Abstract

Tractor trolleys are widely used in rural India. The major transport material and labor is done with tractor trolleys. Through the trolleys have been designed and put in transport, fabricated by local fabricators. No standards have been followed. The trolleys are more prone accidents due to various reasons. Most common reason in absence of any standard braking system. The design of braking system for four-wheeler Trolley have been done and presented. For synchronisation of motion between tractor engine and trolley a concept of fifth wheel coupling
have been incorporated. The standard fifth wheel couplings have been designed and planned. The necessary changes will be made in hydraulic circuit of the tractor.

References

- CAR BRAKE SYSTEM ANALYTICAL ANALYSIS Wojciech Kowalski, Zbigniew Skorupka, Rafa?Kajka, Jan Amborski, Institute of Aviation 02-256 Warsaw, Poland
- Design analysis of Hub, Rim and Drum in Brake Assembly Ramamurti V. 1, Sukumar T. 2, Mithun S. 2, Prabhakar N. 2 & Hudson P. V. 2 Mechanical Engineering Research; Vol. 3, No. 1; 2013 ISSN 1927-0607 E-ISSN 1927-0615 Published by Canadian Center of Science and Education 170.
- Fifth wheel coupling: SAF-HOLLAND Verkehrstechnik GmbH (www. safholland. com)
- Hydraulic Actuated Brake And Electromechanically Actuated Brake Systems, M Kees*, K J Burnham:, F P Lockett*, J H Tabor* and R A Williams’ and R A Williams’ and * Coventry University, United Kingdom Jaguar Cars, United Kingdom
- Automobile Engineering (Volume I & II) By Kripal Singh, Standard Publisher Distributer
- Machine Design By R. S. Khurmi, S. Chand
- Theory Of Machine By R. S. Khurmi And V. P. Singh, S. Chand
- CAD/CAM By Ibrahim Zeid, Mcgraw-Hill.
- Automobile Engineering By Dr. V. M. Domkundwar,Dhanpat Rai And Sons Publication

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