



A STUDY OF CURRENT FRAME SLIDER USAGE ON MOTORCYCLE

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ABSTRACT

For the past few years, the increasing of numbers of motorcycle gives poor records to traffics distribution Malaysia road. A lot of numbers has high motorcycle the possibility for accident to happen on road because of motorcycle mistake. Besides that, the motorcycle damages also because of tip-over and parking. Once the road or grounds are unstable, it can give effect to the position of motorcycle and the possibility to turn over has high.

Hence, the objective of this project of motorcycle frame slider in term of safety is to help and share the information to the owner of motorcycle to protect and reduce motorcycle fairing damages during the accident, parking and tip-over. For this project the motorcycle usage is Kawasaki ZX-6 with 600cc because every motorcycle has different installation of frame slider.

Based on the analysis using Finite Element Analysis (FEA) in CATIA V5R18, it shows an excellent result of using this frame slider because the design and material used are strongly enough and does not fail when large force or impact acting on that. It shows how this frame slider can reduce the damages on motorcycle because of serious damages during accident, crashes, parking and tip-over. How the frame slider looks like of the author was made the frame slider through Rapid Prototyping Machine as mock-up.

However, this project will be as references to further studies about motorcycle protection.

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