

31r707, 31r777, 31r807, 31r877, 31s777

Carburetor Assembly Instruction Manual

For B-riggs & Stratton Engines Models 31R707, 31R777, 31R807, 31R877, 31S777

PRODUCT OVERVIEW

This manual provides detailed instructions for the installation, operation, and maintenance of the Carburetor Assembly designed for specific B-riggs & Stratton engine models. Proper installation and regular maintenance are crucial for optimal engine performance and longevity.

The assembly includes a carburetor, hose, choke lever, gasket, fuel line clamps, mounting brackets, and a screw. This is an Albro/Nikki style carburetor with a straight outlet.



Figure 1: Complete Carburetor Assembly Kit. This image displays all components included in the package: the carburetor unit, a fuel hose, a choke lever, a gasket, two fuel line clamps, two mounting brackets, and a screw.

COMPATIBILITY

This Carburetor Assembly is specifically designed for the following B-riggs & Stratton engine models:

- 31R707
- 31R777
- 31R807
- 31R877
- 31S777

Important:

Before installation, please verify your engine's part or model number to ensure this carburetor assembly is the correct replacement for your unit. This assembly may replace multiple original part numbers.

INCLUDED COMPONENTS

The package contains the following items:

- 1 x Carburetor
- 1 x Fuel Hose
- 1 x Choke Lever
- 1 x Gasket
- 2 x Fuel Line Clamps
- 2 x Mounting Brackets
- 1 x Screw



Figure 2: Individual components of the Carburetor Assembly Kit. This image provides a clear view of each part included: the carburetor, fuel hose, choke lever, gasket, fuel line clamps, mounting brackets, and screw.

SPECIFICATIONS

Attribute	Detail
Brand	Generic
Model Numbers	31R707, 31R777, 31R807, 31R877, 31S777
Item Weight	Approximately 12 ounces
Fuel Type	Gasoline
OEM Part Number	3130723
Manufacturer Part Number	31r707-31r877
Exterior Finish	Silver/Gold Zinc
Flange Type	Throttle Body
Recommended Use	Engine Fuel System Replacement

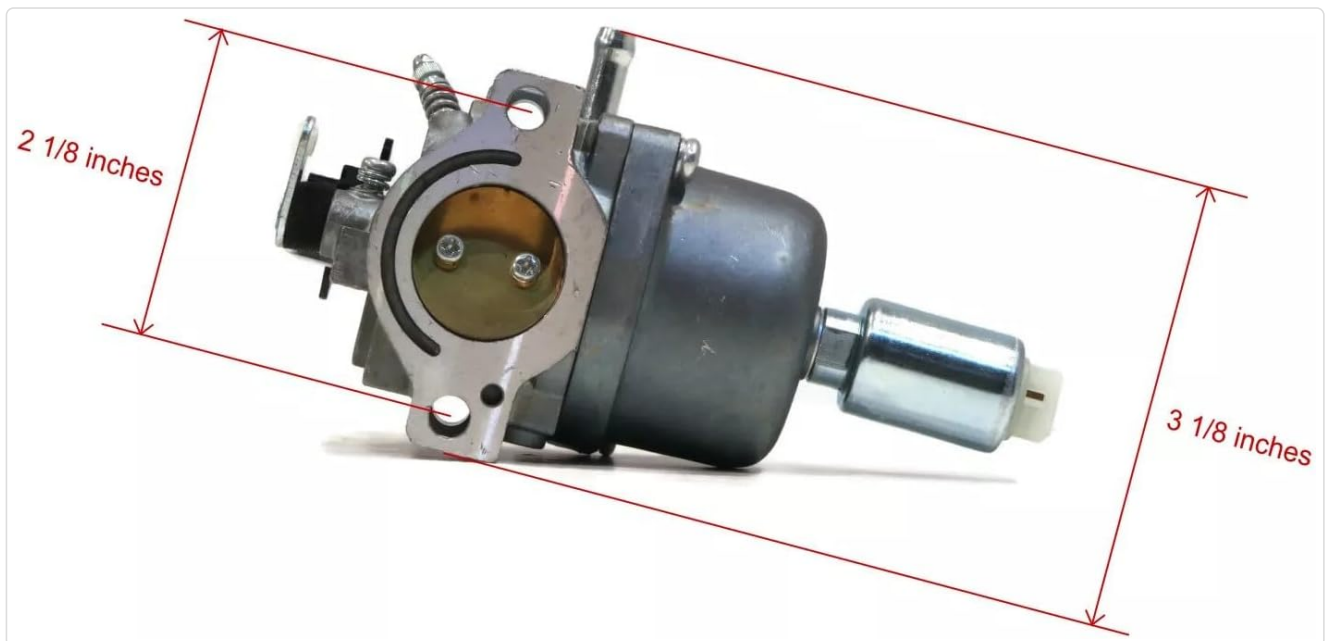


Figure 3: Carburetor dimensions (side view). This image illustrates the approximate dimensions of the carburetor, showing a height of 2 1/8 inches and a length of 3 1/8 inches from the main body to the end of the fuel solenoid.



Figure 4: Carburetor dimensions (top view). This image shows the approximate dimensions of the carburetor from a different angle, indicating a width of 1 3/8 inches and an overall length of 5 3/4 inches including the fuel solenoid.

SETUP AND INSTALLATION

Safety First: Always ensure the engine is cool and disconnected from its power source (e.g., spark plug wire removed) before beginning any installation or maintenance work. Wear appropriate personal protective equipment.

1. **Preparation:** Drain the fuel tank and disconnect the fuel lines from the old carburetor.
2. **Removal of Old Carburetor:** Carefully unbolt and remove the existing carburetor. Note the orientation of all components, including gaskets and linkages, for reassembly.
3. **Gasket Placement:** Place the new gasket (included) between the engine block and the new carburetor. Ensure it is properly aligned to prevent air leaks.
4. **Mounting the New Carburetor:** Position the new carburetor assembly onto the engine. Secure it using the provided mounting brackets and screw. Ensure all connections are snug but do not overtighten.
5. **Connecting Fuel Lines:** Attach the new fuel hose to the carburetor and the fuel tank/pump. Use the provided fuel line clamps to secure the connections, preventing fuel leaks.
6. **Choke Lever Installation:** Install the choke lever onto the carburetor. Ensure it operates smoothly and engages correctly.
7. **Linkage Reconnection:** Reconnect any throttle or choke linkages that were disconnected during removal. Verify smooth operation of these linkages.
8. **Final Checks:** Double-check all connections for tightness and proper routing. Ensure no tools or debris are left in the engine area.



Figure 5: Carburetor inlet and outlet view. This image highlights the straight outlet design of the Albro/Nikki style carburetor, crucial for proper fuel flow and connection.

OPERATING INSTRUCTIONS

After successful installation, follow these steps to operate your engine:

1. **Refuel:** Fill the fuel tank with the appropriate type of gasoline as recommended by your engine manufacturer.
2. **Reconnect Spark Plug:** Reconnect the spark plug wire.
3. **Choke Setting:** For cold starts, set the choke lever to the "Full Choke" position. For warm starts, the choke may not be necessary or only partially needed.
4. **Starting the Engine:** Follow your engine manufacturer's specific starting procedure (e.g., pull cord, electric start).
5. **Choke Adjustment:** Once the engine starts and runs smoothly, gradually move the choke lever to the "Run" or "Open" position.
6. **Monitoring:** Listen for smooth engine operation. If the engine sputters or stalls, re-check fuel supply and choke settings.

MAINTENANCE

Regular maintenance of your carburetor assembly ensures optimal performance and extends its lifespan.

- **Fuel Quality:** Always use fresh, clean gasoline. Stale or contaminated fuel can clog the carburetor. Consider using a fuel stabilizer if the engine will be stored for extended periods.
- **Fuel Filter:** Regularly inspect and replace the fuel filter (if applicable to your engine) to prevent debris from reaching the carburetor.
- **Air Filter:** Ensure the engine's air filter is clean and free of obstructions. A dirty air filter can affect the fuel-to-air mixture.

- **Linkage Inspection:** Periodically check all carburetor linkages for proper movement and ensure they are not binding or loose.
- **Cleaning:** If performance issues arise, the carburetor may need cleaning. This typically involves disassembling the carburetor and cleaning jets and passages with carburetor cleaner. This procedure should only be performed by individuals with appropriate mechanical knowledge.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine won't start	No fuel, clogged fuel line/filter, incorrect choke setting, spark plug issue	Check fuel level, inspect fuel lines/filter, adjust choke, check spark plug
Engine runs rough/stalls	Dirty carburetor, improper fuel-air mixture, old fuel	Clean carburetor, check air filter, use fresh fuel
Fuel leaks	Loose fuel line clamps, damaged gasket, cracked fuel hose	Tighten clamps, replace gasket, replace hose
Engine lacks power	Partially clogged carburetor, restricted air filter	Clean carburetor, clean/replace air filter

If troubleshooting steps do not resolve the issue, it is recommended to consult a qualified service technician.

WARRANTY AND SUPPORT

For information regarding product warranty or technical support, please refer to the documentation provided with your original engine or contact the manufacturer of your engine. As this is a replacement part, warranty terms may vary.

For general inquiries about this carburetor assembly, please contact the seller or retailer from whom it was purchased.