

FOOT SCISSOR JACK

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ABSTRACT

Scissor jacks are simple mechanisms used to drive large loads for short distance. The power screw design of common scissor jack reduces the amount of force required by the user to drive the mechanism. Most Scissor jacks are similar in design, consisting of 4 main members driven by a foot paddle. In this report, a unique design of a Scissor jack is proposed which is very easy to manufacture. Each member, including the power screw sleeves, which connect the four members and the power screw together. The manufacturability of the proposed Scissor jack lowers the cost of production. Scissor jacks allow raising heavy loads using only a fraction of the force ordinary needed. In this project the effort was to design an efficient Scissor jack to operate by leg power capable of raising a 250kg load.

There are some diagrams and pictures that have been attached to give more idea and to understand easily of the project and the concept of how it is manufactured and works.