

**KIT 00063****INSTRUCTIONS FOR FITTING THE BOYER-BRANSDEN ELECTRONIC IGNITION SYSTEM TO SUZUKI 250, 350 & 500 TWINS****This kit comprises:-**

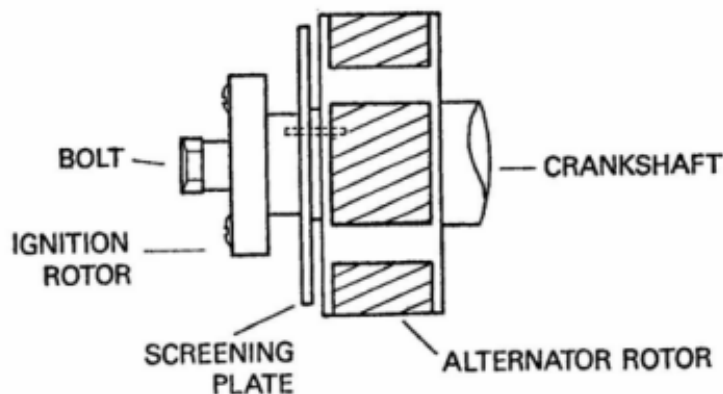
- (1) One black encapsulated electronic ignition box.
- (2) One black ignition rotor, on which are recessed 2 magnets.
- (3) One generator plate, this consists of two bobbins mounted on a round fibre glass printed circuit board.
- (4) One round metal plate, this prevents interference by screening the alternator magnetism from the generator plate.
- (5) One black ring, on which is mounted the generator plate.
- (6) One plastic strap to secure the ignition box.
- (7) Two 3M blue connectors.
- (8) Three washers.

You will also require the following special tools:

- (1) An impact screwdriver to release the very tight cross head screws on the clutch cover and alternator.
- (2) 12-mm. socket or ring spanner.
- (3) Fine black felt tip pen.

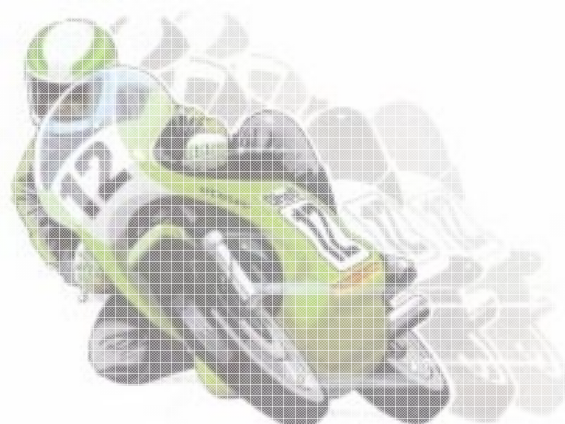
**Installing the system.**

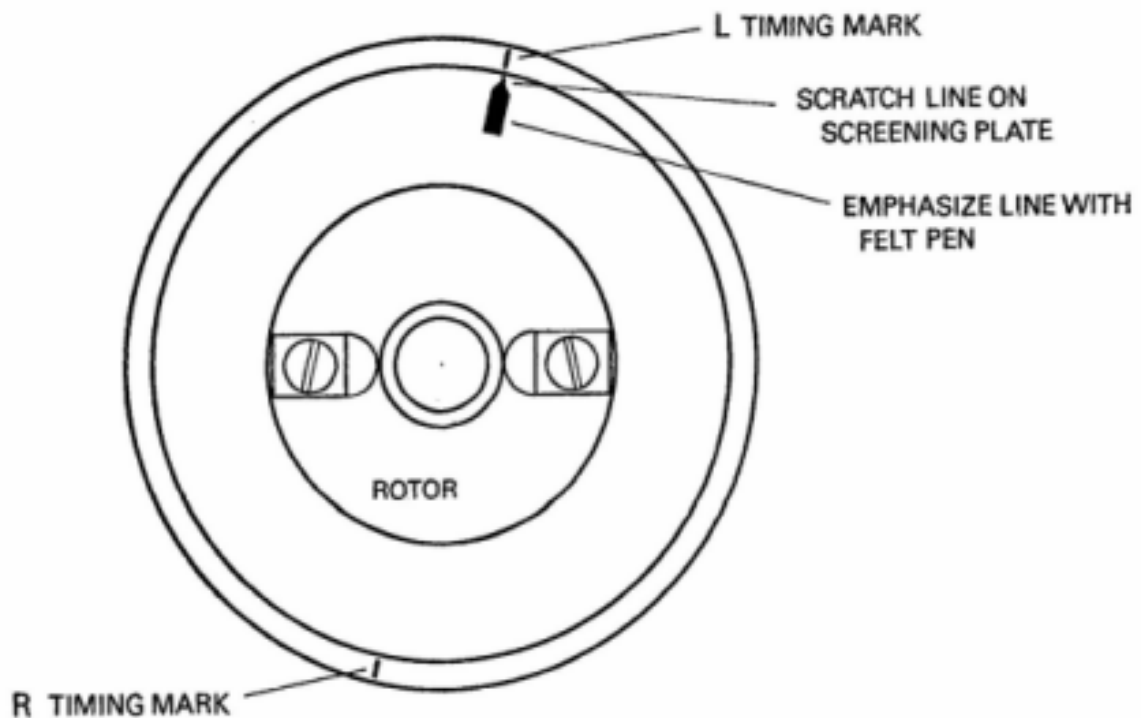
- (1) Remove the seat and the petrol tank.
- (2) Pull apart the four way connector block which feeds the ignition coils.
- (3) Nestle the box in between the frame tubes and the ignition coils and secure it with the strap supplied. Plug the male and female connector blocks of the connectors on the machine.
- (4) Earth the loose black wire under one of the two 12-mm. bolts situated under the seat (just behind the tank mounting).
- (5) Remove the clutch cover.
- (6) Remove the fixing screws of the two contact breakers, condensers cam lubricator and strap holding the black and white wires.
- (7) Cut the black and white wires at the sleeved connections to the condenser wires.
- (8) Remove the 12-mm. contact breaker cam bolt. It will be necessary to engage second gear and apply the rear brake to lock the crankshaft.
- (9) Undo the three cross head screws on the alternator with an impact screwdriver and remove the alternator stator. Do not strain its wires unduly.
- (10) Remove the contact breaker cam.
- (11) Mark on the outside of the alternator rotor with a felt pen the timing mark which applies to the L cylinder.
- (12) With the bolt through the ignition rotor and screening plate offer up the assembly to the alternator rotor. The raised 'washer' on the screening plate must face the alternator rotor and the protruding dowel pin must engage in the keyway of the alternator rotor. See fig. 1.

**[ FIGURE 1. ]**

- (13) Scratch a line on the screening plate 'over' the alternator rotor L timing mark. Emphasize the mark with a felt pen. This line (timing mark will be visible through the hole in the alternator rotor. See fig. 2.

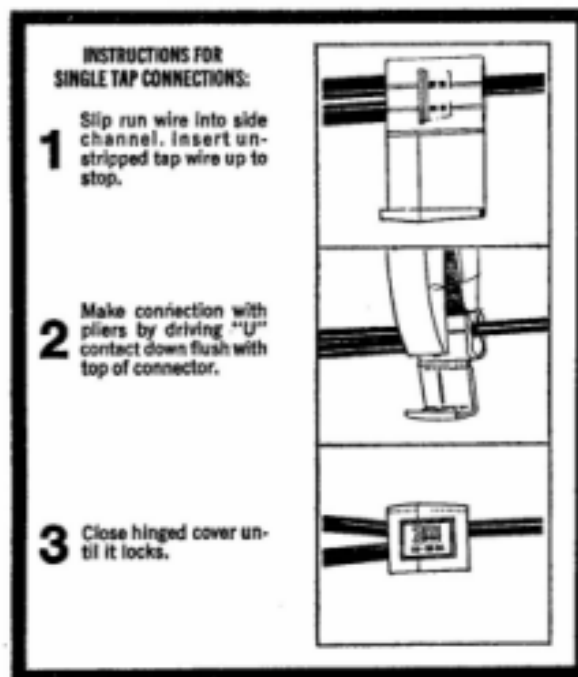
\* Remove the existing connector blocks by releasing the male & female spades and fit the new connector blocks (supplied).





[ FIGURE 2. ]

- (14) Remove the bolt and ignition rotor; the screening plate will remain stuck to the alternator rotor.
- (15) Replace the alternator stator and tighten the three cross head screws.
- (16) Fit the ignition rotor and bolt, ensuring that the dowel pin has located properly in the alternator rotor keyway. Tighten the bolt.
- (17) Rotate the engine with the kickstarter to ensure that the screening plate is not touching the alternator stator. (If it does not touch ignore paragraph 17a.)
- (17a) Remove the ignition rotor and alternator stator but leave the screws in place and fit the three spacing washers (supplied) to them. Re-install the alternator stator ensuring that the washers remain between it and the crankcase. If any washers are dropped they must be found immediately (one may have lodged in the alternator rotor with disastrous results if the engine were started). Replace the ignition rotor.
- (18) Fit the black ring with two contact breaker screws (the third hole is provided to cover the two types of alternator).
- (19) Rotate the engine to the L timing position (scratched on the screening plate).
- (20) Fit the generator plate and twist it so that the timing hole on the ignition rotor can be seen through the 'static' timing hole. The ignition system is now approximately timed.
- (21) Connect the wires black to the black and white to the white with the 3M connectors supplied. (See the panel for instructions.)



- (22) Replace the strap and its screw which secure the black and white wires to the alternator stator.
- (23) Replace the seat and petrol tank, with all the petrol and vacuum pipes.
- (24) Start the engine and time it exactly with a strobe lamp. The timing is adjusted by twisting the generator plate. The timing marks should coincide at 2500 to 3000 r.p.m. only. Tighten all screws.
- (25) If a mark is made on the mounting ring adjacent to the O mark on the generator plate it will serve as an accurate timing position indicator with the graduated scale.
- (26) Provided the system is not disturbed the timing is now set for life.