Tech Tips - BMW Owners News [Sometime in 1989 or 90]

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Last August we discussed timing your K-series motorcycle. Since the K75's use three coils, and the K1OO's use only two (dual) coils, timing is different for the two models. **Steve Burford** of Indianapolis went to a lot of trouble timing and adjusting his K100, and wrote us about it.

I followed the instructions in the August, 1989 issue on timing K bikes, with my trusty Haynes manual alongside. Disassembly proved somewhat difficult, due to a slight corrosion build up. Be real careful taking the ignition rotor off (that's the pot shaped item under the backplate). If you bend it, the rotor will then contact the pick-up coils and generally make a mess of your ignition trigger assembly.

I finally got the timing plate off (the flat plate with the 'V' notch), again due to corrosion. The trick in this case was to insert two very small allen wrenches on opposite sides of the plate and gently rock it back and forth until it came off.

The plate from my machine measured 2.051 inches in diameter, and had a 'U' shaped notch in it counter-clockwise from the 'V' notch, or 0.420 inches from the notch (24 degrees). That represents the spec for advance range, according to my Haynes manual. In fact, all the parts referred to in the August article are identified on page 157, Sections 4.4, 4.5, 4.6. I ran a check after reassembly and found my bike was timed to the 'U' notch (24 degrees).

When reassembly is started, make sure the timing plate is put on the correct way. In my case this meant with the 'U' notch counter-clockwise from the 'V' notch.

The K75's have three coils, and the K100's have only two (dual) coils. I timed the engine of my K100 from the front coil, which connects to cylinders 1 and 4.

The engine must be warmed to normal operating temperature prior to setting timing. The computer apparently controls timing in relation to the temperature, so the advance will be wrong if set on a cold engine. I'm running with 33 degrees total advance measured at 6,000 rpm. Using high test gasoline, I get slight knocking under load at 3500 rpm.

Thanks to Rob's article, I can now monitor an adjust my timing according to a timing light, not by guess or dial indicator. Please note: There is no one rpm where advance stops until you reach red line. If you check it at 1600 and then again at 2500, it will be different. The steadiest advance seems to be between 5,000 and 6,000 rpm.

Steve also played around with the balance on his fuel injection system. Both the factory and the BMW dealers use mercury vacuum gauges to set the fuel/air mixture, but apparently both use wider leeway than most owners would use. I found mine needed adjustment, as did Steve. Using 4-tube Carb Stix connected to the throttle bodies (there are connections there) as described on pgs.146 and 147 of the Haynes manual lets you

really lock them just right. Steve is now reporting 42 mpg on his K100, while I usually average around 47 on my K75S.