

[Manuals.plus](#) /

› [Briggs & Stratton](#) /

› Briggs & Stratton 491031 Carburetor Instruction Manual

Briggs & Stratton 491031

Briggs & Stratton 491031 Carburetor Instruction Manual

Genuine Replacement Part for Small Engines and Lawn Mowers

[Overview](#)

[Safety](#)

[Installation](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty &](#)

[Support](#)

1. PRODUCT OVERVIEW

This manual provides essential information for the proper installation, operation, and maintenance of your Briggs & Stratton 491031 Carburetor. This genuine Briggs & Stratton replacement part is designed to meet exact OEM standards, ensuring optimal performance and compliance with emission regulations for your small engine or lawn mower.

The Briggs & Stratton 491031 Carburetor replaces part number 490499.

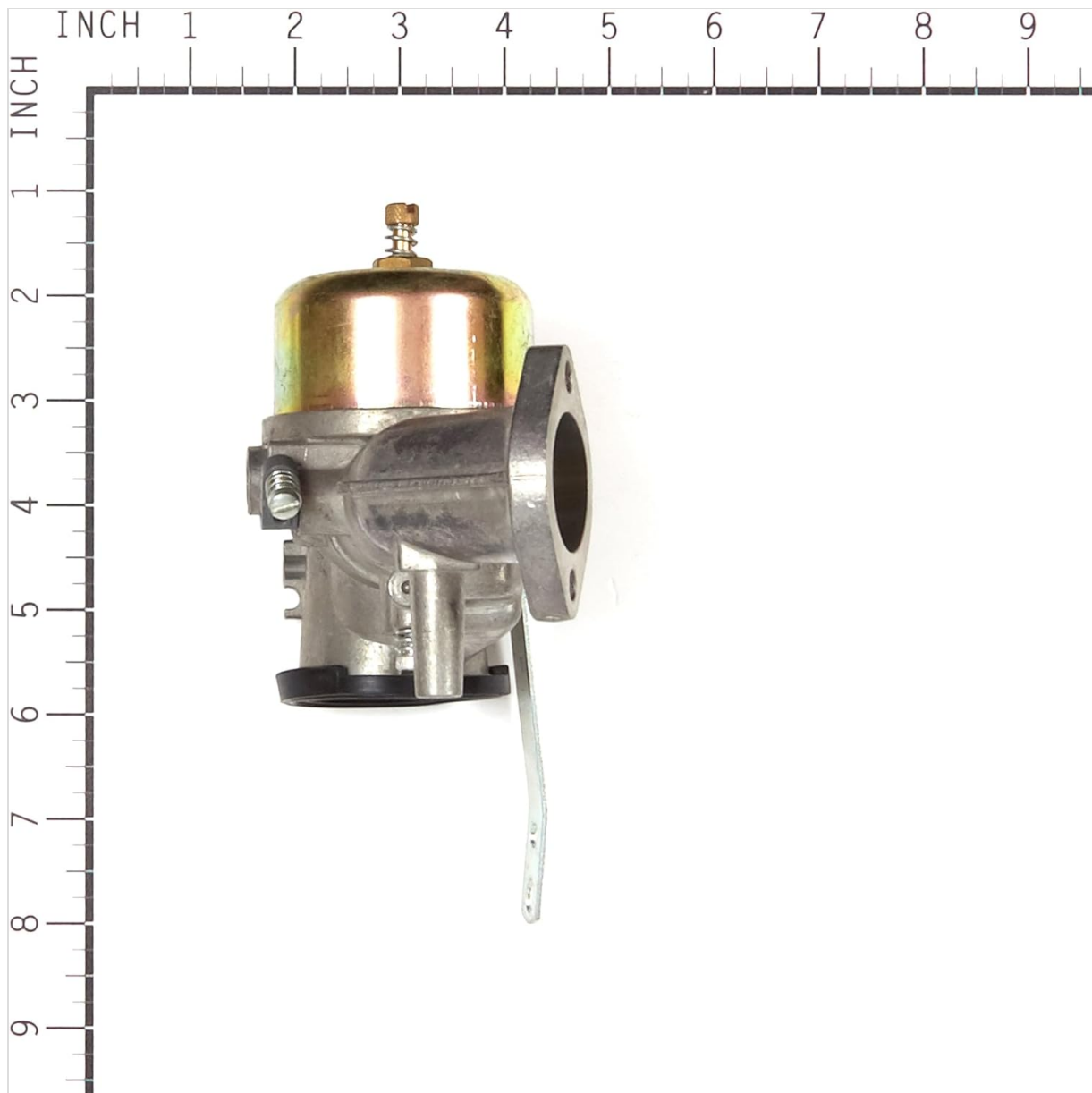


Figure 1: Side view of the Briggs & Stratton 491031 Carburetor. This image shows the main body, fuel inlet, and mounting flange.

2. SAFETY INFORMATION

Always prioritize safety when working with engine components. Failure to follow these safety guidelines may result in serious injury or damage to equipment.

- **Read the Engine Manual:** Consult your engine's specific service manual for detailed safety procedures and instructions before attempting any repairs or installations.
- **Disconnect Spark Plug:** Always disconnect the spark plug wire before working on the engine to prevent accidental starting.
- **Work in a Well-Ventilated Area:** Fuel and carburetor cleaner fumes can be hazardous. Ensure adequate ventilation.
- **Handle Fuel Safely:** Gasoline is highly flammable. Store it in approved containers, away from ignition sources. Do not smoke while handling fuel.
- **Wear Protective Gear:** Use safety glasses, gloves, and appropriate clothing to protect against fuel, chemicals, and sharp edges.
- **Allow Engine to Cool:** Never work on a hot engine. Allow it to cool completely before servicing.
- **Professional Installation Recommended:** If you are unsure about any step, seek assistance from a qualified service technician.

3. PACKAGE CONTENTS

Verify that all items are present and undamaged upon opening the package.

- Briggs & Stratton 491031 Carburetor (Quantity: 1)
- *Note: Gaskets and mounting hardware may be sold separately or included with specific engine models. Refer to your engine's service manual for required components.*



Figure 2: Example of Briggs & Stratton genuine part packaging. Ensure your part is in original, sealed packaging to confirm authenticity.

4. INSTALLATION INSTRUCTIONS

This section provides general guidance for replacing a carburetor. Always refer to your specific engine's service manual for detailed, model-specific instructions and torque specifications.

Required Tools (May Vary):

- Socket/Wrench Set
- Screwdrivers
- Pliers

- Fuel Line Clamp
- Clean Rags
- New Gaskets (if not included with carburetor)
- Fuel Stabilizer (recommended for storage)

Installation Steps:

1. Prepare the Engine:

- Ensure the engine is cool and the spark plug wire is disconnected.
- Place a suitable container under the fuel tank and open the fuel valve (if applicable) to drain all fuel. Alternatively, use a fuel line clamp to prevent fuel flow.

2. Remove Air Filter Assembly:

- Carefully remove the air filter cover, filter element, and any housing components to access the carburetor.

3. Disconnect Linkages and Fuel Line:

- Note the routing and connection points of all throttle and choke linkages. Take photos if necessary for reassembly.
- Disconnect the fuel line from the carburetor. Be prepared for residual fuel.

4. Remove Old Carburetor:

- Unbolt the carburetor from the engine manifold. There may be two or more bolts.
- Carefully remove the old carburetor, ensuring all old gaskets are removed from the mounting surfaces.

5. Inspect and Clean Mounting Surfaces:

- Thoroughly clean the engine manifold and air filter housing mounting surfaces to ensure a proper seal with new gaskets.

6. Install New Carburetor:

- Place new gaskets in their correct positions.
- Mount the new Briggs & Stratton 491031 Carburetor onto the engine manifold.
- Hand-tighten the mounting bolts, then tighten them evenly to the torque specifications provided in your engine's service manual. Overtightening can damage the carburetor or manifold.

7. Reconnect Components:

- Reconnect the fuel line securely to the carburetor.
- Reattach all throttle and choke linkages to their original positions. Ensure they move freely without binding.
- Reinstall the air filter housing and air filter element.

8. Refill Fuel and Test:

- Refill the fuel tank with fresh, clean gasoline.
- Reconnect the spark plug wire.
- Start the engine according to your equipment's operating instructions. Allow it to warm up and check for any fuel leaks or abnormal operation.

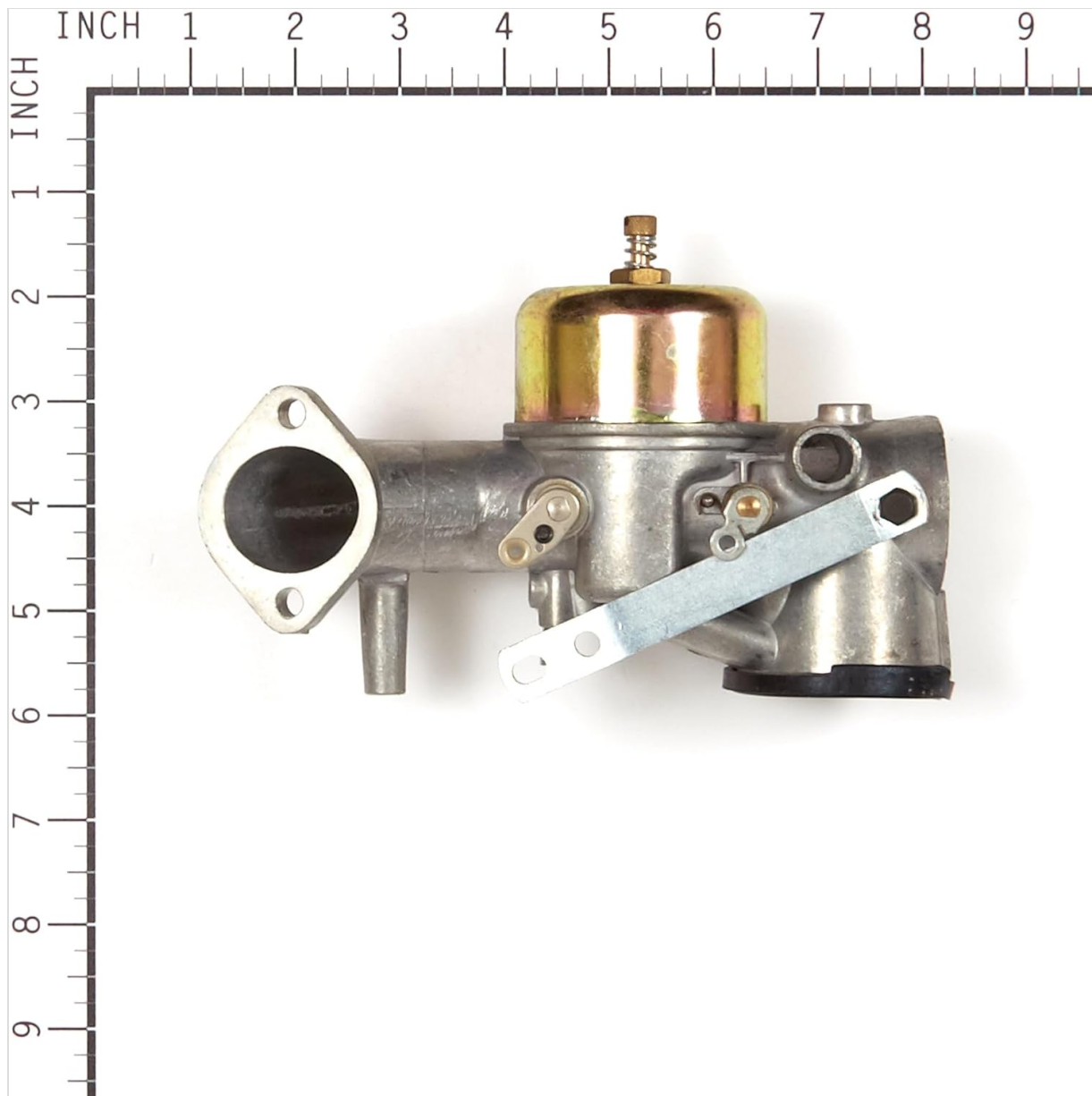


Figure 3: Opposite side view of the carburetor, showing additional linkages and adjustment points. Refer to your engine manual for specific connection details.

5. OPERATING CONSIDERATIONS

Once the new carburetor is installed, the engine should operate as designed. The carburetor's primary function is to mix air and fuel in the correct proportions for combustion.

- **Engine Starting:** Follow your equipment's standard starting procedure (choke, throttle position). A properly installed carburetor should allow for smooth starting.
- **Engine Performance:** The engine should run smoothly, without excessive surging, stalling, or loss of power.
- **Adjustments:** Most modern Briggs & Stratton carburetors are factory-set and do not require manual adjustments. If your engine requires adjustment, consult a qualified service technician or your engine's service manual. Improper adjustments can lead to poor performance or engine damage.

6. MAINTENANCE

Proper maintenance extends the life of your carburetor and ensures reliable engine performance.

- **Use Fresh Fuel:** Always use fresh, clean gasoline. Stale fuel can cause deposits and clog carburetor passages.
- **Fuel Stabilizer:** For engines stored for more than 30 days, use a high-quality fuel stabilizer to prevent fuel degradation.
- **Clean Air Filter:** A dirty air filter restricts airflow, causing the engine to run rich and potentially affecting carburetor performance. Clean or replace the air filter regularly as per your engine manual.
- **Fuel Filter:** Ensure your engine has a clean fuel filter to prevent debris from reaching the carburetor. Replace it periodically.
- **Carburetor Cleaning:** If performance issues arise due to fuel contamination, the carburetor may need cleaning. This is a delicate procedure and often best performed by a professional.

7. TROUBLESHOOTING COMMON ISSUES

If your engine experiences problems after carburetor installation, consider the following common issues. Always refer to your engine's service manual for comprehensive troubleshooting.

Symptom	Possible Cause	Solution
Engine will not start	No fuel, clogged fuel line/filter, incorrect choke setting, spark plug issue, improper carburetor installation.	Check fuel level, inspect fuel line/filter, verify choke operation, check spark plug, re-verify carburetor installation steps.
Engine runs rough or surges	Stale fuel, dirty air filter, minor carburetor blockage, vacuum leak (improperly seated gaskets).	Drain and replace with fresh fuel, clean/replace air filter, inspect carburetor for debris, check for proper gasket seating.
Fuel leaks from carburetor	Improperly seated gaskets, loose fuel line connection, damaged float or needle valve.	Check all connections and mounting bolts, inspect gaskets for damage, if leak persists, carburetor may require professional inspection.
Loss of power	Dirty air filter, fuel delivery issue, carburetor running too lean or rich.	Clean/replace air filter, ensure adequate fuel flow, consult service manual for potential carburetor adjustments (if applicable) or professional service.

8. SPECIFICATIONS

Key specifications for the Briggs & Stratton 491031 Carburetor.

- **Part Number:** 491031
- **Replaces Part Number:** 490499
- **Brand:** Briggs & Stratton
- **Product Type:** Small Engine and Lawn Mower Carburetor
- **Weight:** Approximately 0.2 Kilograms (0.44 lbs)
- **GTIN/UPC:** 024847833157
- **Compatibility:** Designed for specific Briggs & Stratton small engines. Refer to your engine's model and type numbers for exact compatibility.

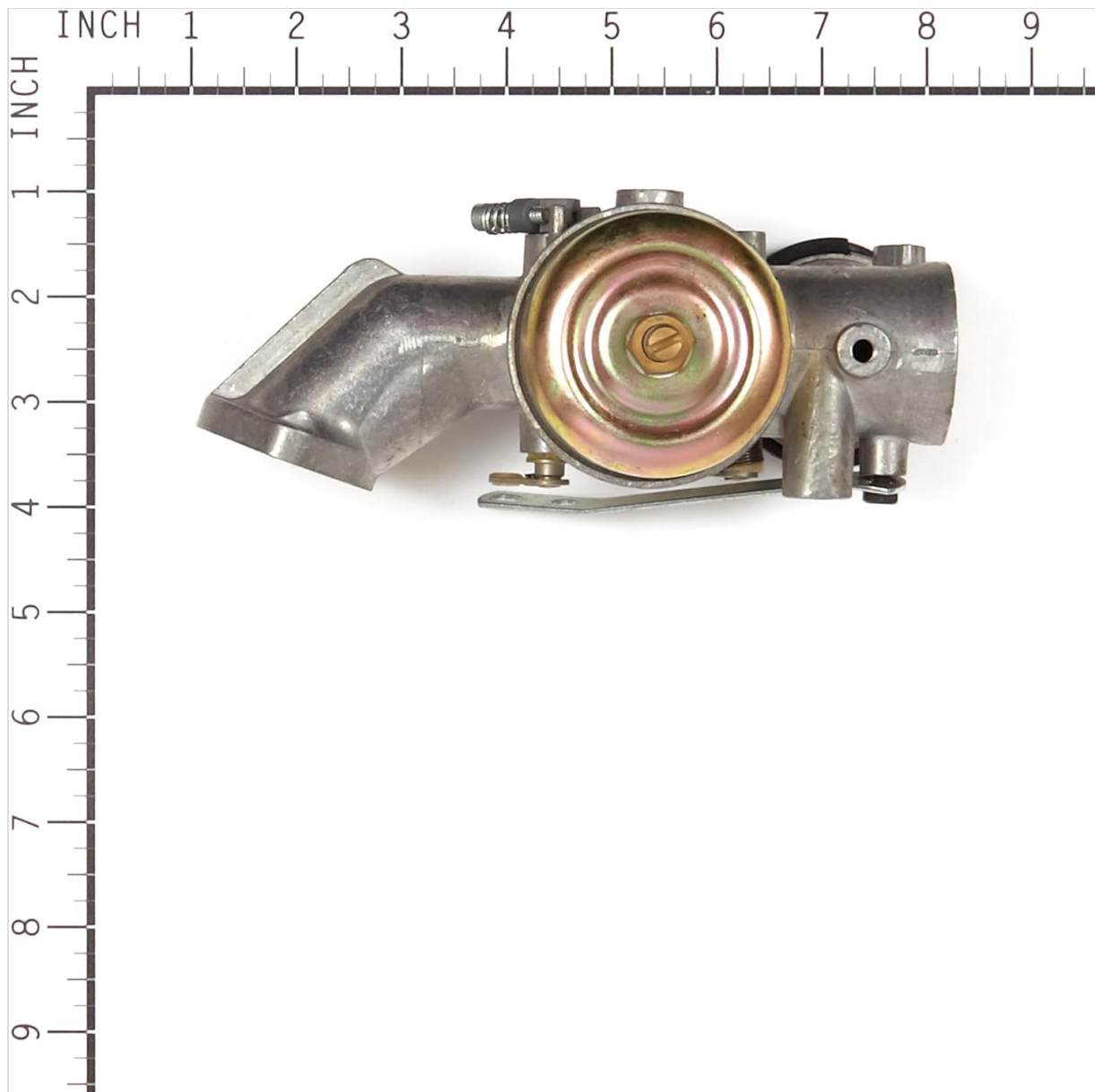


Figure 4: Top view of the carburetor, showing the air intake and fuel bowl area.

9. WARRANTY AND SUPPORT

As a genuine Briggs & Stratton part, this carburetor is covered by the manufacturer's warranty for replacement parts. For specific warranty terms and conditions, please refer to the documentation included with your product or visit the official Briggs & Stratton website.

Customer Support:

For technical assistance, troubleshooting, or warranty claims, please contact Briggs & Stratton customer support or visit their official website:

- **Briggs & Stratton Official Website:** www.briggsandstratton.com
- **Find a Service Dealer:** Use the dealer locator tool on the Briggs & Stratton website to find authorized service centers near you.

Using genuine Briggs & Stratton parts ensures the longevity and performance of your engine.

