IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 16, May 2023

Motorized Scissor Jack

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Abstract: A scissor jack or a Jackscrew is operated by the rotating motion of a lead screw. The height of the jack is acclimated by turning the lead screw. This can be done either manually or by installing an electric motor in a scissor jack attached to a lead screw. This integration is our design. The delicate part of the design may be changing a low-speed motor that's suitable to work at 12V. This is because the battery required for a machine is 12V, and the electricity demand for the operation of the scissor jack is taken from this battery. Another problem will be regarding speed reduction. principally, 12V motors generally operate at advanced pets, probably at 4000 or 5300 rpm. So, reducing the rpm to the needed lower rpm for the operation of a scissor jack without big accessories or power loss can be grueling. With this design royal homemade work can be achieved fluently. This can be done in any type of jack like spherical screw jack, bottle screw jack, and scissorscrew jack. In our design, we use a scissor screw jack which is motorized.

Keywords: Scissor Jack, D.C Motor, Automation

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DOI: 10.48175/IJARSCT-10981

