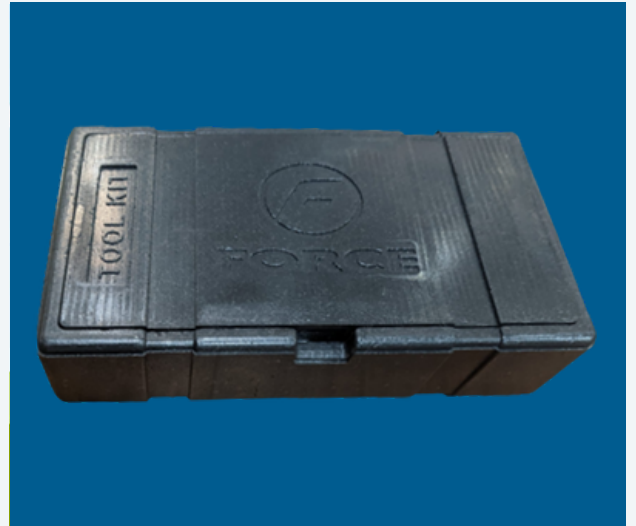


CASE STUDY

Efficient by Design: The Force Motors Tool Kit Evolution



► Introduction

In June 2023, Force Motors Ltd reached out to us to develop an Expanded Polypropylene (EPP) tool kit for one of their new vehicles. At the time, Force Motors was supplying their tools in leather bags that were placed in the trunk of the vehicle. Vibrations during transit caused the tools to collide with one another, leading to damage and noise generation. We visited the customer, understood their requirements in detail and assured them we would provide an effective solution.

► Key Challenges

1. Tools stored in leather bags were prone to damage due to collisions.
2. Noise generated during vehicle movement caused discomfort.
3. The lack of a structured arrangement led to difficulty in locating and securing tools.

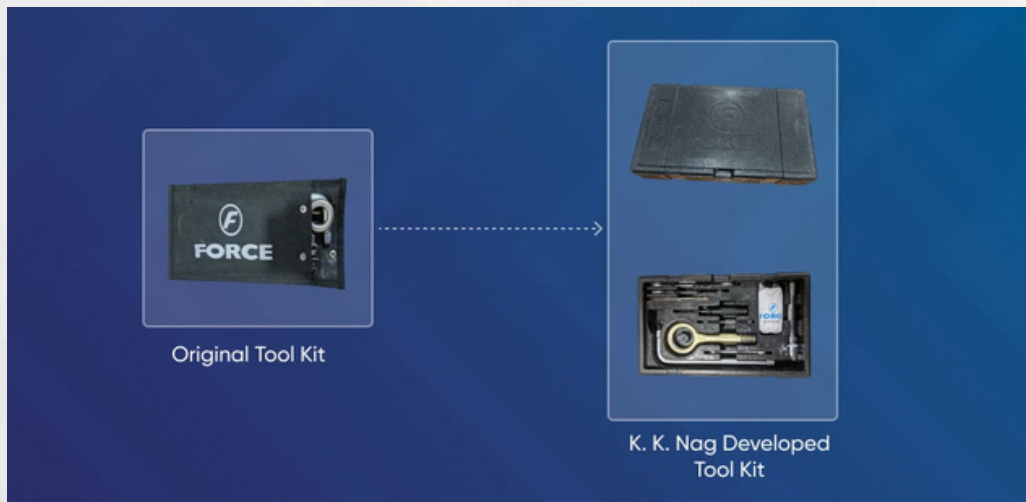
► Solutions

We obtained a set of tools from the customer and hand-crafted a prototype in Expanded Polystyrene. We ensured that every tool had a custom-fit place in the kit. The fitment was designed so that not a single tool would move out of its place despite vibrations, completely eliminating noise. It also made the placement of the tools foolproof, as each tool could fit only in its designated slot. This provided a quick and easy method for the customer to ensure that no tools were inadvertently left out.

The prototype exceeded the customer's expectations as it fulfilled their 2S requirements through PEEP – Place for Everything, Everything in its Place.

► Going Above and Beyond

Our designers noticed that a majority of the tools in three Force Motors vehicles – FML Gurkha, FML Trax and FML Urbania – were the same. Driven by our commitment to our core value Customer Obsession, we took the initiative to modify the design, ensuring that a single tool kit could accommodate the tools of all three vehicles.



► Results

1. Improved tool organisation, reducing the risk of misplacement.
2. Eliminated tool damage and noise during transit.
3. Custom-fit slots to ensure secure placement and easy identification of tools.
4. Standardised tool kit design across three vehicle models, optimising production efficiency.

► Conclusion

Today, we are proud to say that our tool kits are in regular production and are available in the three models of Force Motors vehicles. By addressing the core challenges with an innovative, structured and durable design, we provided Force Motors Ltd with a long-term solution that enhances both efficiency and customer satisfaction.