Intelligent ECU in Automotive Braking System

PALA.Senthil

3rd year

Mechatronics Engineering

Kongu Engineering College

K.Thirunidhi Chelvan

3rd year

Mechatronics Engineering

Kongu Engineering College

C.S.Vignesh

3rd year

Mechatronics Engineering

Kongu Engineering College

***Abstract—*** *Automotive is generally called as a four wheelers. Caution for driving four wheelers is always high mainly in the hilly region. Driver should be very sensitive and adjustable while driving in the hilly region. Controlling of clutch and brake in above mentioned areas are very tedious for new drivers even to the experienced one. We incorporate a new idea in controlling of brake in elevation for the smooth movement of the vehicle. In our project, our model can eradicate the slippage of wheel, back slippage and accident that happen due to the reverse motion of the vehicle. This project deals only in the elevated areas. In the present scenario, when the brake is applied the vehicle stops. The driver needs to control the pedals of clutch, brake and accelerator simultaneously. In order to overcome the jerky movement and back slippage of wheel, inverted linear relationship scope is achieved between the movement of pedals of brake and accelerator. Level sensor is used to detect the elevation angle. When this condition is achieved, the brake shoe is programmed to hold the wheel for extra few seconds. In the meantime, driver can accelerate the vehicle. To avoid jerky start, the accelerator pedal pressing pressure will equalize the brake pedal releasing pressure. By this way, the braking system is equipped in our project.*