14 ADJUSTMENT

CARBURETORS

Although some internal carburetor parts can be adjusted by replacement, repositioning, etc., these adjustments are covered in the maintenance section of this manual. The following procedure covers the idling adjustment, which should be inspected during periodic maintenance or whenever the idling setting has been disturbed. This procedure also includes the necessary steps for obtaining proper carburetor synchronization.

When the idling speed is too low, the engine may stall; when the idling speed is too high, the fuel consumption becomes excessive, and the resulting lack of engine braking may make the motorcycle difficult to control. Poor carburetor synchronization will cause unstable idling, sluggish throttle response, and reduced engine power and performance.

The following procedure consists of four parts: preliminary checks, preliminary adjustment (sometimes necessary), idling adjustment, and carburetor synchronization.

Preliminary Checks:

•In order to obtain correct idling adjustment, first check the following and adjust if necessary:

Engine Oil (Pg. 196)
Spark Plugs (Pg. 9)
Ignition Timing (Pg. 9)
Cylinder Compression (Pg. 128)
Air Cleaner Element (Pg. 112)
Air Cleaner Duct and Carburetor Holder Leakage (Pg. 33)
Camshaft Chain (Pg. 11)
Valve Clearance (Pg. 12)

Preliminary Adjustment:

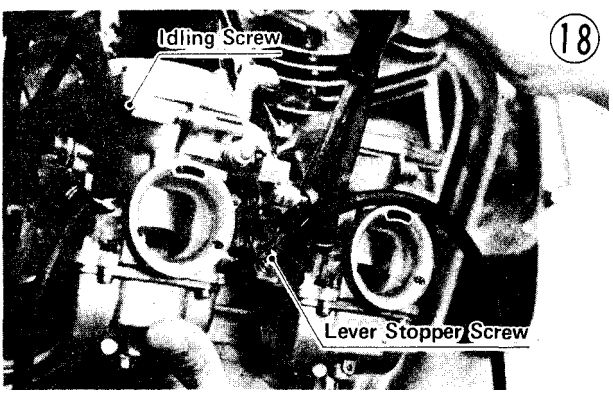
If the engine idling is especially rough, it may be necessary to synchronize the butterfly valves before making the idling adjustment:

•Remove the carburetors from the engine (Pg. 33) leaving the accelerator and decelerator cables connected.

•If the butterfly valves do not close at the same time by visual inspection, synchronize them using the following procedure:

oBack off the lever stopper screw and the idling screw so there is enough clearance to allow the butterfly valves to seat in their bores.

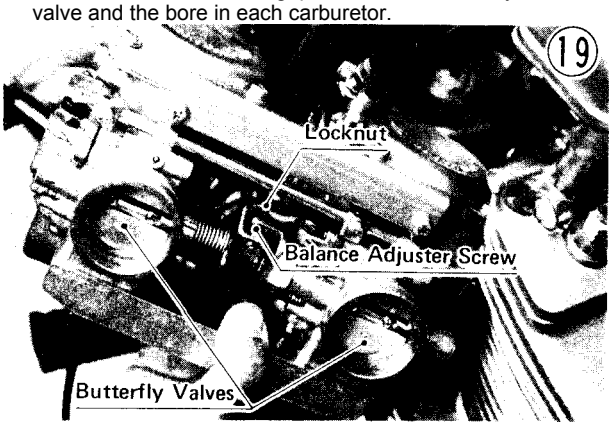
•Start the engine, and warm it up for 5 minutes.



•Adjust idling speed to 950 ~ 1,050 rpm by turning

oTurn the idling screw in until the butterfly valves just begin to open and there is a slight gap between the valve and bore.

oLoosen the locknut and turn the balance adjuster screw to obtain the same gap between the butterfly valve and the bore in each carburetor.



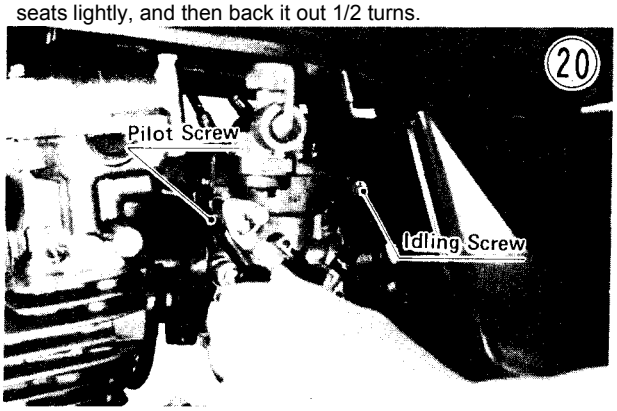
oTighten the locknut.

oBack out the idling screw again, and turn in the lever stopper screw so that it contacts the lever just before the butterfly valves close. Idling screw position will be readjusted later.

•Install the carburetors (Pg. 33), and check the play in the cables (Pg. 13).

Idling Adjustment:

•Turn in the pilot screw of each carburetor until it seats lightly, and then back it out 1/2 turns.



the idling screw.

NOTE: A satisfactory result may be obtained by using the procedure just described, but an experienced mechanic can get a more precise adjustment of engine idle mixture by using the following 4 steps.

oTurn both pilot screws to obtain the highest engine rpm. Normally, this pilot screw adjustment will be within about a half turn in or out from the specified pilot screw setting.

oAdjust idling speed to 950 ~ 1,050 rpm by turning the idling screw.