25. Fabrication Of Automatic Inbuilt Car Cover

Abstract:

In this work an automatic car cover is proposed which will opens itself with the help of push button. It covers the whole car with a thin, but a strong material that not only protects the car from rain, dust and mud (in parked situation) but, also from minor scratches. An assembly of different diameter, concentric cylinders is used to form a hoisting pole and also, so that it could be contained in small space when not in use. The cover material is attached to the top of the innermost cylinder on both sides and to a rolling rod, which has the cover rolled on it. For the accomplishment of our task we are using a simple but dependable mechanism of rack-and-pinion gears. A flexible rack is attached to innermost of the 4 concentric, different diameter hollow cylinders. The pinion is attached to a motor, which derives its power from the car battery. As the pinion moves, the rack moves and pushes the innermost cylinder upwards. The bottom of every inner cylinder is attached to the top of the just outer cylinder, but providing the linear motion between the two. When the rack moves, the innermost cylinder is pushed, which in turn, after being completely hoisted makes the second inner cylinder to move. The After second the third cylinder is hoisted and with it the complete four cylinder pole structure is formed. After complete hoisting, whole structure is rotated along the rear parallel axis of the car. The cover takes the shape of the car and the car is well protected. After complete hoisting, whole structure is rotated along the rear parallel axis of the car. The cover takes the shape of the car and the car is well protected. It is most suited for sports car, because sports car generally have open roof.