

Pazon
IGNITIONS WITH THE 7½ YEAR WARRANTY

HONDA

CBX1000 6 CYLINDER

SPARK UNIT/

IGNITOR MODULE SET

12 VOLTS

Replacements for

OKI MPS-200 Spark Units



SYSTEM TYPE: HONDACBX

APPLICATIONS:

HONDA CBX1000 6 CYLINDER

CONTENTS:

- THREE SPARK UNIT MODULES
- THREE-WAY WIRING HARNESS
- THREE CABLE TIE ADHESIVE MOUNTING BASES
- SIX LARGE CABLE TIES

These units are replacements for the OKI MPS-200 Spark Units, or equivalent make (e.g. NEC). They are intended to work with the original pulse generators, mechanical advance and ignition coils.

These units do not incorporate advance/retard.

WARNING: RISK OF ELECTRIC SHOCK **ALWAYS TURN OFF BEFORE WORKING ON THE SYSTEM**

BEFORE FITTING, PLEASE READ THESE INSTRUCTIONS CAREFULLY, INCLUDING THE NOTICE ON PAGE 8.

Good quality resistor plug caps should be fitted to the h.t. leads (e.g. NGK/DENSO 5K resistor type); these are standard equipment on most machines. Alternatively, resistor spark plugs can be used. Attempting to run the system without resistor type caps and/or plugs will result in excessive radio frequency interference (r.f.i.), which may cause bad running, misfiring and loss of ignition. Carbon fibre leads may be used, but for reliability we recommend copper or steel cored h.t. lead.

INSTALLATION INSTRUCTIONS:

1. All connections must be of the highest quality, use crimped or soldered connections; twisted wires will not give a satisfactory operation.
2. Remove the seat to gain access to the original spark units (if fitted); these are normally located under the seat or battery compartment. Each of these units consists of a small alloy metal box with a mounting tab, secured to a tray with a screw. Each of the units have five wires which merge into three multi-way connectors (1 x 6 way, 1 x 4 way, 1 x 2 way).
3. For safety, disconnect the battery.
4. Unplug the three couplers from each of the units. Undo the fixings and remove the units.
5. Fit the new spark units in the place of the old ones or find a suitable alternative, close to the connectors. Secure the units to the frame or original mounting tray using the supplied tie-straps and adhesive mounting base (if required). If required, a thin sheet of rubber or double-sided tape can be used to keep the units in position. Do not completely wrap the units in foam rubber.
6. Taking the supplied three-way wiring harness, connect the three 6-way plugs to the three 6-way sockets on the new spark units.
7. Insert the crimped connectors into the supplied 4-way receptacle housing, making sure that the colours are connected as follows:

| | | |
|---------------------|---|----------------------------|
| Black/White | ⇒ | Black/White |
| Yellow (black ring) | ⇒ | Blue (Ignition Coil 1&6) |
| Yellow (red ring) | ⇒ | Pink (Ignition Coil 3&4) |
| Yellow (unmarked) | ⇒ | Yellow (Ignition Coil 2&5) |

8. Insert the crimped connectors into the supplied 6-way receptacle housing, making sure that the colours are connected as follows:

| | | |
|--------------------|---|---|
| White (unmarked) | ⇒ | Yellow (white ring) [Pulse Generator 1&6] |
| Blue | ⇒ | Yellow [Pulse Generator 1&6] |
| White (black ring) | ⇒ | Yellow (white ring) [Pulse Generator 3&4] |
| Blue | ⇒ | Yellow [Pulse Generator 3&4] |
| White (red ring) | ⇒ | Yellow (white ring) [Pulse Generator 2&5] |
| Blue | ⇒ | Yellow [Pulse Generator 2&5] |

See fig.1 (page 6).

9. If you are rewiring the machine or do not have the standard wiring harness, the spark unit wire colours & functions are as follows:

| | | |
|-------------|---|---|
| GREEN | ⇒ | GROUND (0 VOLTS) |
| BLACK/WHITE | ⇒ | IGNITION SUPPLY (+12 VOLTS) VIA ENGINE STOP SWITCH |
| YELLOW | ⇒ | IGNITION COIL OUTPUT (TO COIL —) |
| WHITE | ⇒ | PULSE GENERATOR (WHITE RING) |
| BLUE | ⇒ | PULSE GENERATOR (UNMARKED) |

There are three pulse generators, one for cylinders 1&6, one for cylinders 2&5 and one for cylinders 3&4. There are two wires of the same colour coming from each pulse generator, one of these wires is normally marked with a white band. The pulse generator wire with the white band connects to the white wire from the corresponding spark unit, the other pulse generator wire connects to the blue wire on the corresponding spark unit. If the white band is missing, this is normally the upper wire coming from the pulse generator.

10. Push the three newly fitted housings firmly into their respective spark unit harness connectors; they will only fit one way. Recheck that the wires are correctly connected between the spark units and the wiring harness, as per the previous steps. If there is an error, unplug the tab housing and release the incorrect connector(s) by inserting a small blade screwdriver into the front of the tab housing and pressing down on the crimp locking tab whilst pulling on the wire from the other end. Refit into the correct positions and reconnect the tab housing to the spark unit.

11. Reconnect the battery.

12. Refit the seat and tank (if removed earlier).

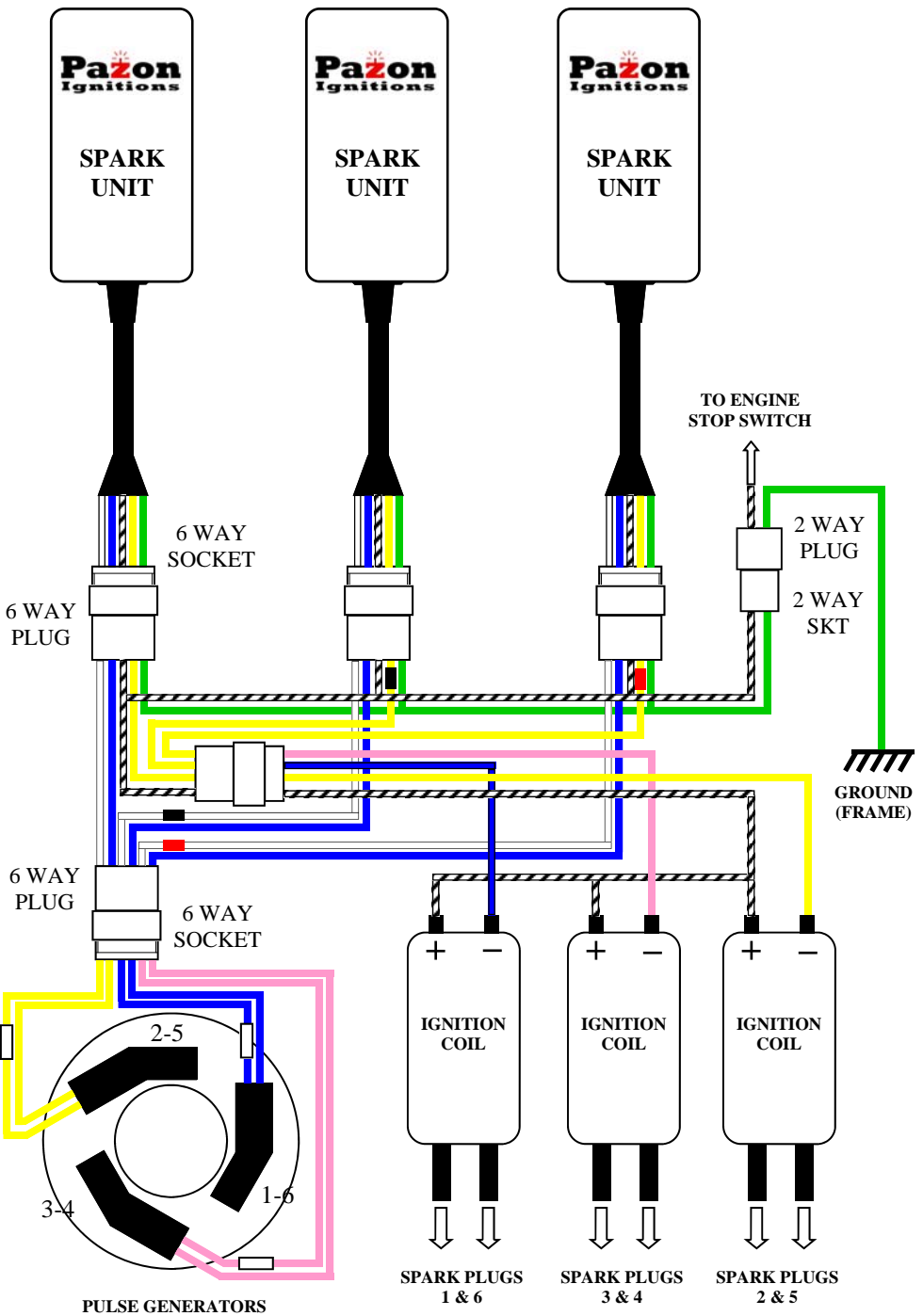
12. Fitting is now complete, although for best results you may wish to verify the ignition timing, see the following guide.

- Strobe timing is best carried out using a plain white light strobe and separate (slave) battery
- Remove the pulse generator cover, start the engine and warm up
- Check the timing as per your workshop manual
- As a guide, the typical timing figures are 10° BTDC STATIC/IDLE, 41° BTDC FULL ADVANCE @ 8000 RPM
- The mechanical advancer unit normally has three sets of timing marks on the outer edge, as follows:
 1. T TOP DEAD CENTRE
 2. F LOW SPEED / IDLE
 3. FULL ADVANCE

Each set is marked 1.6, 2.5 and 3.4

- Attach the strobe pickup to #1 or #6 cylinder and point the strobe through the inspection window in the pulse generator assembly.
- Verify that the appropriate timing mark aligns with the reference point (either at idle or at full advance), or to the recommended figure for your engine.
- Stop the engine. To adjust the timing, loosen the two base plate screws and move the plate slightly. To advance the timing, turn the plate in the opposite direction to the mechanical advancer unit rotation. Retighten the two screws. Restart the engine and recheck the timing as above.

Fig. 1



TECHNICAL DATA

Ignitor Module (Part# IGNITORH1)

| | |
|--|--|
| Module Type: | Transistorised Ignition, replacement for OKI MPS-200 Spark Unit |
| Advance/Retard Timing: | Fixed (no advance) |
| Input Trigger: | Pulse Generator (Magnetic) |
| Minimum Supply Voltage: | 6 Volts DC |
| Maximum Supply Voltage: | 28 Volts DC |
| Reverse Battery Voltage: | -14 Volts DC |
| Load Dump Overvoltage Protection: | 100 Volts |
| Maximum Ignition Coil Peak Primary Voltage: | 450 Volts (Regulated) |
| Maximum Ignition Coil Secondary Voltage: | Ignition Coil Dependent |
| Current Draw (Static): | 0.03 Amps Max. (Ignition Coils Off) |
| Current Draw (Dynamic): | Typically 1 Amp (Coil Dependent) |
| Maximum Ignition Coil Current Draw: | 5 Amps |
| Ignition Coil Turn Off (Engine Static): | 70mS. (Typical) |
| Minimum Cranking Speed: | 30rpm (Typical) |

MOTORCYCLE APPLICATIONS INCLUDE:

HONDA CB750F/CB900F/CB1100F
HONDA CBX1000
HONDA GL1100
HONDA CB650 CUSTOM (1980)

IGNITION TEST MEASUREMENTS (TYPICAL VALUES)

| | |
|---|--|
| Ignition coil primary winding (input): | 2.5 ohms (Ω) |
| Ignition coil secondary winding (plug caps fitted): | 17 Kohms ($\Omega * 1000$) |
| Ignition coil secondary winding (plug caps removed): | 12 Kohms ($\Omega * 1000$) |
| Pulse generator coil resistance @ 20° C: | 530 ohms (Ω) \pm 50Ω |

Terms & Conditions and Warranty

- Use of this product indicates your acceptance of this notice.
- The product design & literature is Copyright © PAZON 2006-2007, & is protected under international copyright, trademark & treaty provisions.
- To provide the best ignition systems possible, PAZON IGNITIONS reserves the right to alter & 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 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's liability related to the product exceed the purchase price actually paid for the product.
- Neither PAZON 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 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 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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