16) Connect the strobe lamp and time to the full advance mark, with the engine running at 4500 RPM. Align by dropping the magnetic rotor supplied. Carefully remove the centre bolt and slide through the magnetic rotor, with the magnets towards the centre bolt and refit the advancer unit to the end of the crankshaft with the centre bolt screwed in a few turns to hold it in place temporarily. Hold the metal timing mark plate back into position, fit the stator plate over it in the original position of the contact backing plate, with the timing hole at the top and the terminal screws at the bottom. Replace the three cross head screws, setting it approximately half way along its adjustment slots. Connect the black and white wires to the two screw terminals, with the black wire to the "BLACK" marked terminal and the white wire to the "WHITE" marked terminal. Make sure that, when tightened, these connectors cannot foul the magnetic rotor or engine casing. The small metal clip is not used. Carefully remove the centre bolt and slide through the magnetic rotor, with the magnets towards the engine and away from the head of the bolt. Refit the centre bolt, sliding the magnetic rotor over the shaft of the auto-advance unit. The centre bolt can now be lightly tightened so that the magnetic rotor can still be turned by hand. The magnetic rotor supplied has no direct location on the advancer shaft and can be fitted in any position, this is due to the dogs on the advancer shaft being placed in various positions by the manufacturer.

14) The method of timing is as shown in Fig.1, first set the engine to the "T" Top Dead Centre position mark on 1 and 4, or 2 and 3 cylinders (GS TWIN models: 1 or 2 cylinders). Move the rotor to the position shown in Fig.1, with the leading edge of the magnet in line with the centre of the pole pieces on the stator plate. Tighten the centre bolt, a small tap on the end of the rotor will make small indentations inside the rotor, providing greater location and giving a fitting position if the rotor is removed.

15) Start the engine and run for 5 minutes to warm up the engine and ignition unit.

16) Connect the strobe lamp and time to the full advance mark, with the engine running at 4500 RPM. Align by moving the stator on its slotted holes. The electronic advance can be seen by accelerating up from idle. This is operating from cranking speed and therefore will be more advanced at idle than standard. A small amount of advance will be seen at 5000 RPM, this is normal.

17) Check all screws are tight and refit cover, the timing is now set and requires no maintenance. The carburation, plug caps and spark plugs must be in good order. The spark plug gaps should not be opened up but left at the standard setting.

18) Models fitted with an electronic tachometer may indicate double the actual RPM and will therefore need to be re-calibrated. Contact Boyer Bransden for re-calibration service.
Fig. 1

Engine case

Engine set at top dead centre (T.D.C.) static.

Align the mark on the engine casing midway between these marks at 4500 RPM.

Hexagon pole piece

Static position of rotor at T.D.C.

Magnetic rotor

Circuit diagram

Stator

Orange coil

Ignition coil from ignition switch

Transistor box

Black

White

Neg battery