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Kawazaki ZXR400 Generator Fitting Info

Contents:

1 x Stator assembly
1 x Rotor assembly
3 x M5 x 15 low head allen screws
3 x M8 x 10 button head allen screws
6 x M5 x 30 button head allen screws
1 x regulator / rectifier
1 x Generator casing gasket

Fitting:

1) Remove the generator cover and flywheel assembly
2) Unbolt the original flywheel from the starter clutch and replace with our flywheel using the M8 x 10 button head allen screws with thread locking compound on the threads.
3) Refit the new flywheel assembly using only the original flywheel bolt tightening to about 25ftlbs and using a touch of thread-lock.
4) Remove the standard stator assembly and keep this along with your original rotor in your race parts in case the generator is damaged in an accident or something similar.
5) Ensure the threads in the casing are clean and dry and fit the back-plate into the casing ensuring that the wires will not be trapped in position.and that the hole for the wires is closest to the grommet position. Mount with the M5 x 15 low head cap screws to manufacturer's recommended torque setting.
6) Fit the stator cup onto the plate carefully aligning the holes in the cup with the plate. Make sure the cup is fully engaged in the plate and with a small drop of thread locking compound on the end fit the 2 x M5 x 30 screws on opposite sides of the stator cup until home. Follow this with the 4 x M5 x 25 screws also with thread-lock. Tighten them each in turn in several passes until all the screws are fully home and tight.
7) Replace the wire clamp that sits inside the original casing ensuring it clamps the wires safely without pulling them tight and does not trap any of them in a way that could damage the insulation. If it is tight then leave this clamp out. Fit the grommet in position and apply a small amount of RTV silicone on the inside of the grommet to help make the oil seal reliable.
8) Ensure the gasket is complete (or replace with provided gasket), that the gasket faces are clean and that the two locating dowels are present and undamaged.
9) Take the 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 – ensure the gasket faces meet flush before tightening the bolts according to manufacturer's recommendations.
10) Replace the original regulator / rectifier with the supplied r/r. The black and red wires go direct to the battery terminals and the blue wire to a switched 12V positive supply (must be perpetually on when the ignition is on and vice versa.
11) Plug the generator into the regulator and fitting is complete!

Please Note: Never run the bike with the battery or regulator/rectifier disconnected from the battery as this will cause damage to the generator. Please also be aware that as the system is designed for race use it only starts charging the system at approx 5000rpm, if left running for long periods of time below this it will eventually flatten the battery.

SECURE ALL SCREWS / BOLTS WITH LOCTITE OR SIMILAR

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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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