ABSTRACT

The evolution of truck into minibus (chassis), is kind of minibus as we know at present, with its uncomfortless for the passenger. It become a goad for the Author to regout a suspension system for the minibus with adequate comfort.

The project base on non-exsperimental method, and the datus gained from Mitsubishi Colt Diesel. It start with to devide the weight by the front wheel-axis and the rear-axis, it considered into 3 portion, one for the front and the other two for the rear. Four spiral spring is submited into a wheel axis is parallely submited with spring diameter. The breaking-force on the front wheel; and fraction-force, cause a maximum burden at front and rear wheel-axis. This maxsimum burden is used to protuding longitudinaly awing-arm; and lateraly awing-arm protuded from centrifugal-force, happened as the vehicle turn. The nature frequency and center osilation is used to calculated the vehicle's pitch and bounce.