TECH TIPS:

We get a lot of questions about Boyer electronic ignitions. Here are a few:

Do I have to replace my 12 volt coils with 6 volt ones when installing a Boyer electronic ignition on a BSA or Triumph twin?

Given that the original 12 volt coils are in good working order, only in rare circumstances is it necessary to go to the additional expense of replacing the stock 12 volt coils with 6 volt ones on a Triumph or BSA twin. Raising the motors compression, abnormal loads or lugging the motorcycle would require such a change. If in doubt about your 12 volt coils have them tested. If they fail, I would then replace them with 6 volt ones.

• Along with a new Boyer ignition I am going to buy new coils, should they be 6 volt?

As you are willing to bear the expense of new coils I would change to 6 volt.

• When I buy a new coil is there anything special that I need to know?

Yes, the coil's (or coils' if you are using two wired in series) total primary winding resistance cannot be less than 2.4 ohms. This means that you could wire two 1.2 ohm coils in series, and as resistance is additive, you would have the 2.4 ohms specified. For consumer information, a lot of performance coils sold today have the primary resistance listed on the box.

• Does Boyer recommend any specific coil?

No, a wide range of coils designed to work with points work well with the Boyer ignition.

• Can I use resistor plug wires?

Yes, resistor plug wires or plug caps are an option, but they must measure 5000 ohms. As resistor spark plug wires can go "high resistance" with time and abuse we advise using solid copper plug wires and 5000 ohm resistor spark plug caps. If you have resistor wires or plug cap that measure more than 5000 ohms total, have them replaced.

• Do I have to use resistor wires or plug caps?

Only when installing the Micro-Digital and Micro-power systems, easily identified with their red control box. On these systems radio frequency (RF) suppression is not an option. RF is the ticking noise heard in a car radio when there is no RF suppersion. The ticking is "heard" by the computer chip and will cause the unit to fire erratically.

TECH TIPS:

Boyer recommends solid copper wires with 5,000 ohm resistor caps. NGK has a wide range of resistor plug cap suitable for this application.

• My dealer says it's important to keep my battery charged. I don't use the bike that much what should I do?

The Battery Tender manufactured by Deltran (904) 736-7900 801 Hwy. 92 East, DeLand, FL 32724 can be left attached to your battery indefinately. It is a perfect solution for the owner of an electronic ignition bike that only uses it occasionally.

• Can I use a dual lead "Harley" style coil on my British Twin?

Yes, you can even wire two in series and use them to fire a dual plug twin (4 plugs total).

• If I use two twin lead coils wired in series to fire the four plugs on a dual plug British vertical twin do I have to do something special?

Yes, it is important that each one of a coil's leads go to a different cylinder. Thus one lead would be firing a plug under compression and the other would be firing the other plug that is not under compression.

• I have read that if the plugs don't fire when I scratch the black/yellow and black/white leads from the ignition box together that the ignition box has failed. Is this true?

Although it is true that you can fire a Boyer ignition by scratching these wires together, it is interesting to note that it is not a conclusive test. The box could be OK if it fails this test or be bad if it passes.

• My bike runs on one cylinder. The dealer tells me that it is not the Boyer. Is this true?

Yes, on British twin and triple Boyer ignitions there is a single output that fires all of the coils at the same time. If one cylinder is missfiring the problem is with the coil, plug wire, plug cap, spark plug or the mechanics of that cylinder, not the electronic ignition.

• Boyer has a new Micro-power ignition. The coils that come with it warn that the output from the coil could kill you. Is this true?

Yes, any modern automotive or motorcycle "pulse" ignition coil delivers very high voltage. Boyer utilizes this modern system in the new Micro-power ignitions. Any time you work around one of these you should turn off the ignition. Whether it be your modern car or motorcycle, always be careful around the plugs, wires and coil of any "pulse" ignition when the motor is running.

SIMPLE TESTS ON THE BOYER BRANSDEN MKIII IGNITION UNITS FOR BRITISH MOTORCYCLES

1. Switching the ignition on should produce a steady current through the ignition coils except for the Norton unit. This remains off until triggered by turning the engine or disconnecting the yellow/black or white/black wires.

   No current through the coils could be caused by:-

   a) No power to the white wire. (Battery voltage low, less than 8 volts).

   b) No earth to red wire.

   c) Poor connectors.. Tinning gone black or very corroded.

   d) Coils or link wire open circuit.

   e) Black coil wire shorting to earth + (Black box very hot).

   f) Coil connected to black wire shorting inside from primary winding to case (very common on Norton machines) (black box very hot).

2. Wires can rub through to frame, check by removing unit and look round all the transistor box wires.

3. All battery cells should be in good order as one poor cell will produce a high resistance supply to the ignition. This can make the ignition spark on switching lights or horn and in some cases may produce a continuous run of sparks.

4. Switching off ignition should produce a spark at all spark plugs. The Norton unit would require triggering by turning the engine or disconnecting yellow/black or white/black wires. (Firing on one cylinder only, one coil shorting to earth could be either coil).

   If test No. 1 is correct but no spark is produced on switching off, the transistor box is faulty.

5. The transistor box can be tested in circuit by disconnecting the yellow/black and white/black wires and with the ignition on they can be touched together and broken, this should produce a spark at the plugs. If not the box is faulty.

Registered no. 1087017 England
Directors: E.J. Bransden, K.G. Bransden.