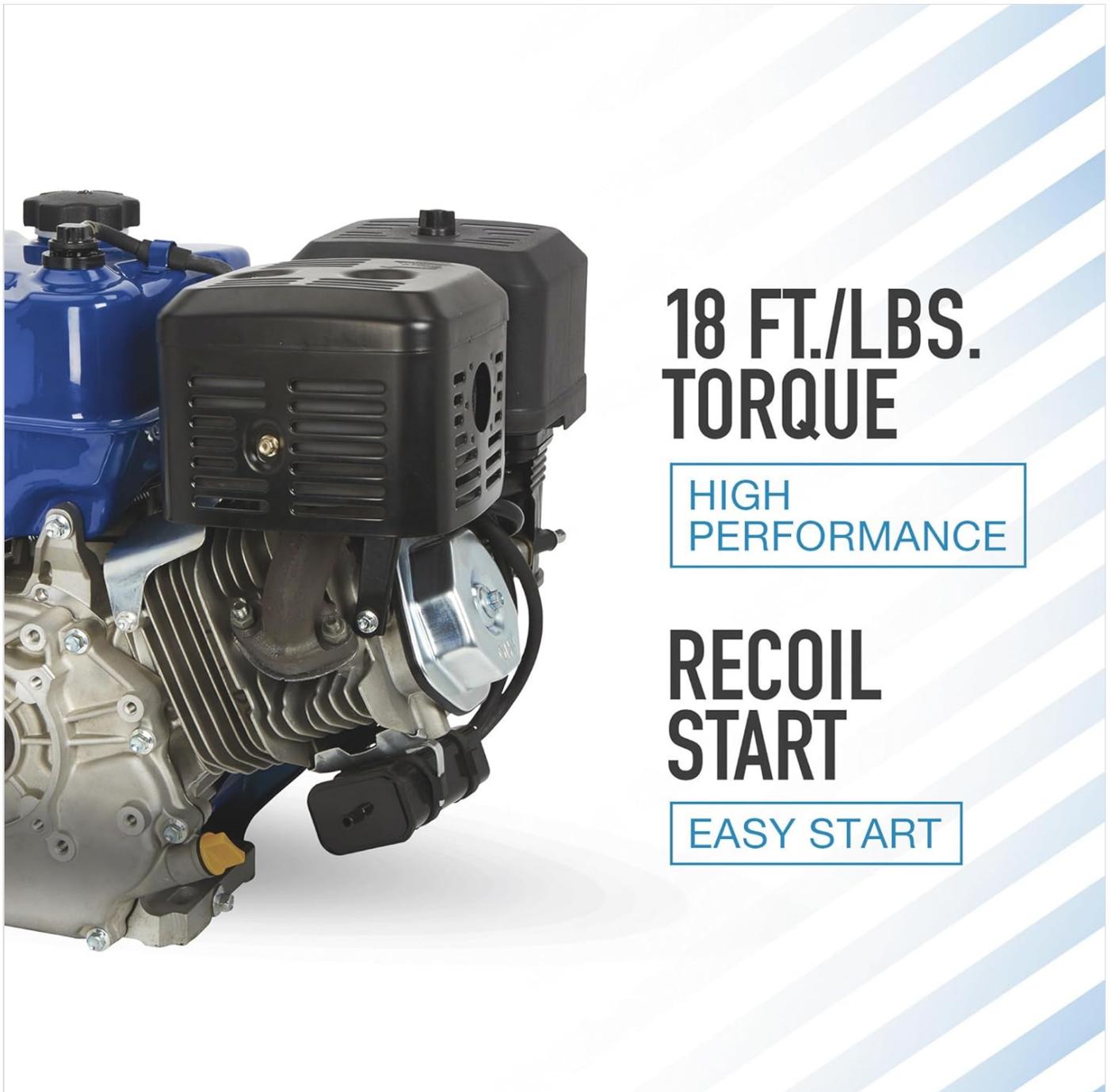
## OPERATING INSTRUCTIONS

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To start the engine, ensure the fuel valve is open and the choke is set appropriately for cold or warm starts. Insert the key into the engine switch and turn it to the 'START' position. The recoil start with compression release assists in easy starting. Allow the engine to warm up briefly before engaging any connected equipment. Always operate the engine in a well-ventilated area.

**Your browser does not support the video tag.**

Video: An overview of the Powerhorse OHV Horizontal Engine, demonstrating its features and ease of starting. This video highlights the electric start mechanism and the engine's robust construction.



**18 FT./LBS.  
TORQUE**

**HIGH  
PERFORMANCE**

**RECOIL  
START**

**EASY START**

Image: Close-up of the Powerhorse engine, emphasizing its 18 ft./lbs. of torque and the convenient recoil start feature for easy ignition.

## **MAINTENANCE**

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Regular maintenance is crucial for optimal performance and longevity. The air filter should be cleaned every 50 hours of use; refer to the manual for detailed instructions on air filter maintenance. Periodically check the engine oil level and replenish as needed. The internal oil splash enhancement system ensures proper lubrication. Always ensure the engine is cool before performing any maintenance.



# 420CC, 12.5 HP

POWERFUL

Image: The Powerhorse engine, showing the air filter housing with a label indicating cleaning every 50 hours of use.

## TROUBLESHOOTING

If the engine fails to start, check the fuel level and ensure the fuel valve is open. Verify that the engine switch is in the 'ON' position and the key is fully inserted. If the engine runs for a short period and then shuts off, check the oil level; the low-oil shutdown feature will activate to prevent damage. For persistent issues, consult a qualified service technician.

## SPECIFICATIONS

Attribute	Value
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Manufacturer	Powerhorse
Brand	Powerhorse
Item Weight	82.6 pounds
Package Dimensions	22 x 22 x 22 inches
Manufacturer Part Number	3250136
ASIN	B081BC7RYF
Date First Available	July 26, 2018



Image: The Powerhorse engine, highlighting its 1000-hour engine rating, signifying long-lasting durability.

## WARRANTY AND SUPPORT

This Powerhorse engine comes with a standard warranty. For specific warranty details, please refer to the documentation included with your purchase. For customer support, technical assistance, or to inquire about replacement parts, please visit the official [Powerhorse Store](#) or contact Northern Tool + Equipment directly. They offer dedicated customer/tech support.

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## Related Documents - 3250136

	<p><a href="#">Powerhorse 420cc OHV Horizontal Gas Engine Owner's Manual</a></p> <p>Comprehensive owner's manual for the Powerhorse 420cc OHV Horizontal Gas Engine (Model DH420, Item #750122). Includes safety instructions, operating procedures, maintenance schedules, and troubleshooting tips for optimal performance and longevity.</p>
	<p><a href="#">Powerhorse 208cc Engine Owner's Manual - Operation, Maintenance, and Safety Guide</a></p> <p>This owner's manual provides comprehensive guidance for the Powerhorse 208cc engine (Model 170N, Item# 45749). It covers essential information on operation, safety precautions, detailed maintenance schedules, troubleshooting tips, fuel and oil specifications, and the U.S. EPA and California emission control warranty. Essential reading for safe and effective use of your Powerhorse engine.</p>
	<p><a href="#">Powerhorse M89897A.3 Pressure Washer Owner's Manual</a></p> <p>Comprehensive owner's manual for the Powerhorse M89897A.3 pressure washer, covering installation, setup, operation, maintenance, storage, and troubleshooting. Includes safety guidelines and specifications.</p>
	<p><a href="#">Powerhorse M1577110D.1 Pressure Washer Owner's Manual</a></p> <p>Comprehensive owner's manual for the Powerhorse M1577110D.1 pressure washer, covering installation, operation, safety, maintenance, and troubleshooting for models 1577110 and 15771120.</p>
	<p><a href="#">Powerhorse PPW2000 Pressure Washer Operator Manual</a></p> <p>This operator manual provides detailed instructions for the safe and effective use of the Powerhorse PPW2000 pressure washer. It covers assembly, operation, maintenance, and troubleshooting for the PPW2000 model.</p>



[Powerhorse PPW2000 Electric Pressure Washer Quick Start Guide](#)

Quick start guide for the Powerhorse PPW2000 Electric Pressure Washer, detailing assembly, setup, and spray tip applications. Includes model PPW2000 and item number 106167.