Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

Briggs & Stratton 395508

Briggs & Stratton 395508 Needle Valve User Manual

Model: 395508 | Brand: Briggs & Stratton

Introduction

This manual provides essential information for the proper installation, function, and maintenance of the Briggs & Stratton 395508 Needle Valve. This genuine replacement part is designed specifically for 3-4 horsepower vertical engines equipped with Vacu-Jet and Pulsa Jet carburetors, ensuring optimal fuel delivery and engine performance.

Safety Information

Always prioritize safety when working with engine components. Failure to follow safety precautions can result in serious injury or damage to equipment.

- Ensure the engine is cool and the spark plug wire is disconnected before beginning any work.
- Work in a well-ventilated area.
- Wear appropriate personal protective equipment, including gloves and eye protection.
- Handle fuel with extreme care; it is highly flammable.
- If unsure about any procedure, consult a qualified service technician.

Product Overview



Image: The Briggs & Stratton 395508 Needle Valve assembly, showing the metal needle with a pointed tip and threaded base, a spring, a black washer, and a separate translucent white plastic housing. A black O-ring is also visible.

The Briggs & Stratton 395508 Needle Valve is a precision component designed to regulate the flow of fuel within the carburetor. It typically consists of the following parts:

- **Needle:** The tapered metal component that moves within the valve seat to control fuel flow.
- **Spring:** Provides tension for the needle's movement.
- **Washer/Gasket:** Ensures a proper seal.
- **O-ring:** Provides a seal to prevent fuel leaks.
- **Plastic Housing:** The main body that holds the needle and spring assembly.

Specifications

Model Number	395508

Brand	Briggs & Stratton
Material	Plastic
Item Dimensions (L x W x H)	1 x 7 x 8 inches
Item Weight	1.6 ounces
Valve Type	Needle Valve
Inlet Connection Size	7 Inches
Inlet Connection Type	Threaded
Number of Ports	2

Installation

The Briggs & Stratton 395508 Needle Valve is a replacement part for specific carburetor types. Proper installation is crucial for correct engine operation. It is recommended to consult your engine's service manual or a qualified technician if you are unfamiliar with carburetor disassembly and reassembly.

General Installation Steps:

1. **Preparation:** Ensure the engine is off and cool. Disconnect the spark plug wire to prevent accidental starting. Place a suitable container under the carburetor to catch any spilled fuel.
2. **Fuel Drainage:** Close the fuel shut-off valve (if equipped) and drain the fuel from the carburetor bowl.
3. **Carburetor Access:** Carefully remove any air filter components, shrouds, or linkages necessary to access the carburetor.
4. **Disassembly:** Remove the carburetor bowl. Locate the existing needle valve assembly. Note its orientation and how it is seated.
5. **Removal of Old Valve:** Gently remove the old needle valve, spring, and any associated washers or O-rings. Inspect the carburetor's valve seat for any damage or debris.
6. **Installation of New Valve:** Insert the new Briggs & Stratton 395508 Needle Valve assembly into its designated position within the carburetor. Ensure the needle is properly seated and moves freely.
7. **Reassembly:** Reattach the carburetor bowl, ensuring the gasket is properly seated to prevent leaks. Reconnect all linkages, shrouds, and air filter components.
8. **Fuel and Test:** Reconnect the spark plug wire. Refill the fuel tank if necessary and open the fuel shut-off valve. Start the engine and check for proper operation and any fuel leaks.

Purpose and Function

The needle valve is a critical component within the carburetor's float system. Its primary function is to regulate the flow of fuel from the fuel tank into the carburetor's float bowl. When the fuel level in the bowl reaches a predetermined height, the float rises, pushing the needle valve into its seat, thereby stopping the fuel flow. As fuel is consumed by the engine, the float drops, allowing the needle valve to open and replenish the fuel in the bowl. This precise control ensures a consistent fuel supply to the engine, which is essential for stable idling, smooth acceleration, and overall efficient operation.

Maintenance

While the needle valve itself requires minimal direct maintenance, its longevity and proper function are heavily dependent on the overall condition of the carburetor and the quality of fuel used.

- **Fuel Quality:** Always use fresh, clean fuel. Stale or contaminated fuel can lead to deposits that clog the needle valve or cause it to stick, leading to fuel delivery issues.
- **Carburetor Cleaning:** Periodically clean the carburetor, especially the float bowl and valve seat area, to remove any varnish, gum, or debris that could impede the needle valve's movement.
- **Storage:** Before long-term storage, drain the fuel system or use a fuel stabilizer to prevent fuel degradation and carburetor issues.
- **Inspection:** During any carburetor service, inspect the needle valve for signs of wear, such as a grooved tip or a worn O-ring, which can lead to fuel leaks or improper fuel levels.

Troubleshooting

A malfunctioning needle valve can cause various engine performance issues. Consider the needle valve as a potential culprit if you experience the following:

- **Engine Not Starting or Hard Starting:** If the needle valve is stuck closed, insufficient fuel will reach the engine.
- **Engine Flooding or Running Rich:** If the needle valve is stuck open or not sealing properly, too much fuel will enter the carburetor bowl, leading to flooding, black smoke, or poor fuel economy.
- **Fuel Leaks from Carburetor:** A worn or damaged needle valve or O-ring can prevent a proper seal, causing fuel to leak from the carburetor bowl.
- **Rough Idle or Stalling:** Inconsistent fuel delivery due to a faulty needle valve can lead to an unstable idle or cause the engine to stall.

If these symptoms occur, inspect the needle valve and its seat for debris, wear, or damage. Replacement with a genuine Briggs & Stratton part is often the most effective solution for these issues.

Warranty and Support

For specific warranty information regarding the Briggs & Stratton 395508 Needle Valve, please refer to the documentation included with your purchase or visit the official Briggs & Stratton website. For technical assistance, troubleshooting beyond this manual, or to locate authorized service centers, please contact Briggs & Stratton customer support directly.
Briggs & Stratton Official Website: www.briggsandstratton.com

© 2024 Briggs & Stratton. All rights reserved.
This manual is for informational purposes only. Always follow manufacturer's instructions and safety guidelines.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B0038U3LVO

More documents and user manuals: **https://manuals.plus/**