AHL AXC-23*2-002

AHL Motorcycle Carburetor Repair Kit Instruction Manual

Model: AXC-23*2-002
Brand: AHL

1. Product Overview

This AHL Motorcycle Carburetor Repair Kit provides essential components for rebuilding and restoring the functionality of your motorcycle's carburetor. Each kit is designed as an OEM replacement, ensuring compatibility and performance. The components are manufactured from high-quality copper material for durability and reliable operation.

The package includes two complete sets of repair components, allowing for comprehensive maintenance or repair of two carburetors, or providing spare parts for a single unit.

Image 1.1: Overview of two complete AHL Motorcycle Carburetor Repair Kits.

2. Compatibility

This carburetor repair kit is compatible with the following motorcycle models and years:

- BMW F650: 1993-2000 (Note: May not fit 1997 models)
- SUZUKI GS500: 1989-2000
- SUZUKI GS500E: 1989-2000

- SUZUKI GSX1100G: 1991-1993
- SUZUKI DR250S: 1990-1993
- SUZUKI DR250SE: 1994-1995
- SUZUKI DR350S: 1990-1993
- SUZUKI DR350SE: 1994-1999
- SUZUKI DR350: 1997-1999

Attention:

- Always verify the shape, size, and specific model year of your carburetor components against the kit contents before purchasing and installation.
- If you have any questions regarding compatibility, especially for specific year/brand/model combinations, please contact AHL customer support.

3. Package Contents

Each AHL Motorcycle Carburetor Repair Kit contains components necessary for a complete carburetor rebuild. The package includes two identical sets of these components. Typical contents for one set include:

- Main jets
- Pilot jets
- Jet needles
- Float valve and seat
- Float bowl gasket
- Various O-rings and washers
- Other small springs and components

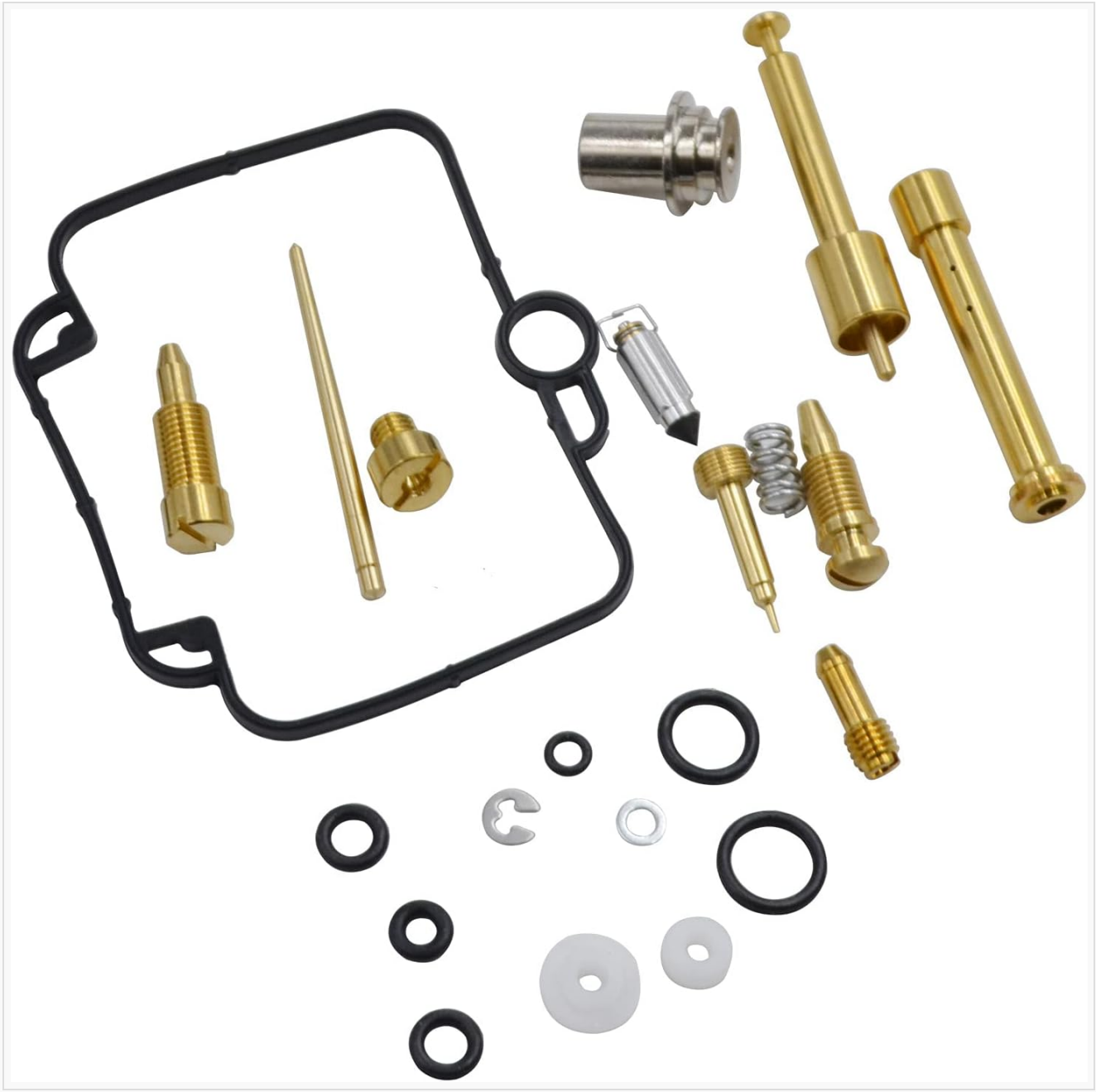

Image 3.1: Detailed view of one set of carburetor repair components.

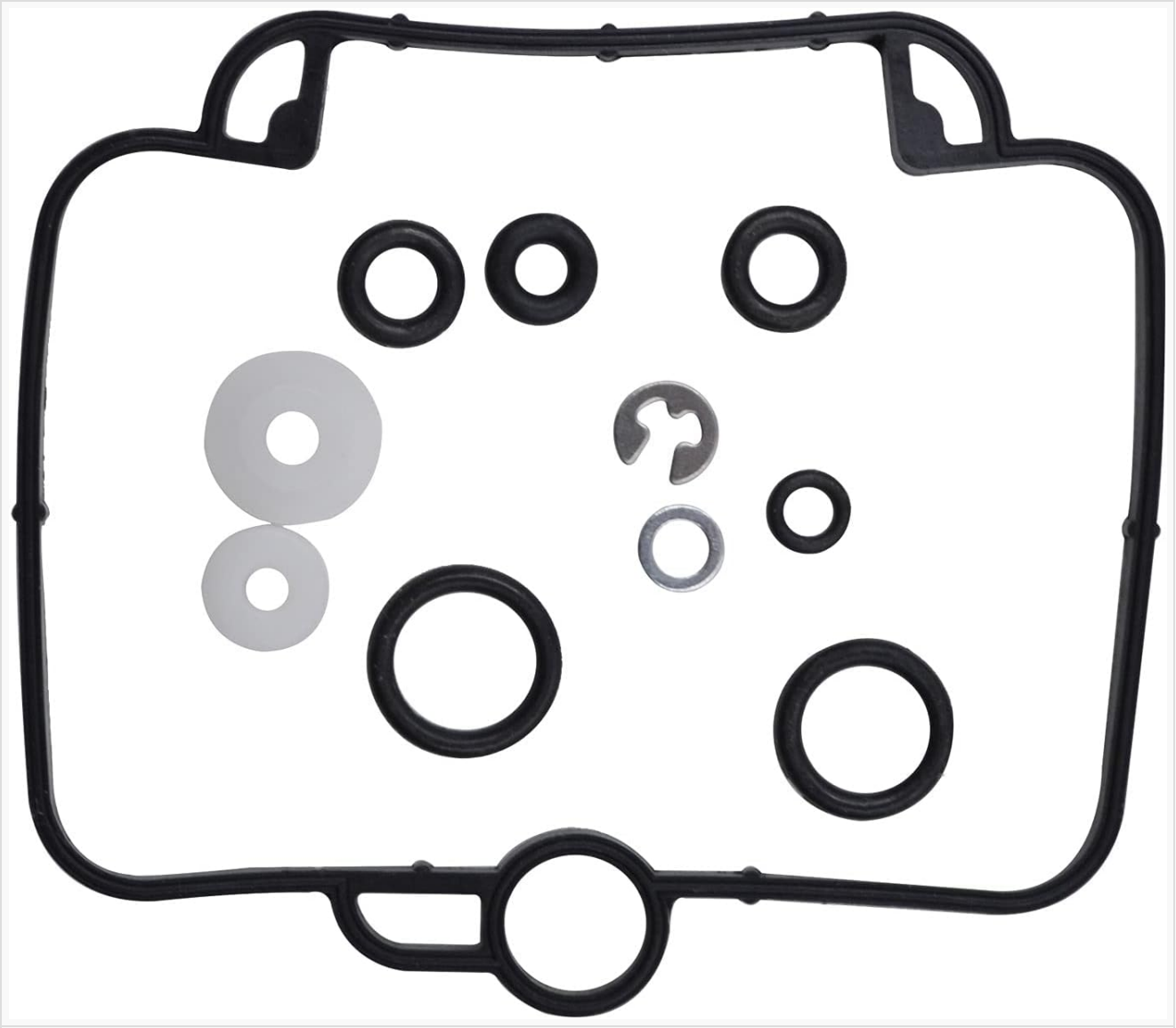

Image 3.2: Close-up of gaskets, O-rings, and washers.

4. Installation Guide

Carburetor repair requires mechanical aptitude and specific tools. If you are not confident in your abilities, it is recommended to seek assistance from a qualified motorcycle mechanic.

4.1 Safety Precautions

- Ensure the motorcycle is on a stable stand and the engine is cool.
- Disconnect the battery to prevent accidental starting.
- 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.

4.2 Disassembly

1. Refer to your motorcycle's service manual for specific carburetor removal instructions.
2. Carefully remove the carburetor from the motorcycle.
3. Drain any remaining fuel from the float bowl.
4. Disassemble the carburetor, paying close attention to the location and orientation of each component. Take photos or make diagrams if necessary.

4.3 Cleaning

- Thoroughly clean all metal carburetor components using a suitable carburetor cleaner.
- Ensure all passages and jets are free of debris and blockages. Use compressed air to clear small orifices.
- Do not use harsh chemicals on rubber or plastic parts, as they can be damaged.

4.4 Component Replacement

1. Replace worn or damaged components with the new parts from the AHL repair kit.
2. Ensure that each new part matches the original part being replaced in terms of size and type.
3. Install new O-rings and gaskets to ensure a proper seal.

Image 4.1: Detailed view of jets and float valve components.

Image 4.2: Main jets and jet needle.

4.5 Reassembly and Adjustment

1. Reassemble the carburetor in reverse order of disassembly.
2. Ensure all screws are tightened to the manufacturer's specifications.
3. Reinstall the carburetor onto the motorcycle.
4. Perform initial adjustments such as idle speed and mixture screw settings according to your motorcycle's service manual.

5. Operating Considerations

After a carburetor rebuild, proper operation depends on correct installation and adjustment. The carburetor's primary function is to mix air and fuel in the correct ratio for combustion. A properly rebuilt carburetor should contribute to:

- Smooth engine idle
- Responsive throttle action
- Efficient fuel consumption
- Consistent engine performance across all RPMs

Monitor engine behavior closely after the rebuild. Any unusual sounds, smells, or performance issues should be investigated promptly.

6. Maintenance

Regular maintenance of your motorcycle's fuel system, including the carburetor, is crucial for longevity and performance. While this kit provides repair components, ongoing care is essential:

- **Fuel Quality:** Always use fresh, clean fuel. Stale or contaminated fuel is a primary cause of carburetor issues.
- **Fuel Filter:** Regularly inspect and replace the fuel filter to prevent debris from reaching the carburetor.
- **Air Filter:** A clean air filter ensures proper air-fuel mixture and prevents dirt from entering the carburetor.
- **Storage:** If storing the motorcycle for an extended period, drain the fuel from the carburetor float bowl or use a fuel stabilizer to prevent gumming and varnish buildup.
- **Periodic Inspection:** Periodically check for fuel leaks, loose connections, or signs of wear on external carburetor components.

7. Troubleshooting

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

7.1 Engine Not Starting or Hard Starting

- **No Fuel:** Check if fuel is reaching the carburetor. Ensure petcock is open and fuel lines are clear.
- **Flooding:** Float level may be too high, or float valve is sticking open.
- **Clogged Jets:** Despite cleaning, a jet might still be partially blocked. Re-inspect pilot and main jets.

7.2 Rough Idle or Stalling

- **Idle Mixture Screw:** Incorrect adjustment. Refer to service manual for baseline settings.
- **Pilot Jet:** Partially clogged pilot jet.
- **Vacuum Leaks:** Check for air leaks around intake manifold or carburetor boots.

7.3 Poor Acceleration or Lack of Power

- **Main Jet:** Main jet may be too small or partially clogged.
- **Jet Needle:** Incorrect needle position or worn needle.
- **Float Level:** Incorrect float level affecting fuel delivery at higher RPMs.

7.4 Fuel Leaks

- **Gaskets/O-rings:** Ensure all new gaskets and O-rings are properly seated and not pinched.
- **Float Bowl:** Check for cracks or damage to the float bowl itself.
- **Float Valve:** If the float valve is not sealing, fuel will overflow.

Always consult your motorcycle's specific service manual for detailed troubleshooting procedures and specifications.

8. Specifications

Attribute	Detail
Brand	AHL
Manufacturer Part Number	AXC-23*2-002
Item Weight	2.39 ounces
Package Dimensions	3.62 x 3.31 x 1.1 inches
Exterior Material	Copper (for primary components)
Recommended Uses For Product	Motorcycle Carburetor Repair

9. Support and Warranty

AHL is committed to providing quality products and customer satisfaction. If you encounter any issues or have questions regarding this carburetor repair kit, please do not hesitate to contact AHL customer support.

While specific warranty details are not provided, AHL encourages communication for any product-related concerns. Please reach out to us with any questions, especially concerning compatibility for your specific motorcycle year, brand, or model. We aim to provide a satisfactory solution through good communication.