



INSTALLATION INSTRUCTIONS
GYTR Carburetor Jet Kit
GYT-5B698-00-00
2008 TTR-110



⚠ WARNING

Please read and understand these instructions completely before installation to avoid possible injury to yourself, or damage to the accessory or vehicle.

CAUTION:

- This installation should be performed by an authorized Yamaha dealer or a qualified mechanic. Some components require information from the model's service manual for proper installation or adjustment. Be sure to have the service manual on hand, if necessary, before proceeding with the installation.
- Alteration of emission-related components constitutes tampering under Federal and State laws and can lead to substantial fines and penalties if used other than in closed-course competition.
- Engine-related competition parts are intended for closed-course racing applications only.

DEALER:

These instructions contain important information for future reference and *must* be given to the customer.

WARRANTY INFORMATION:

- Genuine Yamaha GYTR components are covered by a 90-day warranty against defects in material or workmanship. Labor for replacement of defective components is not covered. See your Yamaha dealer for a copy of the warranty statement.
- The Limited Warranty provided with new Yamaha vehicles has exclusions for certain failures, including those caused by competition or racing use (except YZ and WR motorcycle models) as well as by abnormal strain or abuse. While installation of these GYTR components will not "void" your vehicle's warranty, specific failures adjudged by Yamaha to have resulted from the installation of accessory components or other modifications, or from competition use (except YZ and WR motorcycle models), may not be covered by warranty or Yamaha Extended Service.

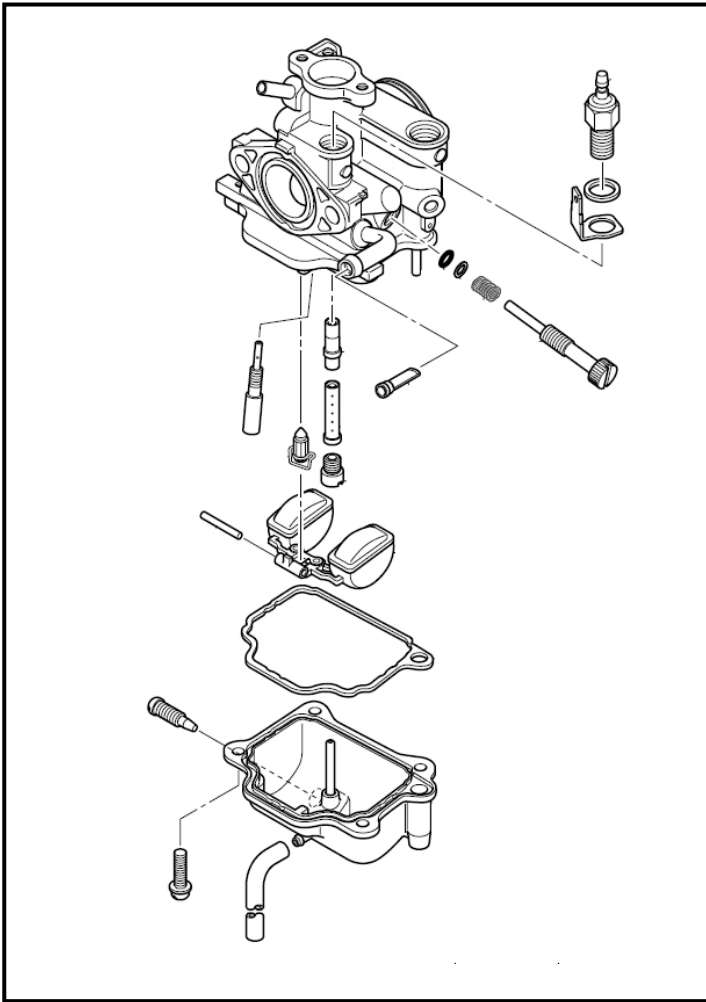
1. PARTS LIST:

This kit contains the following components. Before beginning installation confirm there are no missing or damaged components.

Item #	Part Number	Description	Qty
--	GYT-5B698-00-00	GYTR Carburetor Jet Kit	--
1	*	Jet Needle	1
2	*	Main Jet #80.0	1
3	*	Main Jet #82.5	1
4	*	Main Jet #85.0	1
5	*	Main Jet #87.5	1
6	*	Pilot Jet #15	1

* Part supplied with kit only and not available separately.





2. PREPARATION:

- Turn off gas valve, plug the gas tank vent hose and lay the motorcycle on its side. Check to make sure no fuel is leaking from the gas cap or vent hose before proceeding.

⚠WARNING

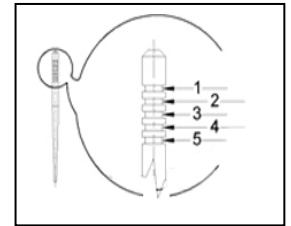
Gasoline and its vapors are highly flammable and explosive.

3. INSTALLATION:

NOTE:

After installing the throttle valve (slide) in the carburetor body, be sure to check for free movement before re-installing the carburetor in the motorcycle.

- Remove rear covers, seat assembly and tank covers. (Refer to service manual)
- Remove carburetor assembly. (Refer to service manual)
- Remove the stock jet needle. Note the order of disassembly.
- Install the clip in the GYTR Jet Needle In the 3rd groove from the top.
- Install GYTR Jet Needle into carburetor assembly.
- Install the main jet (#82.5) and pilot jet (#15).



4. TUNING:

The suggestions above will provide maximum engine performance for closed course competition only. The included jets were tested at altitudes between 0-3000 feet, at 60°F. Further jetting changes may be required based on atmospheric conditions, riding style, state of engine tune, fuel selection, other performance modifications, etc. Consult your nearest Yamaha dealer for recommendations with jetting in your conditions.

Atmospheric conditions and carburetor settings:

Air Temperature	Humidity	Air Pressure (altitude)	Mixture	Setting
High	High	Low (high)	Richer	Leaner
Low	Low	High (low)	Leaner	Richer

The air density (i.e., concentration of oxygen in air) determines the richness or leanness of the air/fuel mixture. Therefore, refer to above table for mixture settings.

- Higher temperature results in reduced oxygen density in the air.
- Higher altitude results in reduced oxygen density in the air.
- Higher humidity results in reduced oxygen density in the air.
- Lower atmospheric pressure (at high altitude) reduces the density of air.

Main Jet Adjustment:

The richness of the air-fuel mixture from $\frac{1}{2}$ to full throttle can be adjusted by changing the main jet. If the air-fuel mixture is too rich or too lean, the engine power will drop, resulting in poor acceleration. Typically, changing from 65 to a 70 main jet is equivalent to a 10% change in air-fuel mixture.

Air screw adjustment:

The richness of the air-fuel mixture with the throttle fully closed to $\frac{1}{4}$ open can be adjusted by turning the air screw. Turning out the air screw will make the mixture lean at low speeds and turning it in will enrich it. Typically, a $\frac{1}{2}$ turn is equivalent to a 5% change in the air fuel mixture.

Idle Drop Procedure for Air Screw Adjustment:

1. Set air mixture screw to 1 turn out from lightly seated.
2. Start and warm the engine to operating temperature.
3. Using a tachometer, set the engine idle speed to the factory recommended specification. (keep the tachometer connected for the following steps)
4. Turn the air mixture screw out $\frac{1}{4}$ turn.
5. If idle speed raises, re-adjust the idle speed to specification and turn the air mixture screw out an additional $\frac{1}{4}$ turn. Repeat the process until the idle speed drops, when this occurs return the air mixture screw to the previous setting.
6. If the idle speed drops during step 4, turn the air mixture screw in $\frac{1}{4}$ turn from the original position. If the idle speed raises, re-adjust the idle speed to the specification and repeat the process until the idle drops, when this occurs return the air mixture screw to the previous setting.

Note:

If this procedure puts the air mixture at less than $\frac{1}{2}$ turn out it is suggested to increase the pilot jet by one size then repeat steps 1-6. (Refer to service manual for pilot jet replacement procedure)

If this procedure puts the air mixture more than 3 turns out it is suggested to decrease the pilot jet by one size then repeat steps 1-6. (Refer to service manual for pilot jet replacement procedure)

Jet Needle groove position adjustment:

Adjusting the jet needle position affects the acceleration when the throttle is $\frac{1}{8}$ to $\frac{3}{4}$ open.

- Too rich at intermediate speeds:
Rough engine operation is felt (hesitation) and the engine will not pick up speed smoothly. In this case, raise the clip on the needle by one groove.
- Too lean at intermediate speeds:
The engine breathes hard and will not pick up speed quickly. Lower the clip by one groove.
- Typically, one clip position is equivalent to a 10% change in air-fuel mixture.

5. CUSTOMER SERVICE:

For further information see your Yamaha dealer.

ESTIMATED TIME TO INSTALL: 0.6 HRS