

nibbi PWK34MM

NIBBI PWK34 Carburetor Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, adjustment, and maintenance of the NIBBI PWK34 Carburetor. This carburetor is designed for various motorcycle engines, including those found in dirt bikes, mini bikes, pit bikes, GY6 ATVs, and similar applications. Please read this manual thoroughly before installation and use to ensure proper function and longevity of your carburetor.

2. INCLUDED COMPONENTS

The NIBBI PWK34 Carburetor package includes the following items:

- 1 x NIBBI PWK34 Carburetor
- 3 x Main Jets (Sizes: #128, #130, #135)
- 1 x Pilot Jet (Size: #30)
- 1 x Carburetor Installation Manual (this document)

Ensure all components are present and undamaged before proceeding with installation.

3. SPECIFICATIONS

Key specifications for the NIBBI PWK34 Carburetor:

Feature	Specification
Brand	nibbi
Model Number	PWK34MM
Manifold Intake Size	40mm
Flange Type	Bolt On

Feature	Specification
Fuel Type	Gasoline
Recommended Uses	Motorcycle, ATV, Apollo, Dirt Bike, Street Bike
Included Components	Carburetor, Main Jets, Pilot Jet
Exterior Finish	Machined
Material	Aluminum Alloy (with high-strength components)

Note: The manifold intake size is 40mm. Please verify the dimensions of your existing carburetor and intake manifold to ensure compatibility. Refer to the product images for detailed measurements.

4. SETUP AND INSTALLATION

Proper installation is crucial for optimal carburetor performance. If you are unsure about any step, consult a qualified mechanic.

4.1 Pre-Installation Check

- Ensure the engine is cool before beginning work.
- Disconnect the battery to prevent accidental starting.
- Drain the fuel tank and carburetor float bowl.
- Compare the dimensions of the new NIBBI PWK34 carburetor with your old carburetor to confirm fitment. The manifold intake size for this model is 40mm.



Image 1: NIBBI PWK34 Carburetor showing key dimensions (158mm height, 82mm width, 55mm air filter side, 34mm engine side, 40mm manifold intake).

4.2 Removal of Old Carburetor

1. Carefully disconnect the fuel line, throttle cable, and any vacuum lines or electrical connections from the old carburetor.
2. Unbolt the old carburetor from the intake manifold and air filter housing.
3. Remove the old carburetor and any gaskets. Inspect the intake manifold for debris or damage.

4.3 Installation of NIBBI PWK34 Carburetor

1. Install new gaskets between the carburetor and the intake manifold, and between the carburetor and the air filter housing.
2. Mount the NIBBI PWK34 Carburetor onto the intake manifold and secure it with bolts. Do not overtighten.
3. Connect the air filter housing to the carburetor.
4. Reattach the throttle cable, ensuring smooth operation without binding.
5. Reconnect the fuel line, vacuum lines, and any electrical connections.
6. Refill the fuel tank.



Image 2: NIBBI PWK34 Carburetor shown installed on a motorcycle engine.

5. OPERATING AND ADJUSTMENT

The NIBBI PWK34 Carburetor features adjustable components for fine-tuning engine performance. Adjustments should be made with the engine at operating temperature.

5.1 Idle Speed Screw Adjustment

The idle speed screw controls the engine's RPM at idle. To adjust:

- Rotate the screw **clockwise** to **increase** the idle speed.
- Rotate the screw **counter-clockwise** to **decrease** the idle speed.

5.2 Air Fuel Mixture Screw Adjustment

The air fuel mixture screw controls the air-to-fuel ratio at idle and off-idle. This adjustment is critical for smooth low-end performance.

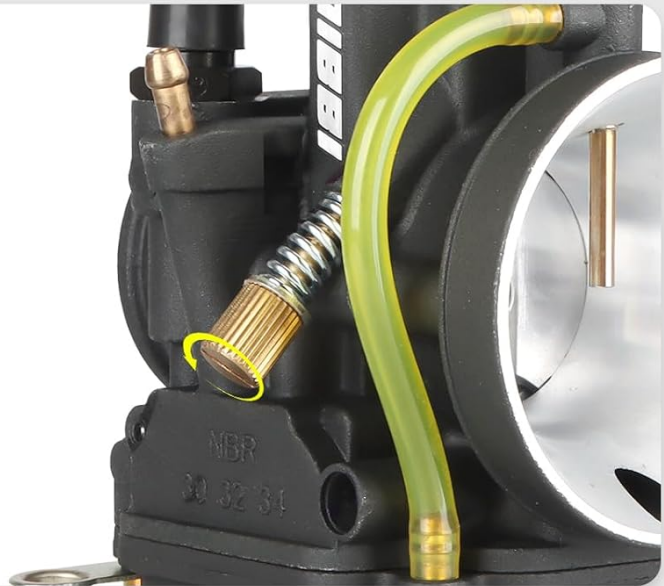
- Rotating the screw **clockwise** reduces the air, making the mixture **richer**.

- Rotating the screw **counter-clockwise** increases the air, making the mixture **leaner**.

Start with the manufacturer's recommended setting (typically 1.5 to 2.5 turns out from lightly seated) and adjust in small increments (1/4 turn) until the engine idles smoothly and responds well to throttle input.

IDLE SPEED SCREW

The higher the idle speed when rotating clockwise, The lower the idle speed when rotating counterclockwise.



AIR FUEL MIXTURE SCREW

*The less air there is to rotate clockwise,
The more air you rotate counterclockwise.*



Image 3: Detailed view of the Idle Speed Screw and Air Fuel Mixture Screw on the NIBBI PWK34 Carburetor.

5.3 Jetting Adjustment

The carburetor comes with additional main jets (#128, #130, #135) and a pilot jet (#30) to allow for tuning based on engine displacement, altitude, temperature, and modifications. Changing jets requires disassembling the float bowl.

- **Main Jet:** Affects fuel delivery at mid to wide-open throttle. A higher number indicates a richer mixture.
- **Pilot Jet:** Affects fuel delivery at idle to 1/4 throttle. A higher number indicates a richer mixture.

Consult a service manual or a qualified technician for specific jetting recommendations for your engine and conditions.



Image 4: Diagram illustrating the location of the pilot and main jets within the carburetor, along with the included jet sizes.

6. MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your NIBBI PWK34 Carburetor. The modular design facilitates easy disassembly for cleaning and inspection.

6.1 Routine Cleaning

- Periodically clean the exterior of the carburetor to remove dirt and grime.
- Inspect the air filter regularly and clean or replace it as needed. A dirty air filter can restrict airflow and affect performance.

6.2 Internal Cleaning (Periodic)

If performance issues arise or after extended periods of use, internal cleaning may be necessary:

1. Remove the carburetor from the engine.
2. Carefully 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 holes are clear.
4. Inspect the float, float needle, and O-rings for wear or damage. Replace if necessary.
5. Reassemble the carburetor, ensuring all components are correctly seated and tightened.

The carburetor's surface is anodized to resist rust, but proper care is still recommended.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your carburetor.

7.1 Engine Not Starting or Hard Starting

- **No Fuel:** Check fuel tank level, fuel line for kinks, and fuel filter for clogs.
- **Flooded Engine:** Too much fuel. Check float level, float needle, and mixture screw setting.
- **Lack of Spark:** Check spark plug, ignition coil, and wiring.

7.2 Poor Idle or Stalling

- **Incorrect Idle Speed:** Adjust the idle speed screw (Section 5.1).
- **Incorrect Air/Fuel Mixture:** Adjust the air fuel mixture screw (Section 5.2).
- **Clogged Pilot Jet:** Clean or replace the pilot jet.
- **Vacuum Leaks:** Inspect intake manifold and carburetor boots for cracks or loose connections.

7.3 Poor Performance at Higher RPMs

- **Clogged Main Jet:** Clean or replace the main jet.
- **Incorrect Main Jet Size:** Consider changing to a different main jet from the included set (Section 5.3).
- **Restricted Airflow:** Check air filter for clogs.

7.4 Fuel Leaks

- **Loose Connections:** Check all fuel line connections and carburetor bolts.
- **Damaged Gaskets/O-rings:** Inspect and replace any worn or damaged gaskets or O-rings.
- **Float Level/Needle Issue:** An improperly set float or a worn float needle can cause fuel to overflow.

8. WARRANTY AND SUPPORT

8.1 Warranty Information

The NIBBI PWK34 Carburetor comes with a **1-year manufacturer's warranty**. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

8.2 Customer Support

If you have any questions, require further assistance, or encounter issues not covered in this manual, please do not hesitate to contact NIBBI customer support via email. We are committed to providing timely and effective solutions.