

Ignition Timing Adjustment

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While doing ignition timing adjustment, a tool requiring minimally is a feeler gauge, a dial gauge and a good plus driver of precision. A dial gauge purchases special tool from Kawasaki motors or dial gauge and an adapter are purchased from machine tool shop. I used the dial gauge (Mitsutoyo), the dial gauge holder for YAMAHA TZ service tool, the dial gauge extension and my own dial gauge holder adapter for H2 cylinder head. When dynamic adjustment is done, timing light is required.



Process

Set the spark plug gap to .035 ~ .039 in. (.9 ~ 1.0 mm)



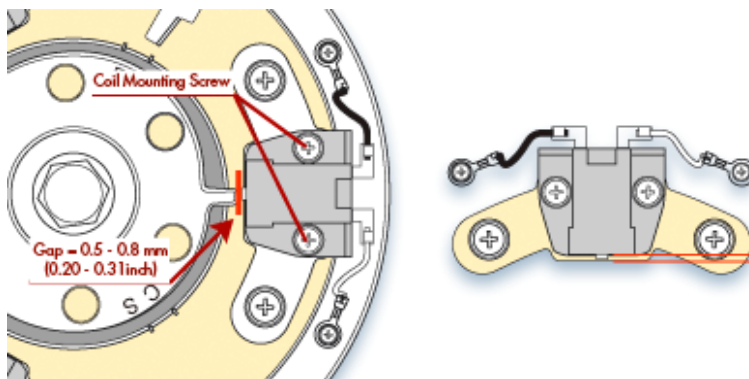
The standard plug is an NGK B-9HS-10. Plug installation torque is 18.0 ~ 22.0 ft-lb (2.5 ~ 3.0 kg-M). There are various opinions about a plug gap, but it lays good effect in my experience to adjust a 1mm plug gap. I think that a large plug gap is effective for CDI, but this is an individual opinion.

Remove the left cover

Take out the two screws and remove the left cover

Signal Generator gap

Take out feeler gauge, check the gap between each signal generator pickup coil and the magnet projection on the rotor. The correct gap is .020 ~ .031 in. (0.5 ~ 0.8 mm). If the gap is incorrect, loosen the two mounting screws and move the coil by hand to set it.





For precise timing adjustment, base plate must become parallel to an IG signal coil. Set the base plate as parallel to the base of the IG signal coil.

CAUTION:

CAUTION: Do not pry on the coil with a screwdriver or any other tool since this may break the coil housing.

Set the BTDC

Remove the spark plugs and insert a dial gauge into the left cylinder. Set the piston to .1231 in. (3.13 mm) BTDC.

Set a wrench on SG rotor mounting bolt, and rotate crank counterclockwise, and set a piston at top dead center.

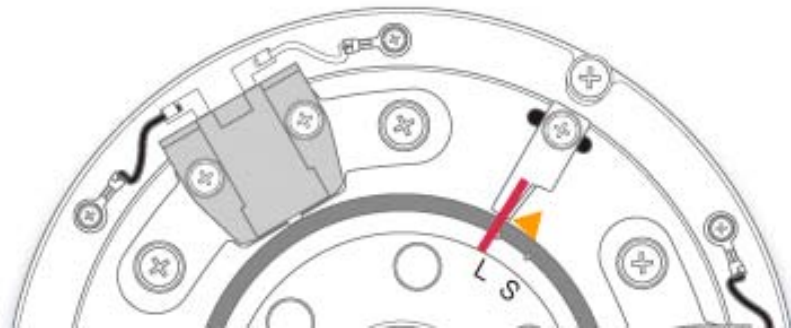
At the position where a piston reached top dead center, adjust a mark of a dial gauge to "0". If top dead center location is not correct, ignition timing cannot be adjusted rightly. Turn crank shaft clockwise slowly after having set top dead center, and leave a turn at the position where dial gage pointed at 3.13mm. If it does not, return to the first step.



Set the pointer

Bend the pointer on the generator stator to coincide with the L mark on the rotor.

When pointer do not coincide with L mark, loosen mount bolt, and reset a pointer. When the mount screw be tightened be careful, because a thread of the generator side is weak. You must watch coincidence with a L mark from the front.



Align the S mark with pointer

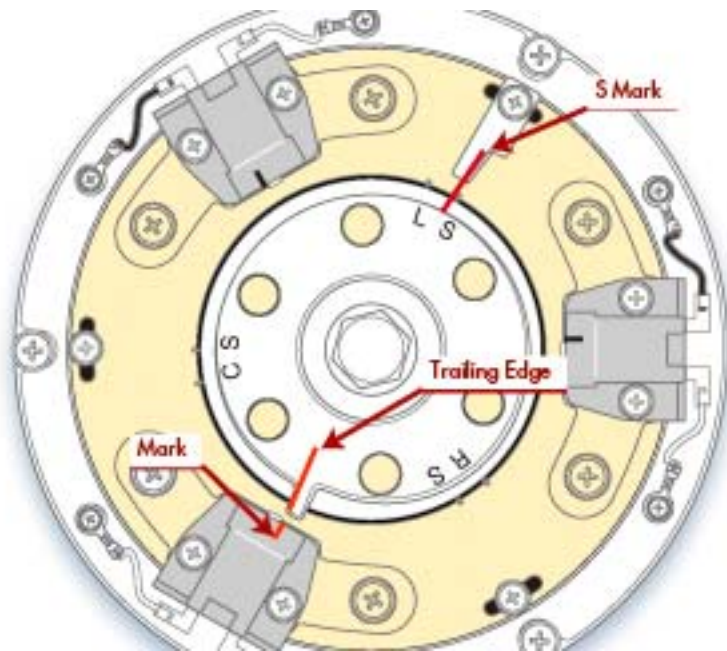
Turn the rotor slightly to align the S mark with the pointer.



Adjustment

See if the trailing edge of the rotor magnet projection coincides with the mark on top of the left cylinder signal generator coil housing. If it does not, loosen the base plate right or left, again taking care not to pry on the coil itself.

If the screw does not become loose, use an impact driver. Adjust it with base plate when cannot adjust it with a mount plate. Base plate loosens three mounting bolt and adjusts it.



Other Cylinders



Repeat steps and for the right and center cylinders, aligning the right and center S marks with the pointer. The above is content of Shop manual, but it is laborious work that check a pointer and a mark I wanted to do simpler work and made this coil guide. It turn out all for the best!! Of course I did usual process and a check by timing light after this, but it is put together without a problem.

Dynamic Adjustment

Reinsert the spark plugs, connect a strobe to the left cylinder plug, start the engine and see if the rotor L mark coincides with the pointer at 4,000 r.p.m. If it does not, readjust left cylinder timing. Repeat step 9 for the right and center cylinders, seeing that the R and C marks coincide with the pointer.

