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INSTRUCTIONS

THROTTLE KIT INSTRUCTIONS

WARNING:

IMPROPER INSTALLATION COULD RESULT IN GREAT BODILY INJURY OR DEATH.

THIS KIT IS TO BE INSTALLED BY A TRAINED TECHNICIAN IN A PROPERLY EQUIPPED SHOP.

**THESE INSTRUCTIONS ARE FOR USE WITH TWIST GRIP TYPE THROTTLE KITS.
THESE KITS ARE DESIGNED TO REPLACE THE ORIGINAL THUMB THROTTLE
WITH A TWIST GRIP TYPE THROTTLE .**

1. Remove the seat and fuel tank. Carefully observe how the stock throttle cable is routed from the thumb throttle to the carburetor or throttle body. This is how you will want to route the new cable.
2. Temporarily remove any clamps or guides used to retain the throttle cable. Remove the stock thumb throttle assembly.
3. Note: On carburetors or throttle bodies where the throttle cable is connected to an external bell-crank, it is not necessary to remove the carburetor cap or slide (skip sections 3 to 5 however, please read warnings) . Before removing the carburetor cap, thoroughly clean the outside of the carburetor. Unscrew the cap and remove the slide by carefully lifting using the carb cap. Do not allow any dirt or foreign material to enter the opening left in carburetor. Placing a clean rag in the opening of the carburetor will help avoid this problem. **WARNING: ANY DIRT OR FOREIGN MATERIAL THAT ENTERS THE CARBURETOR CAN CAUSE THE THROTTLE SLIDE TO STICK.**
4. Pull the spring away from the slide and remove the retaining plate. Remove the slide, spring and cap from the old cable. Install the cap, spring and slide onto the new cable. Make sure the needle is in the correct position and reinstall the retaining plate.
5. Remove the rag in the carburetor opening. Again, be careful that dirt or foreign material does not enter the carburetor. Install the throttle slide into the carburetor. Make sure the guide pin slides into the groove on the slide (slide cutaway to rear). Tighten the carburetor cap. Pull on the top cable end to make sure the full travel (up and down) of the slide is smooth, without binding. **WARNING: DO NOT REASSEMBLE OR START THE ENGINE IF THE SLIDE DOES NOT RETURN FULLY TO THE DOWN CLOSED POSITION.**

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6. Remove the right hand grip from the handlebar. With the Allen wrench supplied, disassemble the new throttle assembly. Using the throttle sleeve as a guide, mark the handlebar showing where the sleeve will fit. With fine sandpaper remove any paint on the handlebar where the throttle sleeve will fit. **IT IS VERY IMPORTANT THAT THE HANDLEBAR BE CLEAN AND SMOOTH. IF THE HANDLEBAR IS NOT CLEAN AND SMOOTH IT IS POSSIBLE FOR THE THROTTLE TO STICK.**

7. The type of twist grips vary, but all types will install and work similarly. Slide the throttle sleeve onto the handlebar. Next, install the cable through the top half of the throttle housing and connect the cable end to the slot in the throttle sleeve. Install the plastic cable guide or wheel into the upper throttle housing. Make sure the cable fits into the groove of the guide or wheel. Note: Some throttle designs do not have plastic guides or wheels. Refer to individual throttle instruction sheets. Assemble the upper and lower throttle housings while positioning the throttle sleeve stop above the housing stop. Allow an 1/8 inch clearance between the grip and handlebar end. This will prevent the grip from binding on the end of the handlebar. Position the throttle so that the throttle cable will exit above the front brake lever assembly. Insert the throttle housing screws and tighten. See the throttle specific instructions for torque specifications.

8. Throttle cable adjustment: **ALL THROTTLE CABLE ADJUSTMENTS ARE DONE WITH THE ENGINE OFF.** Adjust the throttle cable so there is a slight amount of free play (1/16 to 1/8 inch). Tighten all adjuster nuts. Reinstall all cable clamps and guides. Check that the throttle will return to the wide open to the fully closed position without assistance. Also, check that the cable has free play when the handlebars are turned fully to both sides. Note: Cable routing and throttle position affect the smoothness of throttle operation. Route the cable to avoid sharp bends or kinks. Position the throttle so that it does not create sharp bends or kinks in the cable.

9. Install the fuel tank and seat. Put the transmission in neutral and start the engine to check throttle operation. Using throttle, raise engine speed momentarily to 4000 RPM and release throttle. Engine speed should drop quickly to idle speed without hesitation. Next, while turning the handlebars side to side, there should be no change in engine speed. **WARNING: DO NOT USE THE BIKE IF THE THROTTLE IS STICKING OR NOT ALLOWING THE ENGINE TO DROP BACK TO IDLE SPEED WHEN THE THROTTLE IS RELEASED.** Repeat, Step 8 if throttle is not operating as described above.

10. It is suggested that you familiarize yourself with the operation of the twist grip throttle. Run the machine at low speeds until you are completely familiar with how the throttle operates. If you have experience riding motorcycles the twist throttle will be quite natural. If you have only used the thumb type throttle you should practice until operation of throttle is done without second thought.

WARNING:

DO NOT OPERATE YOUR VEHICLE UNTIL YOU HAVE TESTED THE ENGINE AND THROTTLE OPERATION AS SET OUT ABOVE. FAILURE TO DO SO COULD RESULT IN GREAT BODILY INJURY OR DEATH!

DO NOT USE IN CONDITIONS AT OR NEAR FREEZING TEMPERATURES. MOISTURE MAY ENTER THE THROTTLE MECHANISM OR CABLE AND FREEZE AND CAUSE THROTTLE TO STICK. THIS COULD RESULT IN GREAT BODILY INJURY OR DEATH.