

RATION 917.376721, 917.378481

RATION Carburetor Instruction Manual

For Craftsman Lawn Mower Models 917.376721 and 917.378481

Brand: RATION

INTRODUCTION

This manual provides essential information for the installation, operation, maintenance, and troubleshooting of your new RATION carburetor, designed as a replacement part for Craftsman Lawn Mower Models 917.376721 and 917.378481. Proper installation and care will ensure optimal engine performance and fuel efficiency.

Please read this manual thoroughly before attempting any installation or maintenance procedures.

COMPATIBILITY

This RATION carburetor is specifically engineered to be compatible with the following Craftsman Lawn Mower models:

- Craftsman 917.376721
- Craftsman 917.378481

To ensure correct fitment, it is crucial to verify your lawn mower's model number before proceeding with installation. Always compare the physical dimensions and appearance of the new carburetor with your original part, and review the provided product images closely.

SETUP AND INSTALLATION

Safety First: Before beginning any work, ensure the lawn mower engine is cool, the spark plug wire is disconnected to prevent accidental starting, and the fuel tank is empty or the fuel line is clamped off to prevent spills.

1. **Preparation:** Gather necessary tools, including wrenches, screwdrivers, and a clean cloth. Have a container ready to catch any residual fuel.
2. **Remove Air Filter Assembly:** Carefully detach the air filter housing and air filter.
3. **Disconnect Fuel Line:** Locate the fuel line connected to the carburetor. Use pliers to slide back the clamp and gently pull the fuel line off. Be prepared for a small amount of fuel to leak.
4. **Disconnect Linkages:** Identify and carefully disconnect any throttle or choke linkages attached to the carburetor. Take note of their original positions for reassembly.

5. **Remove Mounting Bolts:** Unscrew the bolts or nuts that secure the carburetor to the engine manifold.
6. **Remove Old Carburetor:** Carefully pull the old carburetor away from the engine, ensuring all gaskets are removed.
7. **Install New Gaskets:** Place the new gaskets (included with the RATION carburetor) in their correct positions between the engine, carburetor, and air filter assembly. Ensure they are seated properly to prevent air leaks.
8. **Mount New Carburetor:** Position the new RATION carburetor onto the mounting studs and secure it with the bolts/nuts. Do not overtighten.
9. **Reconnect Linkages:** Reattach the throttle and choke linkages to their correct positions on the new carburetor. Verify smooth operation.
10. **Reconnect Fuel Line:** Push the fuel line firmly onto the carburetor inlet and secure it with the clamp.
11. **Reinstall Air Filter Assembly:** Reattach the air filter and its housing.
12. **Final Checks:** Ensure all connections are secure, there are no loose parts, and the fuel line is free of kinks. Reconnect the spark plug wire.

Image 1: RATION Carburetor with Gaskets



This image displays the RATION replacement carburetor along with the necessary gaskets for installation. The carburetor features a metallic body with a fuel bowl at the bottom and various ports and linkages on top, designed for precise fuel delivery.

OPERATING INSTRUCTIONS

After installing the new carburetor, follow your lawn mower's manufacturer guidelines for starting and operating the engine. The new carburetor is designed to provide optimal fuel mixture for efficient engine performance.

- **Initial Start-up:** It may take a few pulls to prime the fuel system and get the engine started after a carburetor replacement.
- **Engine Warm-up:** Allow the engine to warm up for a few minutes before engaging the blades or applying a load.
- **Observe Performance:** Pay attention to engine idle, acceleration, and overall power. The engine should run smoothly without excessive smoke or hesitation.

MAINTENANCE

Regular maintenance of your carburetor and fuel system is crucial for longevity and performance.

- **Fuel Quality:** Always use fresh, clean fuel. Stale or contaminated fuel is a primary cause of carburetor issues. Consider using a fuel stabilizer, especially during storage.
- **Fuel Filter:** Regularly inspect and replace the fuel filter according to your mower's maintenance schedule. A clogged fuel filter can restrict fuel flow to the carburetor.
- **Air Filter:** Keep the air filter clean and replace it as recommended. A dirty air filter can cause the engine to run rich and affect carburetor performance.
- **Storage:** Before long-term storage, either run the engine until it runs out of fuel or drain the fuel tank and carburetor bowl to prevent fuel degradation and gumming.

TROUBLESHOOTING

If you encounter issues after carburetor installation, consider the following common troubleshooting steps:

Symptom	Possible Cause	Solution
Engine won't start	No fuel, clogged fuel filter, incorrect choke setting, spark plug issue, air leak	Check fuel level, replace fuel filter, adjust choke, inspect spark plug, check carburetor mounting and gaskets for leaks.
Engine runs rough/stalls	Dirty fuel, clogged jet, air leak, incorrect idle adjustment	Drain old fuel and refill with fresh, clean fuel. Inspect and clean carburetor jets if accessible. Check for air leaks around gaskets. Adjust idle screw if necessary.
Engine lacks power	Clogged air filter, restricted fuel flow, incorrect engine speed	Clean or replace air filter. Check fuel filter and fuel line for obstructions. Ensure throttle linkage is operating correctly.
Fuel leaks	Loose fuel line, damaged gasket, stuck float, cracked fuel bowl	Tighten fuel line connections. Replace damaged gaskets. Inspect float and needle valve for proper operation. Check carburetor body for cracks.

If these steps do not resolve the issue, it is recommended to consult a qualified small engine technician.

SPECIFICATIONS

- **Manufacturer:** RATION
- **Compatibility:** Craftsman Lawn Mower Models 917.376721, 917.378481
- **Part Type:** Replacement Carburetor
- **ASIN:** B0DV4413KD

WARRANTY INFORMATION

For specific warranty details regarding your RATION carburetor, please refer to the documentation provided at the time of purchase or contact the seller directly. Generally, replacement parts come with a limited warranty covering manufacturing defects.

CUSTOMER SUPPORT

If you require further assistance with installation, troubleshooting, or have questions about your RATION carburetor, please contact the retailer or the RATION customer support channel specified on your product packaging or purchase invoice. When contacting support, please have your product details and purchase information readily available.

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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.

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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