

Grassroots Technological Innovations for National awards

1	Category	Automobile
2	Name of the innovator	Mr.Mujib Khan. MK Motors Near Jagatpura Railway Crossing, Jaipur Phone No.1: 9414053710
3	Title of the innovation	Car for handicapped
4	Keywords	Hand operated car, handicapped car
5	Background of the Innovator	High school, auto mechanic
	Summary	The innovator has modified the existing Maruti 800, Mahindra Scorpio etc to make it suitable for lower limb physically challenged. The modifications made are in breaks, clutch and accelerator. All these controls are modified in such a way that these can be operated using hands. For the person with one leg, the clutch remains at its original position while the other controls are modified to be operated by hands. These modifications are made in such a way that a normal person can also use the cars conventionally.



Innovation Ref No: 41KL07A0736

Features of the Entry:

1	Novelty of the innovation, feature or subsystem	Novel machine as that the car is modified to make suitable for use by physically challenged without making any changes in its basic engineering. The user gets all the feature of the similar normal car.
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2	<p>Comparison to current conventional alternative by</p> <p>a) Functioning</p> <p>b) Cost: Rs 8,000- 20,000 depending on the model of the vehicle.</p> <p>c) Removal of drudgery</p>	<p>The cars for lower limb physically challenged are available with automatic gear system. Maruti Udyog Ltd already has sold such cars. Now Maruti has stopped manufacturing such cars.</p> <p>Such cars are not readily available and are costlier than the standard cars. Rs 40,000/- Approx for the Hand operated transmission system for brake, Accelerator, Clutch with Automatic gear system.</p> <p>Physically challenged can also now become self-sufficient and enjoy driving.</p>
3	<p>a) Demerits and Limitations</p> <p>b) Areas needing further work:</p>	<p>Standard parts for retrofitting are not available. Needs to customize for each user.</p> <p>The components used in retrofitting are currently custom-made. These need to be Standardization. Clearance for retrofitting from the original manufacture Approval from ARAI for its road worthiness etc.</p>
4	<p>Commercialization</p> <p>a) How many has been made/sold/used locally?</p> <p>b) What is the diffusion potential?</p>	<p>Over 50 have been developed and sold.</p> <p>Good</p>
5	<p>Current and future application areas (multiplicity of utility)</p>	<p>All the existing vehicle have scope for such system</p>
6	<p>Social /environmental impact</p>	<p>High social impact. Used for handicapped person.</p>
7	<p>Significance to women, handicapped and other marginalized sections</p>	<p>Used for handicapped person</p>
8	<p>IPR considerations</p>	<p>As per prior art search such system are available with one or other differences.</p>