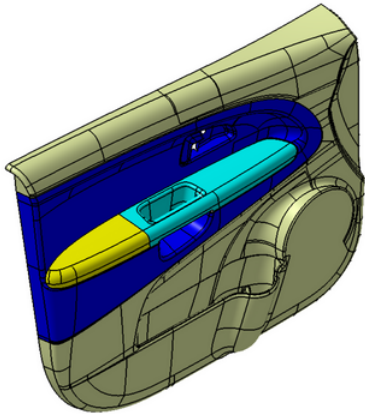
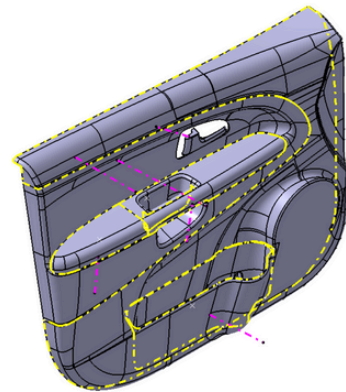


CAR DOOR SUBSTRATE

BEFORE



AFTER



What?

- Check A surface feasibility
- Make 2.5 mm thick part
- Close the surface with 2-deg clearance
- Design Feasible attachment features
- Consider cost at its lowest

How?

- **CAD Software** : CATIA V5, Part design & Generative Shape Design Domain to create concept Closebody & B side attachment Features.
- Used GSD Commands Sweep , Blend,Multisection then Boolean operations & part design commands.
- Conducted Draft Analysis, and identified Main Tooling Direction and Parting line.
- Conducted Clash Analysis for all the parts: map pocket, arm rest, door trim, bezel cover, and lever, in Assembly design and modified the parts accordingly.
- **Material** : PP-TD30 - Talc-Filled PP, ABS, PC-ABS, and TPO.
- Created 3 -4 different proposals and finalized one shown above.

Output

- Plastic bracket of 2.5 mm thickness.
- Followed standards Design Guidelines for Plastics like Rib to wall ratio = 40% T min
Radius at bottom of feature should be min 0.5 mm
- Selected Features based on 321 principle & Easy to assemble hence less assembly time.
- Used features like boss, snaps and locators Added Ribs for strengthening purpose.

