CBR600RR Race Generator Fitting Info

Contents:

1 x Generator coil assembly
1 x Rotor Assembly
1 x Generator backplate
1 x Regulator / Rectifier
6 x Button head allen screws M5 x 30mm
4 x Low cap head allen screws M6 x 10mm

1) Remove the original generator cover and the stator assembly from it.
2) Remove the standard flywheel.
3) Take the new rotor assembly and slide on to the end of the crankshaft.
4) Put some thread-lock on the original flywheel bolt and tighten it to 16lb-ft (22Nm).
5) Ensure the threads inside the cover are clean and dry, then fit the generator backplate to the original casing using thread-lock on the 4 M6 screws supplied.
6) Now place the generator coil assembly onto the back-plate with the wires pointing out at the appropriate place (wire clamp is no longer required).
7) Retain the coils using thread-lock on the 6 x M5 button head screws supplied and tighten gently and evenly in several passes until the heads bite into the windings and are secure.
8) Refit the casing to the engine making sure the dowels are present and in good condition and that you line it up as you fit it so as not to damage the coils by catching them on the edge of the rotor. The gasket faces should meet flush before tightening.
9) Replace the original reg/rec with the kit version. The reg / rec need only be mounted with one bolt and can be cable tied through the other hole. We do recommend that it be fixed to a flat metal surface where possible.
10) Connect the reg/rec red wire to battery positive terminal, black wire to battery negative and blue wire to a switched 12V supply (as near after the ignition switch as possible). Alternatively the blue wire can be connected to the battery positive terminal, but in that case the blue wire must be isolated after use to prevent drain on the battery (usually by fitting a switch or a fuse holder and removing the fuse when not in use).
11) Plug the generator in to the reg/rec and fitting is complete!

When the generator is overcoming losses and keeping the battery topped-up the green light on the reg/rec will shine brightly.

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Please Note:

Never run the bike with the battery or regulator/rectifier disconnected as this will cause damage to the generator.
Never run the generator attached to a standard reg/rec as this is likely to cause damage to the generator.
Be aware that as the system is designed for race use it will not supply enough power to run lighting systems, although it may indeed provide sufficient power for LED tail lights and horn so that a daytime MOT can be obtained it is unlikely that on the road sufficient revs will be maintained to keep the battery topped-up. It starts charging the system at approx 5000rpm, although at which point it overcomes losses is dependent on what drains are imposed by the fitted items on the bike.
If left running for long periods of time below this level it will eventually flatten the battery.

ALWAYS USE THREAD LOCKING COMPOUND ON ALL THREADS! FAILURES HAVE OCCURRED WHEN THIS HAS BEEN OMMITTED!

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Testing your race generator if a fault is suspected:

1) Check that there is a 30 or 35A fuse in the reg/rec positive lead and that it is not blown.

2) Ensure that there is at least 12V DC at the blue wire feed with the ignition on and that the connection is secure.

3) Connect the reg/rec to the stator and with the battery terminals and blue wire fixed if your battery has 13+V you should see a very dim light from the reg/rec LED (you may need to shield out the light to see this).

4) Check that the three pins in both the stator side and reg/rec side connectors are firmly fixed by giving them a gentle tug each in turn.

5) Unplug the stator from the reg/rec and check continuity between the stator pins – you should have continuity between any two of them, but no continuity between any of them and earth.

6) With the stator unplugged from the reg/rec and whilst the engine is running at a fixed speed measure the voltage in AC across the pins out of the stator in turn (three different ways).
It is important that your meter is set to AC before doing this, and you should be getting the same voltage between any two pins. You should be getting somewhere between 3V & 4V per 1krpm, ie 9-12V for 3krpm.

7) Reconnect the stator to the reg/rec. Fire the bike up, set your multi-meter to DC and measure the voltage across the battery terminals. You should be seeing between 13V and 14.1V across the terminals at around 5k rpm. The generator will not fire below around 3krpm. The green LED on the reg/rec should be brightly lit – this indicates over 13.5V.

8) If all the above have been checked and yet the desired charging is not happening get in touch with us for further instruction and advice before sending the unit back.

Warranty and Liability Disclaimer

Due to the high stress environment of high performance riding, competition riding and especially from previous or future crash damage, in common with other racing parts no warranty, guarantee or liability is expressed or implied whatsoever in terms of but not limited to the item itself and any consequential damage. It is imperative that customers understand and recognise that they are purchasing racing equipment which has been designed with performance in mind over longevity and that they are solely responsible for their own skill and judgment when selecting and installing these products.

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