

K throttle Body Synching

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Here's a real simple way to ascertain whether your K's throttle plates are in synch--the adjustment we are admonished to never touch!

Attach a carb stix, other mercury synchronizer, or very accurate bourdon tube vacuum gages to each vacuum access port (covered by rubber caps and the fuel pressure regulator line). Connect the loose fuel pressure regulator vacuum line to the corresponding carb stix column (or gage) using a "T" fitting.

Warm the engine. Screw in and lightly seat all three (or four) idle bypass synch adjustment screws (count the turns in for each, and record). Doing this will slow or stall the engine, so actuate the starting lever (choke) to maintain normal idle speed**[see [amended procedure](#) below-wd]**.

When the screws are fully seated, any measured vacuum imbalance is then a function of variance in throttle plate opening ONLY, and is adjustable from between the throttle bodies. If out of synch, carefully adjust to equalize all readings. At this point, increase RPM slowly and smoothly, checking for different readings at various engine speeds.

You should see little or no change, since adjustment at the smallest throttle opening is most critical. Once throttle plate synch is set, reopen the idle bypass synch adjustment screws (per your notes), and fine-adjust them to reestablish correct idle speed and synchronization with the "choke" lever off.

Following this procedure should not affect the adjustment of the throttle switch/position transmitter. Check if in doubt. On older Ks you're listening for a audible "click" just as the throttle returns to the closed position.

Follow this procedure and your perfect throttle body synchronization will eliminate much vibration.

I stand corrected!

A few days ago I shared with all a procedure to synch the throttle bodies of K motors. In it, I suggested using the choke lever to maintain idle speed while the bypass screws were closed and the butterflies checked for equal vacuum (and adjusted if required).

Joe Senner and Tom Coradeschi pointed out a problem, one I hadn't thought about. Their contention was that the choke opens the butterflies from the aft end, while the throttle cable itself actuates from the center. Both guys said vacuum differences would be measured between these two methods, and opening the throttle through the twistgrip was THE correct way.

Anal as I am, I assured Tom I would verify his empirical data right away, so I jumped on the K last night to vindicate myself (everybody has an ego!).

Using my Carb Stix, I measured a 2-3 cm delta in the mercury column between injector body number 3 (the aft one) and the other two when switching from throttle to choke actuation. Whether this is enough to cause vibration or rough running is debatable. Yet, the whole point of doing the synch procedure is to "knats ass" the adjustment.

So, bottom line: Amend my procedure to use the throttle to keep the engine running with the bypass screws closed.

<http://www.ibmwr.org/ktech/throttle-sync.shtml>

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