

## XILENY XILENY124

# Instruction Manual: Motorcycle Carburetor

Brand: XILENY | Model: XILENY124

## INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of your new XILENY Carburetor, specifically designed for Yamaha JOG100 ZY100 100cc scooters and mopeds. This carburetor is engineered for reliable performance and durability, ensuring optimal fuel delivery to your engine.

Please read this manual thoroughly before attempting any installation or adjustment to ensure proper function and safety.

## SETUP AND INSTALLATION

Proper installation is crucial for the carburetor's performance and the vehicle's safety. If you are unsure about any step, consult a qualified mechanic.

### Pre-Installation Checklist

- Ensure the engine is cool before beginning work.
- Gather all necessary tools (wrenches, screwdrivers, pliers, etc.).
- Have a clean workspace and proper ventilation.
- Disconnect the battery's negative terminal to prevent accidental starts.
- Drain any fuel from the old carburetor and fuel lines into an approved container.

### Installation Steps

#### 1. Remove Old Carburetor:

- Locate the existing carburetor on your Yamaha JOG100 ZY100.

- Carefully disconnect the fuel line, vacuum lines, and throttle cable from the old carburetor. Be mindful of any fuel spills.
- Unbolt the old carburetor from the intake manifold and air filter housing. Remove any gaskets.

## **2. Prepare for New Carburetor:**

- Clean the intake manifold and air filter housing mounting surfaces thoroughly.
- Ensure new gaskets are available and in good condition.

## **3. Install New Carburetor:**

- Position the new XILENY carburetor with new gaskets between the intake manifold and air filter housing.
- Securely bolt the carburetor into place, ensuring a tight seal without overtightening.
- Reconnect the fuel line, vacuum lines, and throttle cable. Ensure all connections are secure and free of kinks.
- Verify that the throttle cable operates smoothly and returns to the idle position freely.

## **4. Initial Fueling and Start-up:**

- Reconnect the battery's negative terminal.
- Turn on the fuel supply. Allow the carburetor float bowl to fill. Check for any fuel leaks.
- Start the engine. It may take a few attempts to prime the fuel system.
- Allow the engine to warm up and check for smooth idle and responsiveness.



**Figure 1:** General view of the XILENY Carburetor. This image shows the overall assembly, including the main body, fuel inlet, and air intake, providing a visual reference for installation.

## OPERATING PRINCIPLES AND ADJUSTMENTS

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The carburetor mixes air and fuel in the correct ratio for combustion. Proper adjustments ensure optimal engine performance and fuel efficiency.

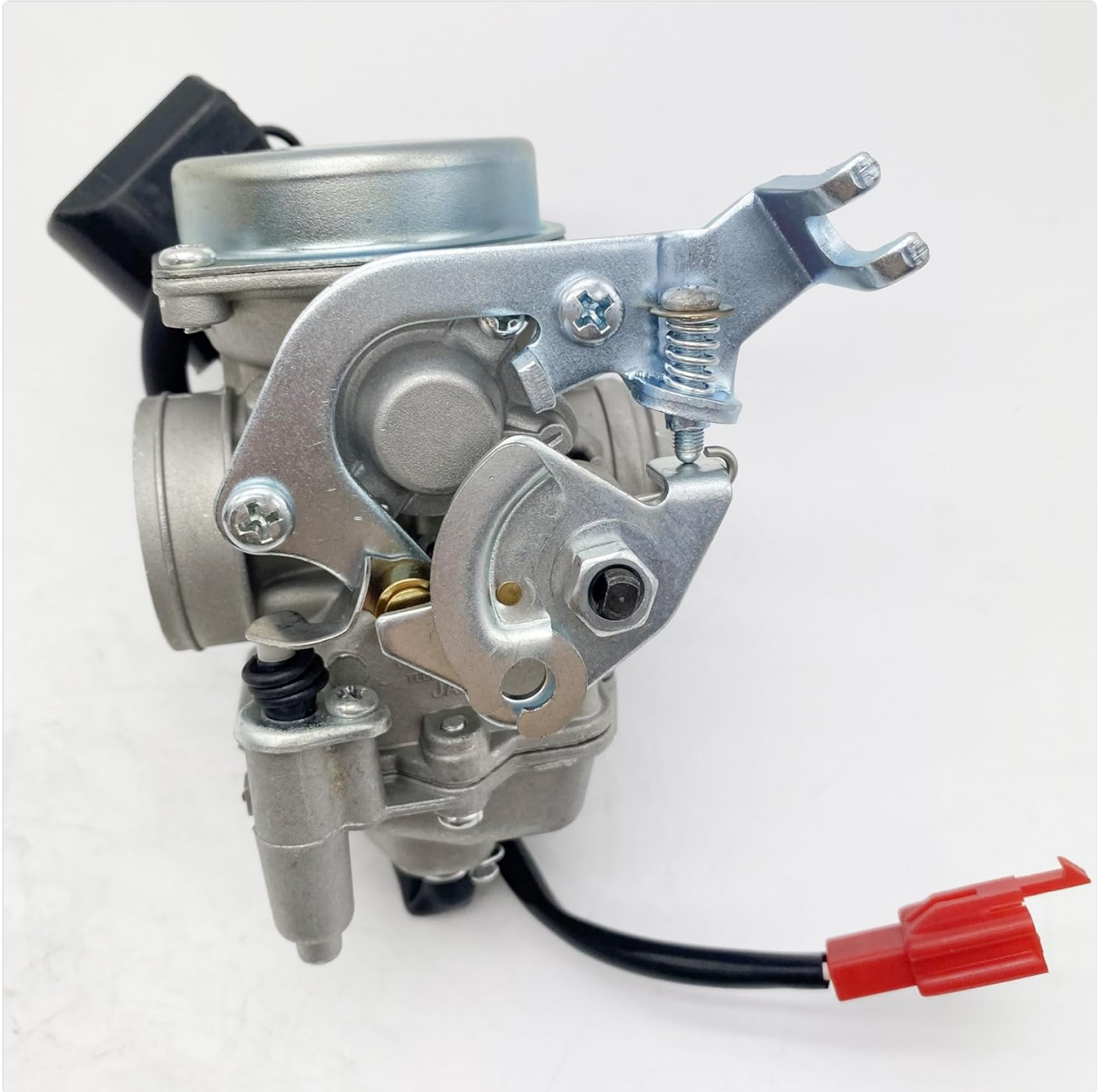
### Basic Function

The carburetor uses the vacuum created by the engine's intake stroke to draw fuel from the float bowl and mix it with air. The throttle valve controls the amount of air-fuel mixture entering the engine, thereby regulating engine speed.

## Idle Speed Adjustment

The idle speed screw (often located on the side of the carburetor, near the throttle linkage) controls the engine's RPM when the throttle is closed. To adjust:

1. Warm up the engine to operating temperature.
2. Turn the idle speed screw clockwise to increase idle RPM, or counter-clockwise to decrease it.
3. Adjust until the engine idles smoothly at the recommended RPM for your vehicle (refer to your scooter's service manual).



**Figure 2:** View showing the throttle linkage and associated components. The idle speed screw is typically located in this area, controlling the throttle plate's resting position.

## Air/Fuel Mixture Adjustment

The air/fuel mixture screw (pilot screw) controls the richness or leanness of the mixture at idle and low speeds. Incorrect adjustment can lead to poor performance, stalling, or excessive emissions. To adjust:

1. Warm up the engine to operating temperature.
2. Locate the air/fuel mixture screw. It may be covered by a cap from the factory.
3. Gently turn the screw clockwise until it seats lightly (do not overtighten). Note the number of turns.

4. Turn the screw counter-clockwise 1.5 to 2.5 turns as a starting point (refer to your scooter's service manual for specific recommendations).
5. With the engine idling, slowly turn the screw in small increments (e.g., 1/8 turn) in either direction, listening for the highest and smoothest idle.
6. Once the highest idle is found, slightly turn the idle speed screw down to the desired RPM.
7. Re-check the air/fuel mixture screw for the highest idle again. Repeat until both idle speed and mixture are optimized.



**Figure 3:** View of the carburetor's air intake side. The air/fuel mixture screw is typically located near the base of the carburetor, often on the engine side of the throttle plate.

## MAINTENANCE

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Regular maintenance extends the life of your carburetor and ensures consistent performance.

### Regular Inspection

- **Fuel Lines:** Check for cracks, leaks, or kinks. Replace if damaged.
- **Air Filter:** Inspect and clean or replace the air filter regularly as per your vehicle's service schedule. A dirty air filter can cause rich running conditions.
- **Throttle Cable:** Ensure smooth operation and proper lubrication. Check for fraying.
- **Mounting Bolts:** Periodically check that all mounting bolts are secure.

## Cleaning the Carburetor

Over time, fuel deposits can build up inside the carburetor, affecting performance. A thorough cleaning may be required if issues arise.

### 1. Disassembly:

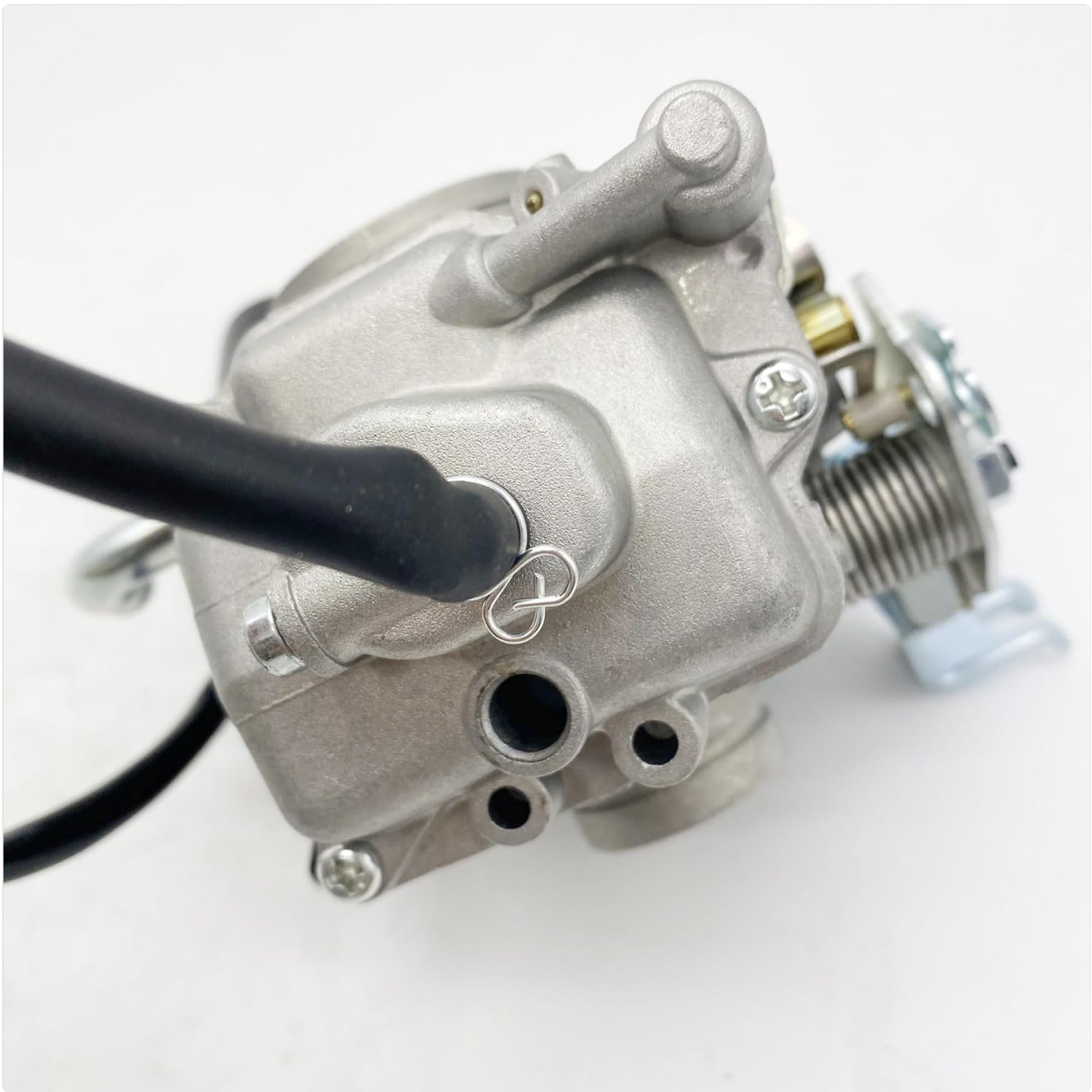
- Remove the carburetor from the vehicle (refer to Setup section).
- Carefully remove the float bowl (bottom section) by unscrewing the retaining screws.
- Remove the float pin, float, and needle valve.
- Carefully unscrew and remove the main jet and pilot jet. Note their locations.
- Remove any other accessible components like the idle mixture screw (counting turns before removal).

### 2. Cleaning:

- Use a specialized carburetor cleaner spray to clean all passages, jets, and the float bowl. Ensure the cleaner is safe for rubber and plastic components.
- Use compressed air to blow out all passages and jets, ensuring they are clear of debris. Do not use wire or hard objects to clear jets as this can damage them.
- Inspect all components for wear or damage. Replace worn gaskets or O-rings.

### 3. Reassembly:

- Reassemble the carburetor in reverse order of disassembly. Ensure all jets are tightened correctly.
- Install new gaskets if necessary.
- Reinstall the carburetor on the vehicle and perform initial adjustments as described in the "Operating Principles and Adjustments" section.



**Figure 4:** Bottom view of the carburetor, showing the float bowl and drain screw. This area is accessed for cleaning jets and inspecting the float mechanism.

## Storage

If the vehicle will be stored for an extended period (e.g., over winter), it is recommended to drain the fuel from the carburetor float bowl to prevent fuel degradation and gumming. Run the engine until it stalls from lack of fuel, or use the drain screw on the float bowl.

## TROUBLESHOOTING

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This section provides solutions to common issues you might encounter with your carburetor.

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Engine will not start or starts with difficulty	No fuel, clogged fuel filter, clogged jets, incorrect choke operation, vacuum leak.	Check fuel level and flow. Clean or replace fuel filter. Clean carburetor jets. Ensure choke is functioning. Inspect intake manifold and vacuum lines for leaks.
Engine idles poorly or stalls	Incorrect idle speed adjustment, clogged pilot jet, air/fuel mixture incorrect, vacuum leak.	Adjust idle speed. Clean pilot jet. Adjust air/fuel mixture screw. Check for vacuum leaks.
Engine runs rough at high RPM	Clogged main jet, dirty air filter, incorrect float level.	Clean main jet. Clean or replace air filter. Check and adjust float level.
Excessive fuel consumption / Black smoke from exhaust	Air filter dirty, float level too high, main jet too large, choke stuck on.	Clean or replace air filter. Adjust float level. Inspect main jet size. Check choke mechanism.
Backfiring	Lean air/fuel mixture, vacuum leak, ignition timing issue (less common for carburetor).	Adjust air/fuel mixture to be richer. Check for vacuum leaks. Consult a mechanic for ignition timing.

## SPECIFICATIONS

Technical specifications for the XILENY Carburetor Model XILENY124:

Attribute	Value
Brand	XILENY
Model	XILENY124
Item Weight	1.76 ounces
Package Dimensions	1.18 x 0.79 x 0.39 inches
Manufacturer Part Number	XILENY124
Vehicle Service Type	Scooter
Recommended Uses For Product	Motorcycle
Date First Available	January 17, 2024

## WARRANTY INFORMATION

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This XILENY Carburetor is manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the product packaging or contact the seller directly. Keep your proof of purchase for any warranty claims.

## CUSTOMER SUPPORT

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If you encounter any issues not covered in this manual or require further assistance, please contact your point of purchase or the XILENY customer support team. Provide your product model number (XILENY124) and a detailed description of the issue for faster service.

For additional resources, you may also consult online forums or professional motorcycle/scooter mechanics specializing in Yamaha JOG100 ZY100 models.