

Briggs & Stratton 104M02-0196-F1

Briggs & Stratton 725EXi Series Engine User Manual

MODEL: 104M02-0196-F1

Introduction

This manual provides essential information for the safe and efficient operation, maintenance, and troubleshooting of your Briggs & Stratton 725EXi Series Engine. This engine is designed to deliver dependable power with features like the ReadyStart system for easy starting, a dual-sealing air cleaner for enhanced durability, and an acoustically-engineered muffler for quieter operation. Please read this manual thoroughly before operating the engine to ensure proper use and longevity.

Safety Information

Operating any engine can be hazardous. Always follow safety precautions to prevent serious injury or property damage. This engine produces carbon monoxide, an odorless, colorless gas that can cause death. Operate only in well-ventilated areas.

- **Read the Manual:** Familiarize yourself with all instructions and warnings before starting or servicing the engine.
- **Fuel Safety:** Gasoline is highly flammable. Handle fuel in a well-ventilated area, away from sparks or open flames. Do not refuel a hot or running engine.
- **Hot Surfaces:** Engine components, especially the muffler, become very hot during operation and remain hot for a period after shutdown. Avoid contact.
- **Moving Parts:** Keep hands, feet, and clothing away from rotating parts such as the flywheel and crankshaft.
- **Exhaust Fumes:** Engine exhaust contains carbon monoxide. Never operate the engine in an enclosed area.
- **Proposition 65 Warning:** This product can expose you to chemicals including engine exhaust, which is known to the State of California to cause cancer, and carbon monoxide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Setup

1. Unpacking and Inspection

Carefully remove the engine from its packaging. Inspect for any signs of shipping damage. If damage is found,

contact your dealer immediately.

2. Mounting the Engine

The engine features a 25 mm x 3-5/32" crankshaft. The mounting holes on the engine base are designed for self-tapping bolts. When installing, use the appropriate bolts from your equipment. These bolts will cut their own threads into the engine's mounting plate, ensuring a secure fit. Do not attempt to pre-tap the holes with standard taps, as this may compromise the secure mounting.



Figure 1: Overall view of the Briggs & Stratton 725EXi Series Engine, showing its general configuration and mounting points.

3. Adding Engine Oil

IMPORTANT: The engine is shipped without oil or with only a small amount for corrosion protection. You **MUST** fill the engine with the correct type and amount of oil before starting. Refer to the engine label or your equipment's manual for the recommended oil type (e.g., SAE 30, 10W-30) and capacity. Overfilling or underfilling can cause severe engine damage.

1. Place the engine on a level surface.
2. Remove the oil fill cap/dipstick.
3. Slowly add the recommended oil to the engine crankcase until the oil level reaches the FULL mark on the dipstick. Do not screw in the dipstick when checking the level; simply insert it until it rests on the fill tube.
4. Replace the oil fill cap/dipstick securely.



Figure 2: Side view of the engine, highlighting the location of the oil fill cap for adding engine oil.

4. Adding Fuel

Use clean, fresh, unleaded gasoline with an octane rating of 87 or higher. Do not use E85 fuel or gasoline containing more than 10% ethanol (E10). Always add fuel in a well-ventilated outdoor area, away from ignition sources.

1. Ensure the engine is off and cool.
2. Remove the fuel cap.
3. Fill the fuel tank carefully, leaving some space for fuel expansion. Do not overfill.
4. Replace the fuel cap securely.



Figure 3: Side view of the engine, showing the fuel tank area and important warning labels, including the ReadyStart feature.

Operating the Engine

1. Starting Procedure (ReadyStart System)

Your 725EXi Series engine features the Briggs & Stratton ReadyStart system, which eliminates the need for manual priming or choking. This system automatically senses engine temperature to deliver the right amount of fuel to the carburetor.

1. Ensure the engine has adequate oil and fuel.
2. Make sure the equipment attached to the engine is in neutral or disengaged.
3. Move the throttle control (if equipped) to the FAST position.
4. Grasp the starter rope handle firmly and pull it slowly until resistance is felt, then pull rapidly with a full arm stroke. Allow the rope to rewind slowly. Repeat if necessary.

2. Stopping Procedure

To stop the engine, move the throttle control to the STOP or OFF position. If the engine does not stop, refer to the troubleshooting section or your equipment's manual.

3. Break-in Period

During the first few hours of operation, avoid operating the engine at maximum load or speed for extended periods. This allows engine components to properly seat and ensures optimal performance and longevity.

Maintenance

Regular maintenance is crucial for the performance and lifespan of your Briggs & Stratton engine. Always perform maintenance with the engine off and cool, and disconnect the spark plug wire to prevent accidental starting.

1. Engine Oil Maintenance

- **Check Oil Level:** Check the oil level before each use.
- **Change Oil:** Change the engine oil after the first 5 operating hours, then every 50 operating hours or annually,

whichever comes first. Dispose of used oil responsibly.

2. Air Filter Maintenance

Your engine is equipped with a dual-sealing air cleaner for improved debris resistance. Inspect the air filter element regularly (every 25 operating hours or annually, more often in dusty conditions). Clean or replace as necessary according to the instructions in your engine's full service manual.

3. Spark Plug Maintenance

Inspect the spark plug annually or every 100 operating hours. Clean or replace if electrodes are fouled, burned, or cracked. Ensure the gap is set correctly according to specifications.

4. Fuel System Maintenance

Inspect fuel lines and connections for cracks or leaks. For seasonal storage, add a fuel stabilizer to the gasoline or drain the fuel system completely to prevent fuel degradation issues.

5. General Cleaning

Keep the engine clean, especially the cooling fins and air intake areas, to prevent overheating. Use a brush or compressed air to remove debris.



Figure 4: Side view of the engine, illustrating the muffler area and general engine construction, important for cleaning and inspection.

Troubleshooting

This section provides solutions to common engine problems. For issues not listed or if problems persist, consult a qualified service technician.

Problem	Possible Cause	Solution
Engine will not start	No fuel or stale fuel	Add fresh fuel; drain old fuel if necessary
	Low or no engine oil	Fill oil to correct level
	Spark plug faulty or disconnected	Inspect/replace spark plug; ensure wire is connected
	Air filter clogged	Clean or replace air filter

Problem	Possible Cause	Solution
Engine runs poorly or stalls	Clogged air filter	Clean or replace air filter
	Stale or contaminated fuel	Drain and refill with fresh fuel
	Spark plug issues	Inspect/replace spark plug
Excessive smoke from exhaust	Engine overfilled with oil	Check oil level and drain excess if necessary
	Engine tilted during operation	Operate engine on level surface
	Internal engine issue	Consult service technician

If you receive an engine that appears damaged or defective upon arrival, document the condition with photographs and contact your seller or Briggs & Stratton customer service immediately for assistance. Do not attempt to operate a visibly damaged engine.

Specifications

Feature	Detail
Brand	Briggs & Stratton
Model Name	Simpson
Item Model Number	104M02-0196-F1
Crankshaft Dimensions	25 mm x 3-5/32 inches
Speed	3200 RPM
Horsepower	5.7 Horsepower
Item Weight	22.5 Pounds (10.2 kg)
Product Dimensions (L x W x H)	17.5 x 14.75 x 14.75 inches (44.45 x 37.47 x 37.47 cm)
UPC	047282259375

Warranty and Support

Your Briggs & Stratton 725EXi Series Engine is backed by a **two-year limited consumer engine warranty**. This warranty covers defects in material or workmanship under normal use and service. For complete warranty terms and conditions, please refer to the warranty statement included with your engine or visit the official Briggs & Stratton website.

For technical assistance, parts, or service, please contact Briggs & Stratton customer support or visit their authorized service center locator online. Having your engine model and serial numbers ready will expedite the support process.

Briggs & Stratton Official Website: www.briggsandstratton.com

