

**Pazon**  
IGNITIONS WITH THE 7½ YEAR WARRANTY

# Sure-Fire™



ELECTRONIC IGNITION  
FOR UNIT CONSTRUCTION  
TWIN CYLINDER MOTORCYCLES  
WITH POINTS IN THE SIDE CASING  
& 12 VOLT ELECTRICS  
POSITIVE OR NEGATIVE GROUND



SYSTEM TYPE: PA2





9. Using the black coil link wire, connect the negative (—) terminal of one ignition coil to the positive (+) terminal of the other ignition coil. See figs. 1/2 on page 7.
10. Take the black wire from the ignition module, cut to length and fit an insulator and female spade connector to the end. Connect to the negative (—) terminal on ignition coil #1. See figs. 1/2 on page 7.
11. Take the red wire from the ignition module, cut to length and fit an insulator and female spade connector to the end. Connect to the positive (+) terminal on ignition coil #2. See figs. 1/2 on page 7.
12. For NEGATIVE GROUND electrics go to step 15.
13. For POSITIVE GROUND electrics (standard):  
Take the white wire from the ignition module, cut to length and fit an insulator and male spade connector to the end. Connect to one of the negative ignition feed wires previously removed in step 7 (white-blue wire for Norton Commando). The other wire (if fitted) is spare and should be covered with insulation to prevent shorting to the frame etc.
14. Take the red grounding wire, fit an insulator and female spade connector on one end and connect to the positive (+) terminal on ignition coil #2. Cut to length and fit a ring terminal on the other end and connect to a good grounding point on the frame, ideally the battery positive (+) terminal. For the Norton Commando, the grounding tag on the end of the condenser pack can be used (fit a female spade connector to the end of the red grounding wire). See fig.1     GOTO STEP 17.
15. For NEGATIVE GROUND electrics:  
Connect one of the positive ignition feed wires previously removed from the ignition coils in step 7 to the positive terminal of ignition coil #2. See fig. 2  
Any other wires are spare and should be covered with insulation to prevent shorting to the frame etc.
16. Take the white wire from the ignition module, cut to length and fit a ring terminal connector to the end. Connect to a good grounding point on the frame, ideally the battery negative (—) terminal. For the Norton Commando, the grounding tag on the end of the condenser pack can be used (fit a female spade connector to the end of the white wire). See fig. 2
17. Remove the two sleeved wires (black-white & black-yellow), previously disconnected in step 5.
18. Feed the two sleeved wires (black-white & black-yellow) from the ignition module down to the timing cover, in place of the original wires. If you would prefer not to remove the original wires, they can be reused with the electronic ignition. If so, take the white—black & white—yellow wires from the ignition module, cut to length and fit two insulators and male spade connectors to the ends. Connect these to the two wires removed



the two wires. Insert the yellow-black wire into the left-hand screw terminal and the white-black wire into the right-hand screw terminal. The connector block terminals are marked on the trigger plate "Y/B" and "W/B". Tighten the two screws. Secure the wires and sleeving with the cable tie, fitted in step 23. If preferred, the two wires can be soldered directly to the trigger using the two solder pads provided in front of the connector block. It is essential that these two wires are connected the right way around for correct operation of the ignition system.

Reversed connections will give very retarded ignition timing.

25. Re-check all connections are good and tight; any loose crimps should be removed, slightly closed up and refitted, or preferably replaced.
26. Refit tank, fuel lines, battery & seat.
27. Start engine and run for 4-5 minutes to warm up. Using a white light strobe, time the engine to the full advance mark (previously used in step 19) with the engine running up to 4000rpm. If running in, you may strobe time at 3000rpm to the full advance figure less 2°. Adjust the timing by making very small movements of the ignition trigger on its slotted holes; moving the trigger by 1° is equivalent to 2° of the crankshaft. The trigger has calibration marks (equivalent to crankshaft degrees) marked on the outer edge to assist with the timing adjustment. When using a strobe light, you may see a small amount of advance above 4000rpm, this is normal. For high revving engines you may wish to strobe at 5000+ rpm for best results. To advance the timing, turn the trigger against the direction of the magnetic rotor. To retard the timing, turn the trigger in the same direction as the magnetic rotor. In the unlikely event that the timing cannot be obtained before the end of the adjustment slots, the magnetic rotor will need to be slackened off and repositioned slightly. If no timing mark is available, road test the machine and adjust (if necessary) for optimum performance.
28. Refit timing/contact-breaker cover.
29. The timing is now set and requires no further adjustment. However, please note that for satisfactory operation of this ignition system it is important that the wiring, ignition coils, switch, battery, h.t. leads, plugs and plug caps are in good order.



**Table 1**

| MOTORCYCLE      | TIMING HOLE    | FULL ADVANCE TIMING    |
|-----------------|----------------|------------------------|
| TRIUMPH TWIN    | CLOCKWISE      | 38°                    |
| BSA TWIN        | ANTI-CLOCKWISE | 34°                    |
| NORTON COMMANDO | ANTI-CLOCKWISE | 31°<br>(28° STANDARD*) |
| NORTON ATLAS    | CLOCKWISE      | 31°<br>(28° STANDARD*) |

\* STANDARD REFERS TO ORIGINAL IGNITION SETTING WITH MECHANICAL ADVANCE

NOTE: IF USING A DEGREE DISC ATTACHED TO THE CAMSHAFT,  
THE FULL ADVANCE FIGURE READING ON THE DISC MUST BE HALVED.  
E.G. FOR 38°, SET ENGINE TO T.D.C., ZERO DEGREE DISC AND ROTATE  
ENGINE BACKWARDS UNTIL DEGREE DISC HAS TRAVELED 19°



### Sure-Fire Ignition Timing BRITISH TWINS









