CB250/400N & CB250/400T
Generator testing guide

Honda give very wide limits on the stator winding resistance in their manuals. This is not helpful as the new stator would have been wound on a machine and machine wound coils will have a DC resistance within 2% of each other when new. Such wide resistance ranges in the shop manual leads to inaccurate fault finding. Across industry, if a winding is more than 5% away from its newly wound value its considered to have failed. If you apply this narrow 5% tolerance, faults are quickly identified, saving you from buying parts that are not required.

CB250N & CB250T

Our experience with CB250 generators over many years has given us much more accurate information than Honda give. If the measurements of your generator don't match the right hand column (blue figures), you must consider the generator to be faulty.You do not need to take the generator off to carry out these tests, unplug the generator lead from the CDi unit and test from this plug.

These figures are only correct with the generator temperature at 20 degrees C

Winding	Wire colours and Honda specification	Actual reading of known good windings.
Low speed source	Green-White 200-500ohms	320R
High speed source	Blue-White 4-7ohms	5R
Low speed pick-up	Green-Light blue 100-200ohms	135-145R
High speed pick up	Green-Pink 10-30ohms	16R

If your readings vary by as little as 5% to the figures in blue you should suspect a faulty stator.

CB400N & CB4000T

The same 5% rule applies to the 400 machines when measuring the stator, below are figures we have obtained from results taken gathered over many years. This system is distinctly different and more complicated than the 250 generator. These stators commonly suffer high speed pick-up failures combined with faults in the CDi unit, we suspect that the power surge when the winding fails damages the sensitive timing circuit in the CDi unit. Very often clearing these faults requires both a stator repair and a new CDi unit. We manufacture a new CDi unit so you don't need to rely on 40 year old units.

CB400N (1978) Early kick starter bikes

These figures apply to CB400T Engine numbers CB400TE-20XXXXX to CB400TE-40XXXXX: (so far we've not found any difference in the CDi windings, the lighting coils however are very de-rated on T models)

You do not need to take the generator off to carry out these tests, unplug the generator lead from the CDi unit and test from this plug.

These figures are only correct with the generator temperature at 20 degrees C

Winding	Wire colours and Honda specification	Actual reading of known good windings.
Low speed source	Green-White 400-500ohms	410R
High speed source	Blue-White 75-13 ohms	85R
Low speed pick-up 1	Green-Brown 75-130 ohms	94R
Low speed pick-up 2	Green-Light blue 75-130 ohms	112R
High speed pick up	Green-Pink 120-180 ohms	135R

Apply a 5% tolerance

These figures apply to stator with yellow painted screws on, while Honda give different figures, in practise they are all the same:
CB400TE-2105940 ~
CBTE-4103395 ~
NC03E-20XXXXX
NC03E-2100001 ~
CM400T
NC01E-20XXXXX
NC01E-21XXXXX
NC01E-2200001~

CB400T (1979 -)
Green-White 315-385 ohms - we've never seen this, all measure around 410R.
Blue-White 77-95 ohms - 85R
Green-Brown 77-92 ohms - 94R
Green-Light blue 95-116 - 112R
Green-Pink 126-154 ohms -135R

The same 5% rule applies