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HACKATHON

BATTERY CASING FOR ELECTRIC VEHICLES

PROBLEM DESCRIPTION

Battery packs, especially the ones containing Lithium-ion cells, account for a major portion of the production and maintenance costs of electric vehicles. The replacement of the traditional 'battery ownership' model with 'battery swap' model, combined with the establishment of regular 'battery swapping' stations can significantly reduce the cost of three-wheeler EVs.

Battery casings are modifications present in such vehicles which enable battery swapping.

Design a swappable battery casing for a three-wheeler vehicle battery

Constraints:

The vehicle must leave the battery swapping station within 5 minutes with a new battery.

