

LED Charger Port Upgrade

Project goal

To design a functional & aesthetic illuminated charger port to indicate charge status on a custom GM electric vehicle

Results

Prototypes were created successfully and installed in the GM vehicle. LED indicator was hooked straight into the batteries charge status indication and lights up when the vehicle is currently charging.

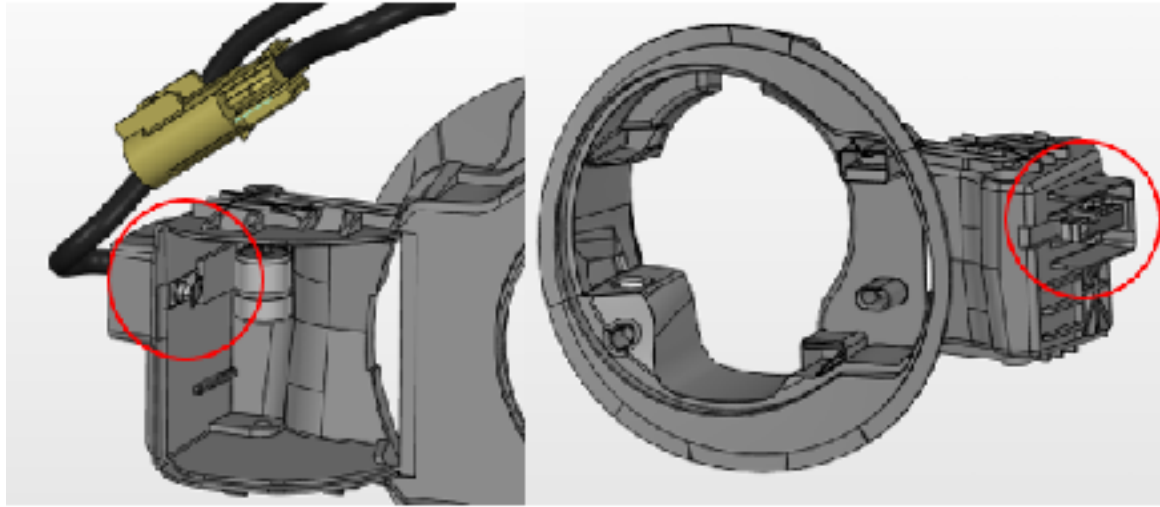


Backlight charger port prototype



Side-lit light pipe prototype

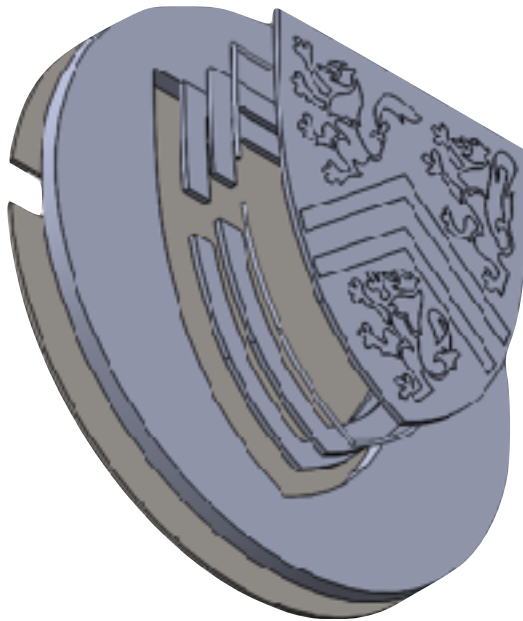
Implementation



Location of mechanical switch inside charger port assembly



Concept and prototype of single piece lid replacement



Exploded view of acrylic
backlight prototype



Example placement of
continuous LED strip