



R6 to 2005 Race Generator Fitting Info

Contents:

- 1 x Generator and casing
- 1 x Rotor Assembly
- 1 x Regulator / Rectifier

Fitting:

- 1) Remove the original generator cover and stator assembly.
- 2) Unbolt the original flywheel from the starter clutch and replace with our flywheel using the supplied aluminium washer under the original (thread-lock MUST be used).
- 3) Refit the new flywheel assembly tightening to 25ftlbs using thread-lock on the flywheel bolt.
- 4) Ensure locating dowels are undamaged and either in the engine casing or transferred to the new cover. Replace if damaged.
- 5) Take the new generator cover and generator assembly and fit to the engine taking care to line up the casing when fitting so as to not damage the generator coils through misalignment. Retain gasket for spacing. Before tightening the cover ensure it meets the gasket face flush and fully without pressure (no obstruction).
- 6) Remove the original regulator / rectifier and replace with the supplied regulator. The standard reg/rec should NEVER be used as this is likely to cause the windings to burn out. It is only necessary to bolt the reg/rec through one hole, the other hole can be cable-tied in place.
- 7) Attach the positive and negative eyes to the battery and the blue wire to a switched positive 12V supply. The blue wire MUST be attached for the generator to operate without damage, if no switched supply is chosen then the blue wire can be attached to the battery positive but you must isolate the generator by removing the fuse or there will be a drain on the battery.
- 8) When the generator is overcoming drain and producing around 13.8+V the LED on the reg/rec will shine brightly.

Please Note: Never run the bike with the battery or regulator/rectifier disconnected as this will cause damage to the generator. Please also be aware that as the system is designed for race use it will not supply enough power to run lighting systems. It starts charging the system at approx 5000rpm, if left running for long periods of time below this it will eventually flatten the battery.



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.