ABSTRACT

TRANSMISSION SYSTEM ANALYSIS ON BEAT 2010 ELECTRIC MOTORCYCLE

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Along with the development of technology and increasing awareness of environmental protection, electric motorcycles are increasingly popular as an alternative to environmentally friendly motor vehicles. The 2010 Honda Beat modification is one of the electric motorcycle models that has gained public attention due to its attractive design and fairly good performance. However, despite the growing popularity of electric motorcycles, there are still some technical aspects that need to be further analyzed to ensure optimal performance. One of the important components in a motorcycle is the transmission system. The transmission system plays a role in converting power from the engine into motion on the drive wheels. The cause of the slip that occurred on the 2010 beat electric motorcycle was too loose tension. On the 2010 beat electric motorcycle, the transmission system was changed from belt transmission to a sprocket transmission system with a ratio of 15 number of teeth on the front sprocket and 32 number of teeth on the rear sprocket with a sprocket ratio of 2.128 with a chain speed of 7.7 m / s with 76 chain links or 84.22 cm long. The transmission system on this electric motorcycle uses chain number 40 with a single circuit.

Keywords : Transmission, Honda Beat 2010, Electric Motorcycle, Transmission system, Slip, Belt transmission, Sprocket