

Arctic Cat 0470-448

Arctic Cat ATV 300 4x4 Keihin CVK 32 Carburetor Instruction Manual

Model: 0470-448 | Brand: Arctic Cat

Applicable to 2001-2005 Arctic Cat ATV 300 4x4 models

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Arctic Cat ATV 300 4x4 Keihin CVK 32 Carburetor, OEM Part Number 0470-448. This carburetor is designed for specific Arctic Cat ATV 300 4x4 models manufactured between 2001 and 2005. Adhering to these instructions will help ensure optimal performance and longevity of your ATV's fuel system.

2. SAFETY INFORMATION

Always prioritize safety when working on your ATV. Improper installation or maintenance of fuel system components can lead to serious injury or damage. Consult a qualified technician if you are unsure about any procedure.

- Ensure the ATV engine is off and cool before beginning any work.
- Disconnect the battery to prevent accidental starting.
- Work in a well-ventilated area to avoid inhaling fuel vapors.
- Wear appropriate personal protective equipment, including gloves and eye protection.
- Keep open flames, sparks, and other ignition sources away from fuel and fuel system components.
- Properly dispose of old fuel and parts according to local regulations.

3. PRODUCT OVERVIEW

The Keihin CVK 32 Carburetor (0470-448) is a critical component responsible for mixing air and fuel in the correct proportions for combustion in your ATV's engine. Understanding its various parts is essential for proper installation and maintenance.



Figure 3.1: Side view of the Keihin CVK 32 Carburetor (0470-448) showing the main body, throttle linkage, and clear fuel overflow line.

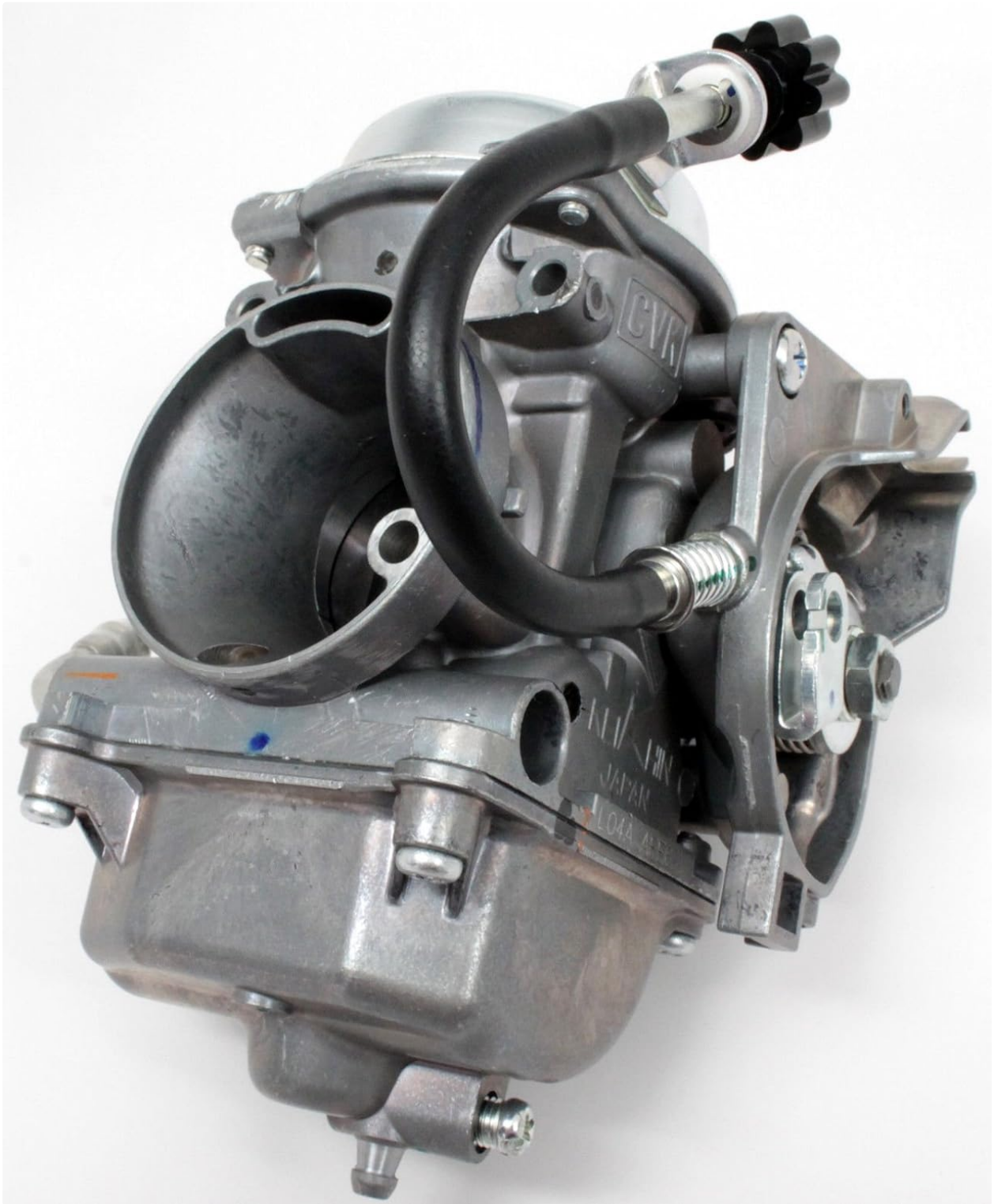


Figure 3.2: Another side view, highlighting the air intake port and the spring-loaded throttle mechanism.

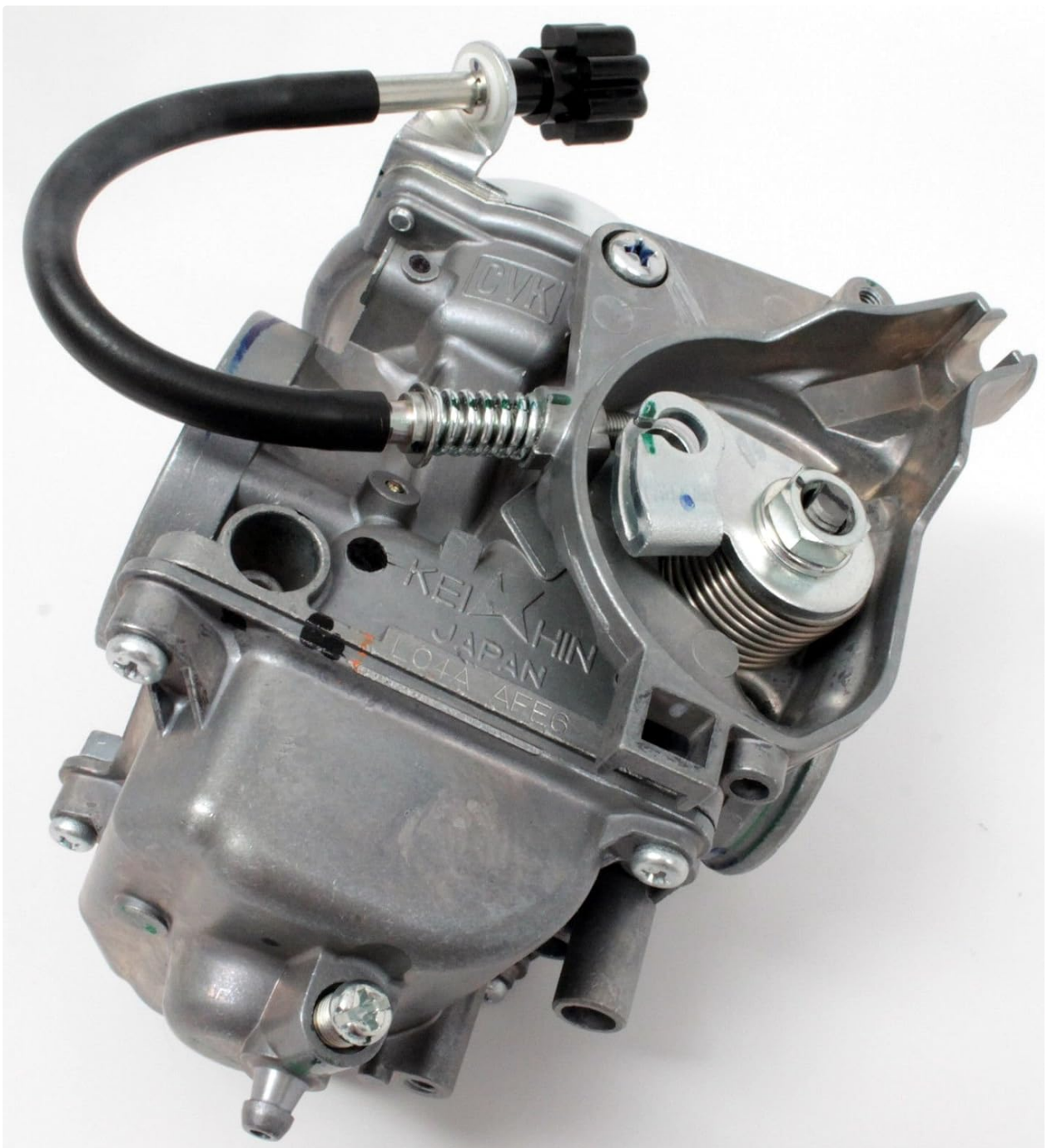


Figure 3.3: Top-down perspective, clearly showing the 'KEIHIN' branding and various adjustment points.

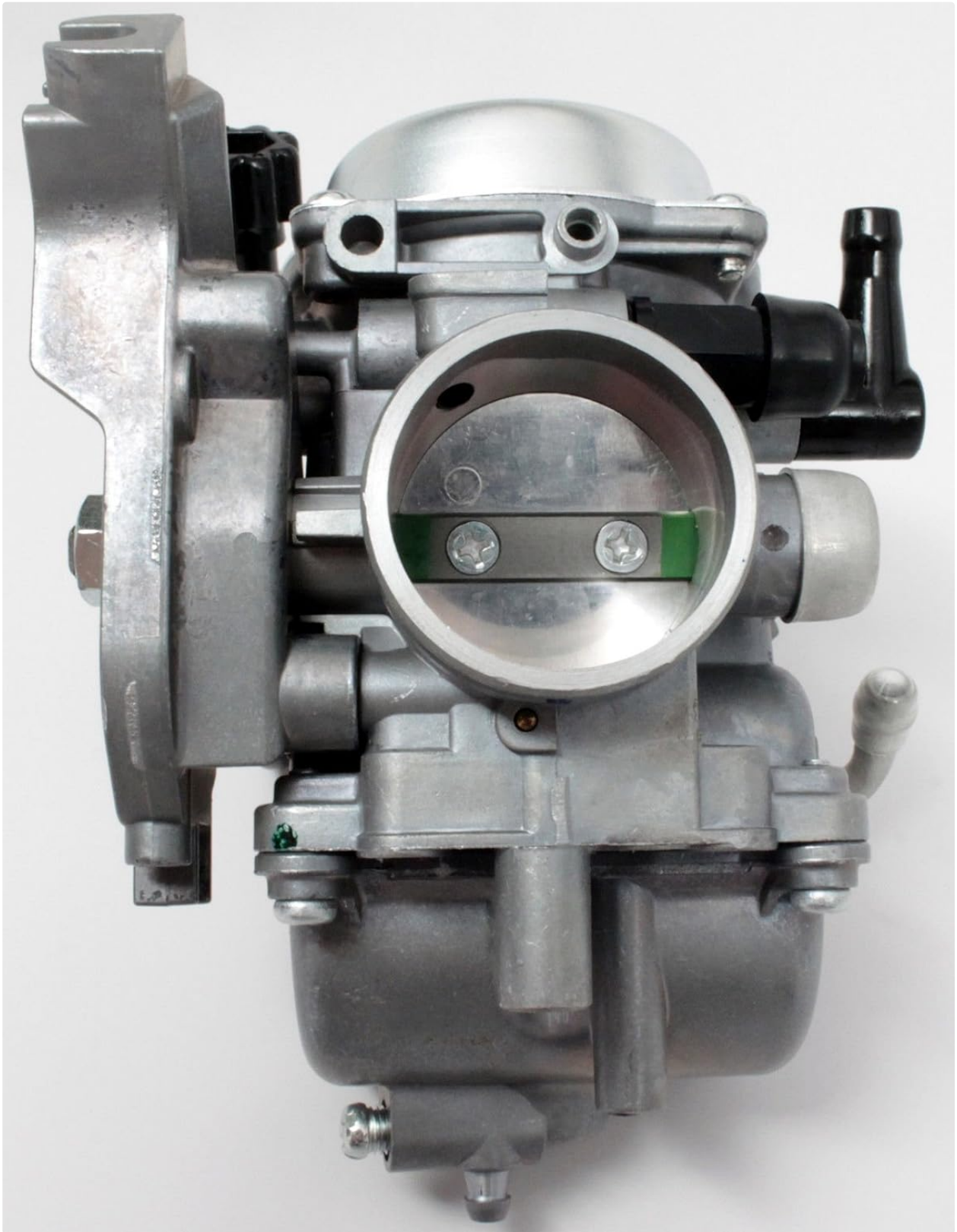


Figure 3.4: View from the air intake side, showing the internal butterfly valve that regulates airflow.

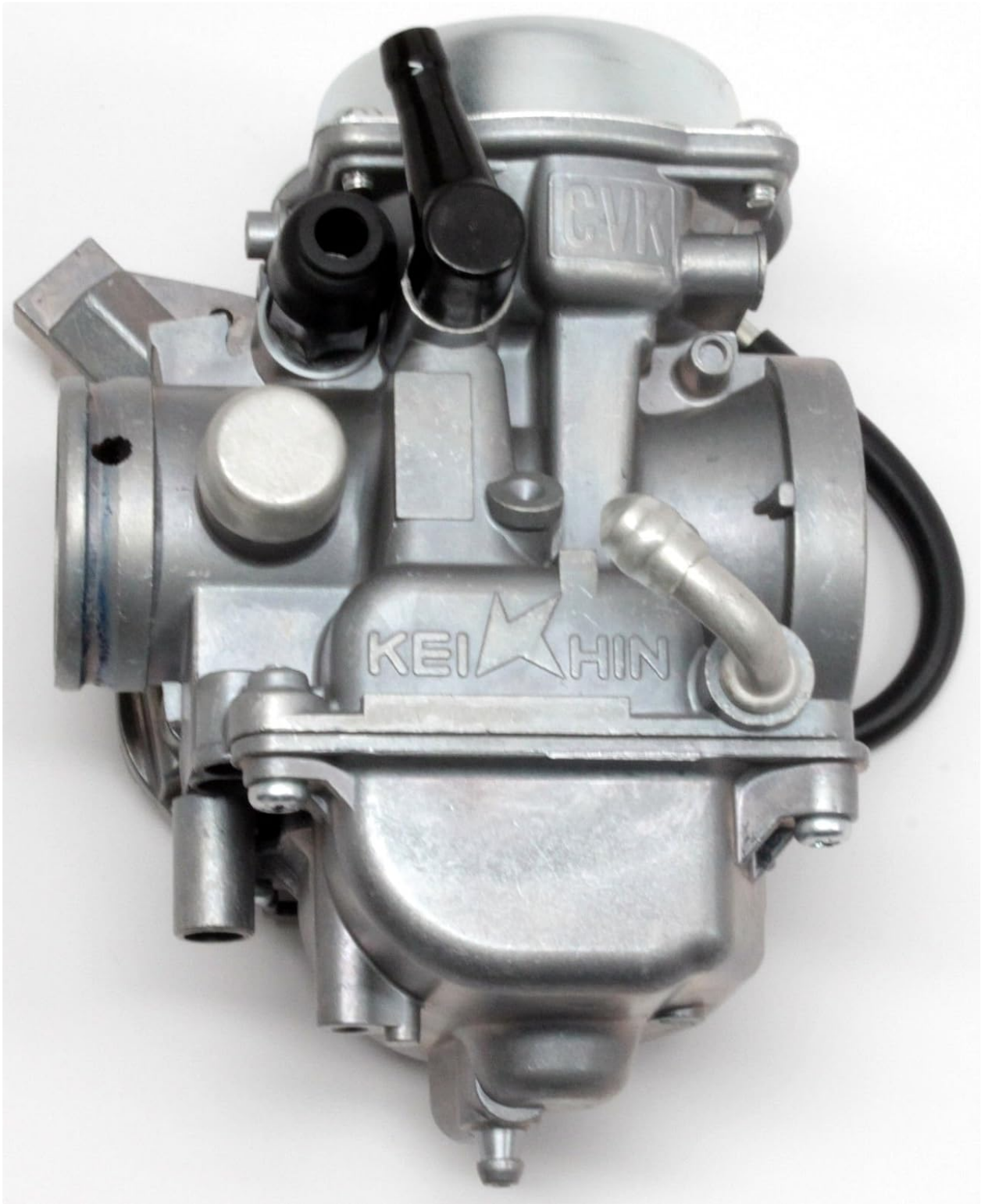


Figure 3.5: Front view of the carburetor, displaying the fuel inlet and other external connections.

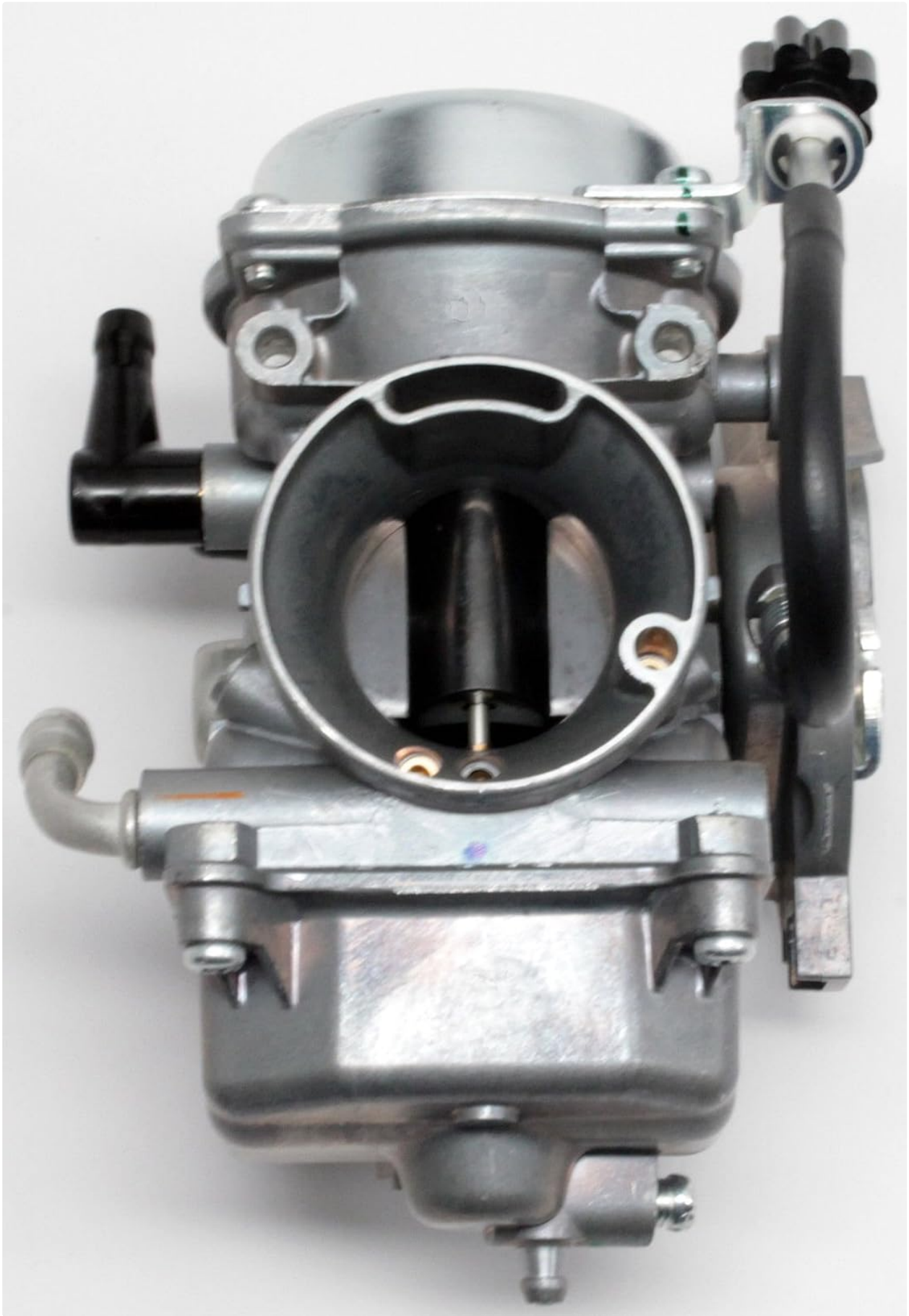


Figure 3.6: View looking directly into the carburetor bore, showing the internal components that atomize fuel.

4. SETUP AND INSTALLATION

Replacing a carburetor requires careful attention to detail. Refer to your ATV's service manual for specific torque

specifications and routing diagrams.

4.1. Preparation

1. Park the ATV on a level surface and engage the parking brake.
2. Turn off the engine and allow it to cool completely.
3. Turn the fuel petcock to the 'OFF' position.
4. Disconnect the negative terminal of the battery.
5. Remove any body panels or airbox components necessary to access the carburetor.

4.2. Removal of Old Carburetor

1. Place a suitable container beneath the carburetor to catch any residual fuel.
2. Disconnect the fuel line, vacuum lines, and overflow lines from the carburetor.
3. Carefully disconnect the throttle cable and choke cable (if applicable).
4. Loosen the clamps securing the carburetor to the intake manifold and airbox boot.
5. Remove the old carburetor. Inspect the intake manifold and airbox boot for cracks or damage. Replace if necessary.

4.3. Installation of New Carburetor

1. Ensure all mating surfaces are clean and free of debris.
2. Carefully slide the new carburetor into position, ensuring it seats properly in both the intake manifold and airbox boot.
3. Tighten the clamps securely, but do not overtighten.
4. Reconnect the throttle cable and choke cable. Ensure smooth operation without binding.
5. Reconnect all fuel lines, vacuum lines, and overflow lines. Double-check all connections for security.
6. Reinstall any removed body panels or airbox components.
7. Reconnect the battery.

5. OPERATING CONSIDERATIONS

After installation, proper tuning of the carburetor may be required for optimal engine performance. This typically involves adjusting the idle speed screw and the air/fuel mixture screw. Refer to your ATV's service manual for specific tuning procedures and recommended settings for your altitude and climate.

- **Initial Start-up:** Turn the fuel petcock to 'ON' or 'RES' and allow the carburetor bowl to fill. Use the choke as needed for cold starts.
- **Idle Adjustment:** Adjust the idle speed screw to achieve the manufacturer's recommended idle RPM.
- **Air/Fuel Mixture:** Adjust the air/fuel mixture screw for the smoothest idle and best throttle response. This often requires specialized knowledge or tools.

6. MAINTENANCE

Regular maintenance of your carburetor is crucial for consistent engine performance and to prevent issues such as fuel blockages or poor running conditions.

6.1. Routine Checks

- Inspect fuel lines for cracks, leaks, or kinks.
- Check the air filter regularly and clean or replace as needed. A dirty air filter can affect carburetor

performance.

- Ensure the throttle and choke cables operate smoothly and are properly adjusted.

6.2. Carburetor Cleaning

If the ATV experiences rough idling, poor acceleration, or difficulty starting, the carburetor may require cleaning. This procedure should be performed by an experienced individual or a qualified technician.

1. Remove the carburetor from the ATV (refer to Section 4.2).
2. Disassemble the float bowl and remove the jets.
3. Use a carburetor cleaner spray to clean all passages, jets, and the float bowl. Ensure all small orifices are clear.
4. Inspect the float and needle valve for wear or damage. Replace if necessary.
5. Reassemble the carburetor with new gaskets and O-rings if available.
6. Reinstall the carburetor and perform necessary adjustments.

7. TROUBLESHOOTING

This section outlines common issues and potential solutions related to carburetor performance.

Symptom	Possible Cause	Solution
Engine will not start or starts with difficulty	Clogged fuel filter, stale fuel, clogged jets, improper choke use	Check fuel supply, clean/replace fuel filter, clean carburetor jets, ensure proper choke operation
Rough idle or stalling	Improper idle speed/mixture adjustment, vacuum leak, dirty pilot jet	Adjust idle speed/mixture, check for vacuum leaks, clean pilot jet
Poor acceleration or lack of power	Clogged main jet, restricted air filter, improper float level	Clean main jet, clean/replace air filter, adjust float level
Fuel leaks	Damaged float bowl gasket, stuck float, loose fuel line connections	Replace gasket, inspect/clean float and needle valve, tighten fuel line clamps

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

8. SPECIFICATIONS

- **Part Number:** 0470-448
- **Carburetor Type:** Keihin CVK 32
- **Brand:** Arctic Cat
- **Vehicle Service Type:** All-Terrain-Vehicles (ATV)
- **Flange Type:** Bolt On
- **Product Dimensions:** Approximately 6 x 6 x 6 inches
- **Item Weight:** Approximately 2 pounds
- **Recommended Uses:** Replacement carburetor for Arctic Cat ATV 300 4x4 (2001-2005 models)

9. WARRANTY AND SUPPORT

For information regarding warranty coverage for this OEM part, please refer to the original purchase documentation or contact your authorized Arctic Cat dealer. For technical support or service, it is recommended to consult an authorized Arctic Cat service center or a qualified ATV mechanic.

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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.

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