

Fig. 5.6 Adjusting the ignition timing

- ① "F" mark
- ② Alignment mark

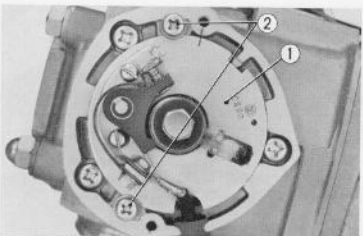


Fig. 5.7 Adjusting the ignition timing

- ① Base plate
- ② Base plate screws

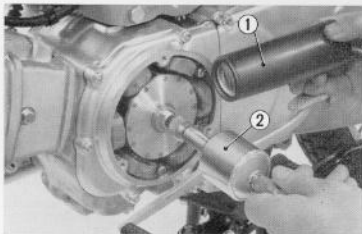


Fig. 5.8 Adjusting the ignition timing advance

- ① Timing light
- ② Tachometer

build-up in the secondary or the high tension voltage circuit. This condition will cause poor engine starting, spark missing at high speed and a consequent loss of power.

- (b) Engine over-heats readily.
- (c) The ignition timing is greatly advanced.

4. Ignition timing adjustment

- a. Whenever the breaker point gap has been adjusted, the ignition timing will be affected and therefore it must also be readjusted.
- b. With the dynamo cover removed, rotate the generator rotor counter-clockwise until the "F" mark ① on the flywheel lines up with the alignment mark ② on the stator. (Fig. 5.6) In this position, the breaker point should just commence to open. This can be checked with a thin thickness gauge. If adjustment is necessary, loosen the base plate screws ② and rotate the base plate ① by inserting a screwdriver into the adjusting slot to obtain the proper timing. (Fig. 5.7)
- c. The static ignition timing is relatively accurate and will give satisfactory engine performance, however, the use of the service tester will assure the most precise timing. (refer to service tester operation).

When using a strobo timing light ① to check the timing, idle the engine at 1,200 r.p.m. (Fig. 5.8) If it is found out of timing, perform the adjustment in the same manner as described above.

Results of retarded ignition timing :

1. Drop in power output.
2. Drastic increase in fuel consumption.
3. Engine overheats with a possibility of piston seizure.

Results of advanced ignition timing :

1. Produces knocking and drop in power output. In severe cases, damage to piston, connecting rod, crankshaft may result, therefore, periodic inspection should be performed.
2. Upon completion of the point gap and ignition timing adjustment, check for proper operation of the spark advancer with the service tester.