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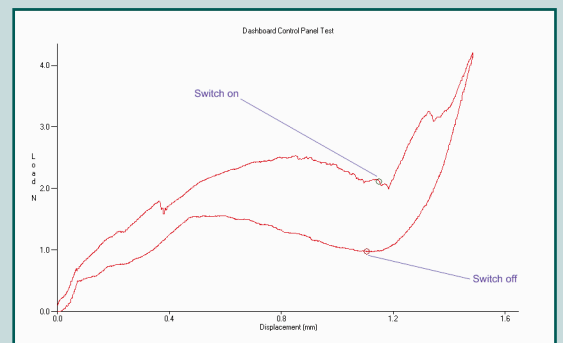
Dashboard Button Testing

Specification

Visteon required an automated system to measure the actuation force for dashboard buttons and check the electrical contact closure points. By quantifying the subjective 'feel' of the buttons they would be able to improve the quality feel. As the loads being measured were very low, typically less than 10N, and displacements were only a few millimetres, any system used would need to be capable of high levels of precision and repeatability at these low loads.

Solution

The computer-controlled Imperial system with Emperor software was chosen as it was able to meet these needs as well as providing very detailed graphical feedback plus easy collation and export of batch results. Since the buttons needed to be tested within whole dashboard assemblies the system was supplied with a large anvil plate and extended crosshead to ensure even the largest assemblies were properly supported and easily measured. The switch actuation cable could be connected to the assembly to allow contact closure points to be represented on the force graph, to make sure that the electrical contacts were being made at the right time. Not only was the system capable of low force measurements, but after interchanging the 'plug and play' loadcell for another with higher capacity the system was then suitable for button pull-off and impact tests.



Button Actuation Profile

System

- Imperial 1000
- Extended crosshead
- Switch actuation cable
- 25N & 250N loadcells
- Large anvil plate

Supplied to

Visteon

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