6 Sigma 689338035658

6 Sigma Jet Kit YZ65 YZ 65 Custom Carburetor Carb Stage 1-2-3-7 User Manual

Brand: 6 Sigma

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1. Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your 6 Sigma Jet Kit for Yamaha YZ65 motorcycles. This custom-made jet kit is designed to optimize your carburetor's performance, ensuring maximum power output and extended engine life, especially after modifications to your exhaust or intake system. Installing a jet kit is essential to prevent a lean running condition, which can lead to engine damage due to excessive heat. Our kit addresses all throttle positions, improving throttle response and overall performance that you will notice immediately.



Figure 1: 6 Sigma Jet Kit packaging, illustrating the kit contents and the performance benefits, including horsepower gains across the RPM range.

2. SETUP AND INSTALLATION

The 6 Sigma Jet Kit is custom-designed for your specific motorcycle and its modifications. To ensure the correct kit is provided, it is crucial to furnish the necessary information after purchase.

2.1 Providing Customization Details

After purchasing your jet kit, please email6SigmaJetKits@gmail.com with the following exact details:

- Exact Year of your Yamaha YZ65.
- Exact Model of your Yamaha YZ65.
- Modifications Made to your motorcycle (e.g., aftermarket exhaust, intake).
- Your typical Riding Elevation.

Please Include in Notes to Seller or Email us

AFTER Purchase

- 1. Exact Year
- Exact Model
- 3. Modifications
- 4. Riding Elevation

This information is <u>needed</u> to Design the correct kit needed for your specific application.

Figure 2: Important instructions for providing motorcycle details to ensure the correct custom jet kit is designed and shipped.

2.2 Kit Contents

Your 6 Sigma Jet Kit includes all necessary components for a comprehensive carburetor tuning:

- Main Jets
- Pilot Jet
- Needle Adjusters
- · Nylon Spacers
- Drill Bits for: Slide Hole Mod (with CV carb), Idle Mixture Mod, Slide Spring Mod (with CV carb)
- Carb Schematic
- Specifications
- Carb Synchronizer Tool (instructions on how to build for \$5)
- · Carb Cleaning Procedure
- · Proper Tuning Techniques
- · Step-by-step instructions with photos

2.3 Installation Process

The kit comes with complete, easy-to-follow instructions for installation. Only basic hand tools are required. Full support is

available if needed. Refer to the detailed step-by-step guide included in your kit for specific procedures tailored to your motorcycle.

3. OPERATION AND PERFORMANCE BENEFITS

Once properly installed, your 6 Sigma Jet Kit will significantly enhance your motorcycle's performance and engine longevity:

- **Increased Performance:** Designed to improve all RPM ranges of performance and throttle response. You can expect to feel a noticeable difference in power delivery.
- More Peak Horsepower: The kit is designed to gain 6%-8% in horsepower with intake/exhaust modifications, and 2-3% on a bone stock setup.
- Longer Engine Life: By correcting the air/fuel mixture, the engine runs cooler, which increases the lifespan of engine components and prevents damage from lean conditions.
- Reduced Exhaust Popping: The kit stops lean exhaust popping, a common indicator of a lean condition that can
 damage engines.
- Lower EGT's (Exhaust Gas Temperatures): Crucial for modified bikes, as running lean causes detonation and hotter temperatures, which can ruin exhaust valves and destroy engines.

The comprehensive nature of this jet kit ensures that all throttle positions are addressed, unlike simply replacing main jets which only affects full throttle.

4. MAINTENANCE

Maintaining your carburetor and jet kit is essential for continued optimal performance. Your kit includes a detailed "Carb Cleaning Procedure" to guide you through proper carburetor maintenance.

- Regularly clean your carburetor according to the provided instructions to prevent fuel deposits and blockages.
- Ensure your air filter is clean and properly maintained to prevent dirt from entering the carburetor.
- Periodically check fuel lines and connections for leaks or blockages.
- If you make further modifications to your engine or riding environment changes significantly (e.g., large elevation changes), re-evaluate your jetting needs.

5. TROUBLESHOOTING

This section addresses common issues you might encounter after jet kit installation or during general operation. Always refer to the detailed tuning techniques and schematic provided with your kit for specific guidance.

5.1 Common Symptoms and Solutions

Symptom	Possible Cause	Solution
Exhaust Popping / Backfiring	Engine running too lean, especially on deceleration.	Verify idle mixture screw setting. Ensure pilot jet is clear and correctly sized. Check for exhaust leaks.
Poor Throttle Response / Hesitation	Incorrect needle setting or pilot circuit issue.	Adjust needle clip position. Clean pilot jet. Ensure slide hole modification is correct.
Lack of Power at High RPM	Main jet too small or restricted fuel flow.	Verify main jet size. Check fuel filter and fuel lines for blockages.

Symptom	Possible Cause	Solution
Engine Runs Rough / Fouls Plugs	Engine running too rich.	Check main jet, pilot jet, and needle settings. Ensure air filter is clean and not overly restrictive.

For detailed tuning procedures and specific adjustments, refer to the "Proper Tuning Techniques" guide and the Carb Schematic included with your 6 Sigma Jet Kit.

6. Specifications

Attribute	Detail
Product Name	6 Sigma Jet Kit YZ65 YZ 65 Custom Carburetor Carb Stage 1-2-3-7 Fits Yamaha
Brand	6 Sigma
Model Number	689338035658
ASIN	B084P64KHB
Manufacturer	6 Sigma
First Available	February 11, 2020
Category	Powersports Fuel Jet Systems

7. SUPPORT & WARRANTY

7.1 Technical Support

For any questions regarding the installation, tuning, or operation of your 6 Sigma Jet Kit, comprehensive support is available. Please contact 6 Sigma directly via email:

6SigmaJetKits@gmail.com

When contacting support, please have your motorcycle's year, model, modifications, and riding elevation readily available, as this information is crucial for accurate assistance.

7.2 Warranty Information

Specific warranty details for the 6 Sigma Jet Kit are provided by the manufacturer. Please refer to the documentation included with your product or contact 6 Sigma directly at the support email address provided above for the most current warranty terms and conditions.

Legal Disclaimer: Please check your local laws before purchasing and installing this product.

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This manual is for informational purposes only. Always exercise caution and consult a professional if unsure about any installation or maintenance procedures.