

22.Fabrication Of Electromagnetic Break System For Vehicles

Abstract—

This project mainly focuses on the analysis and design of Electromagnetic Brakes when coupled with Electronic Brake force distributor and is entitled as, “Design and Fabrication of Electromagnetic Braking System Incorporate with Electronic Brake Force Distribution.” The objective of our project is to come up with a Electronic Braking System with EBD prototype that can be operate by the help of microcontroller to provide appropriate amount of brake force the brakes automatically at the instance required without driver input. EBD are till now being employed in vehicles with ABS nowadays to prevent the accidents. Electromagnetic brakes are used to apply the brakes automatically. Microcontroller is used to control the motion of brakes and motor at the time of braking. Microcontroller gets signal about the distribution of load over the vehicle and provides required amount of braking force to rear and front wheels resulting in effective and efficient braking. The aim of making this type of braking system with EBD is to check how EBD reacts when combined with Electromagnetic brakes and prevent the possible effects of accidents caused due to insufficient amount of brake force required to stop vehicle. It is anticipated that this will be an efficient system if tested successfully in automobiles, helping to prevent the loss of life and property.