

A Project Report on

DESIGN AND DEVELOPMENT OF AUTOMOBILE DRIVING MECHANISM FOR DISABLED ARM PEOPLE

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ABSTRACT

The customization in vehicle (turning mechanism, acceleration mechanism, brake mechanism) has been done to accommodate the requirement of a disabled arm person to drive. The basic mechanism has to be shifted, and turning should be actuated either by shoulder or leg movements. Several mechanism like Cam mechanism, gear operated mechanism, lever mechanism, have been developed and simulated using ADAMS software. The primary controls of the vehicle such as accelerator and brakes, has to be repositioned from the handlebar to seat floor. The secondary controls should also be change in such a way that they are easily accessible by legs. As the person has no arms, safety measures also plays a very important role in securing the driver while travelling. These are the modifications that has to done in a scooter, for an disabled arm person to drive.

Keywords: Customization, Cam mechanism, gear operated mechanism, lever mechanism, Primary controls, Secondary control, safety measures.