

2MC Capacitors & Batteries

Someone asked me, "I'm working on a 1970 BSA Thunderbolt and some people are telling me that I need to fit a capacitor to the wiring harness to be 100% stock. Is this true? I want my BSA to be a true restoration."

The only capacitors that came stock on the 1970 BSAs were 2 ignition capacitors (aka "ignition condensers") under the seat. They are connected to the BLK/WHT and BLK/YEL wires in parallel with the 2 ignition coils. On a 1970 model, both these capacitors live inside a black rubber boot that is located under the seat.

Now this is probably the confusing part... so put on your bifocals and hearing aid, grandpa and pay careful attention....

To meet US DOT law, all imported vehicles after about 1968 had to have a battery operated headlamp and tail lamp (for safety reasons) just to get into the country. So all motorcycles after 1968 came with a battery. This meant BSA and Triumph could no longer offer the ET ignition on their "competition models". (This one law is why 1967 was the last year for so many famous English models like the BSA Hornet and the Triumph T120 TT.)

However, riders still needed a way to simplify and lighten their bike for off-road and competition. So to provide the battery operated lights to meet the law, and at the same time make battery removal possible for the competition riders, all the stock models starting in 1968 came with a special wiring harness. Part of that special harness design was a 2-wire pigtail that allowed you to connect the big, blue, Lucas 2MC capacitor *if you intended to ride competition*. This pigtail can be found on all BSA and Triumph motorcycles from 1968 to 1970. Fitting the Lucas 2MC capacitor would thereby allow you to remove the battery and steel brackets; a loss of about 15 lbs total.

Bottom line: The 1968 and later BSA and Triumphs were designed to run a battery on the street **OR** a Lucas 2MC electrolytic capacitor for competition... but not both. It is electrically possible to run both, but since they do the same job there is absolutely nothing to be gained. So what was "showroom stock" on a BSA or Triumph was the battery only.

So what's probably troubling you is that you have this 2-wire "pigtail" back near the battery and it goes nowhere. That is correct. For street riding, nothing gets connected to it. It's empty. It's not used. It's vacant. It's free of connection. It's unfilled.

Hope this helps.

RF Whatley
Rodi British Bikes