

Pazon

IGNITIONS WITH THE 7½ YEAR WARRANTY

Sure-Fire™

TRIUMPH BSA

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



SYSTEM TYPE: PA1

male taper which fits into the taper in the end of the camshaft. There is no keyway, allowing it to be fitted in any desired position.

9. Using the ¼" washer and the appropriate bolt (UNF or BSF), pass the bolt through the centre of the magnetic rotor and into the thread in the camshaft. Finger tighten only at this stage. The magnetic rotor centre thread (metric M8) is provided for attaching a puller, if the rotor should need to be removed for engine servicing, etc.
10. Taking the ignition trigger assembly, insert a small cable tie into the two holes in front of the connector block on the ignition trigger. This will be used later to secure the two wires to the plate.
11. Fit the ignition trigger plate with the adjustable slots at approx. 6 & 12 o'clock, using the original pillar fixings & washers, positioned in the centre of the slots (to allow for adjustment in either direction). Handle the trigger with care.
12. Check that the engine is still at the correct full advance position, then adjust the magnetic rotor position so that one of the red marks is centrally behind the static timing hole at 9 o'clock (see fig. 4, page 7). If your machine's camshaft rotates clockwise, refer to fig. 3. Gently tap the rotor into the taper & tighten the centre bolt, using a 3/16" allen key.
13. Replace the outer timing cover, gear lever & kickstart.

WIRING:

14. All connections must be of the highest quality, use crimped or soldered connections; twisted wires will not give a satisfactory operation. Avoid coiling up surplus lead.
15. Find a suitable place for the ignition module, preferably near to the ignition coil. Secure the ignition module to the frame using one or more large cable ties. An adhesive mounting base is provided; this can be affixed to the underside of the module and the cable tie passed through and around the module and frame.
Do not completely wrap the module in foam rubber.
16. Disconnect the external condenser (if fitted) and the existing contact-breaker wire from the positive (+) ignition coil terminal (standard positive ground) or from the negative (-) ignition coil terminal (if wired for negative ground).
17. If currently wired for negative ground electrics goto step 18. Disconnect all leads from the negative (-) ignition coil terminal; this includes the ignition switch supply (normally a white wire).
18. 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 the ignition coil. See figs.1/2 on page 5.
19. 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

engine running up to 4000rpm. If running in, you may strobe time at 3000rpm to the full advance figure less 2°. Stop the engine and 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. When using a strobe light, you may see a small amount of advance above 4000rpm, this is normal. To advance the timing, turn the trigger against the direction of the magnetic rotor (normally clockwise). To retard the timing, turn the trigger in the same direction as the magnetic rotor (normally anti-clockwise). 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. Road test the machine and make any final timing adjustments (if necessary) for optimum performance.

EARLY MODELS:

These have no provision for strobe timing.

**WARNING: RISK OF SERIOUS INJURY,
DO NOT ATTEMPT TO STROBE TIME
BY RUNNING THE ENGINE WITH THE CHAINCASE REMOVED**

For C15 and B40 machines, road test the machine and make any final timing adjustments (if necessary) for optimum performance. Adjust the timing by moving the trigger plate, as described for later models (above). The working advance range for this ignition system is approximately 20° crankshaft (10° camshaft).

29. Refit timing/contact-breaker cover. 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 coil, switch, battery, h.t. lead, plug and plug cap are in good order.

Table 1

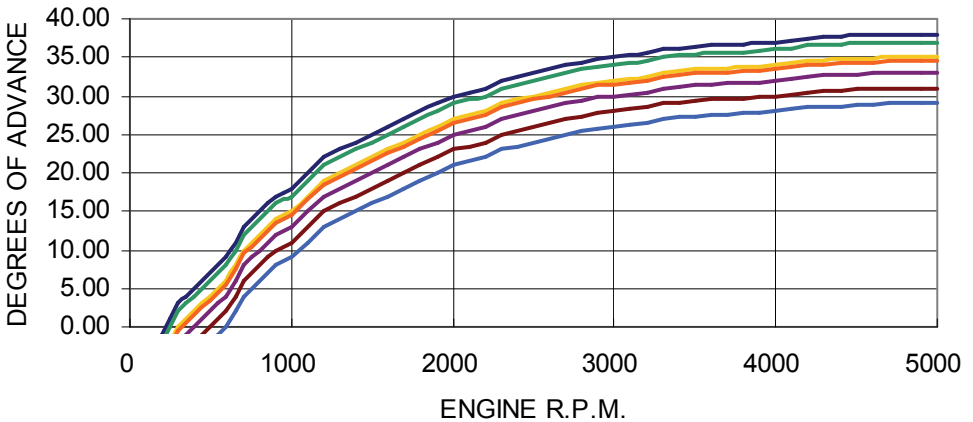
MOTORCYCLE (ALL VERSIONS)	TIMING HOLE	FULL ADVANCE TIMING
BSA C15/B40	ANTI-CLOCKWISE	33.5° (9/32", 7mm)
BSA B25	ANTI-CLOCKWISE	37° (0.342", 8.69mm)
BSA B44	ANTI-CLOCKWISE	28° (0.266", 6.75mm)
BSA B50	ANTI-CLOCKWISE	34° ('72-'73) (0.385", 9.78mm) 30° ('71)
TRIUMPH T20/M (CUB)	ANTI-CLOCKWISE	36° (early models) 32° ('67)

ABOVE FIGURES ARE FOR ENGINES IN A STANDARD STATE OF TUNE

NOTE: IF USING A DEGREE DISC ATTACHED TO THE CAMSHAFT, THE FULL ADVANCE FIGURE READING ON THE DISC MUST BE HALVED. E.G. FOR 34°, SET ENGINE TO T.D.C., ZERO DEGREE DISC AND ROTATE ENGINE BACKWARDS UNTIL DEGREE DISC HAS TRAVELLED 17°



Sure-Fire Ignition Timing
TRIUMPH/BSA SINGLES



- B25
- T20/M (EARLY)
- B50 ('72-'73)
- C15/B40
- T20/M (LATER)
- B50 ('71)
- B44

Ignition Coils

For best results with this system, use an ignition coil with a primary resistance of 3 to 4.5ohms (standard Lucas/PVL 12 volt coil, or equivalent). CDI type and some electronic ignition coils are incompatible with this system; for suitability check the primary resistance is 3 ohms or more (measure across the + and — terminals with a multimeter).

For a twin-plug head, a 12 volt dual output coil with a primary resistance of between 3 to 4.5 ohms is satisfactory, but for best results on high compression/competition engines use two 6 volt coils connected in series (as for a twin cylinder).

Ignition coils can develop a short circuit to ground through the case, especially if the clamps are too tight. This can cause overheating of the affected coil and can also produce misfiring/bad running. Slacken the clamp and examine the coil casing for heavy crease marks. If in doubt replace the coil.

HT Lead, Spark Plug & Plug Cap

Always use copper cored ht lead. Do not use carbon-fibre (resistive) lead.

Provided you have the correct grade of plug for your engine and that it is in good order, there is no need to change it when fitting this system. The spark plug gap can be left as standard, as a guide 0.025”-0.028” should be sufficient.

We recommend fitting an NGK 5K resistor (suppressor) type plug cap (or similar good quality make), but you can also fit a non-resistor cap.

General Data/Troubleshooting

This system can be adapted to work on many types of engine, provided that the required firing interval is every 360° crankshaft / 180° camshaft. This ignition is of the wasted spark type, i.e. sparking occurs every turn of the engine (on compression & exhaust strokes).

Wiring should be cut to the correct length. Excess wire should not be coiled up; this can affect the correct running of the ignition system. Where possible the wires from the ignition trigger should be run

Terms & Conditions and Warranty

- Use of this product indicates your acceptance of this notice.
- The product design & literature is Copyright © PAZON IGNITIONS LTD. 2005-2009, and is protected under international copyright, trademark & treaty provisions.
- To provide the best ignition systems possible, PAZON IGNITIONS reserves the right to alter and improve the specifications of its products without prior notice.

Ignition Systems

- Pazon warrants to the original purchaser that the Pazon Ignition System be free from defects in workmanship & parts under normal use for a period of 7½ years from date of purchase.

Ignition Spares

- Spares are defined as item(s) not purchased as part of a complete ignition system. Pazon Ignitions warrants to the original purchaser that these item(s) be free from defects in workmanship & parts under normal use for a period of one year from date of purchase.
- Ignition coils will only be covered by the warranty if it can be proved that the fault is due to a manufacturing fault within the coil.

Limitation of Liability

- In no event shall Pazon Ignitions liability related to the product exceed the purchase price actually paid for the product.
- Neither Pazon Ignitions nor its suppliers shall in any event be liable for any damages whatsoever arising out of or related to the use or inability to use the product, including but not limited to the direct, indirect, special, incidental or consequential damages, or other pecuniary loss.
- This warranty will be void if the product or parts have been altered, damaged, abused or installed incorrectly.
- This warranty will be void if parts supplied by Pazon Ignitions are used with other makes of ignition. Your statutory rights are not affected.

Warranty Claims

- To make a claim under warranty, the product must be returned to PAZON IGNITIONS or its authorized representative, with a copy of your receipt (or evidence of date & place of purchase), within the warranty period.
- Include a detailed description of the problem and why you believe there is a fault within the ignition system.
- The system must be returned postage paid. Proof of posting is not proof or receipt, therefore we recommend using a recorded mail service.
- Upon receipt we will thoroughly test the returned items and repair or replace any items found to be faulty and covered by the warranty.
- Please allow seven working days from receipt of the returned parts before contacting us, to allow sufficient time for a thorough test and evaluation.
- PLEASE CONTACT PAZON IGNITIONS FOR RETURN INSTRUCTIONS.

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