**Pedestrian Protection**

NA Hood design did not perform to the required level of head impact performance specified in the GTR.

Inner Panel Reinforcements converted to steel to reduce HIC values associated with impact to hood – 5 kg mass increase.

Dual latching system added to achieve aggressive styling with minimal performance impact.

EU hood was designed in steel to meet the more stringent EuroNCAP HIC values.
Load Path – Front Structure

Sub-Frame provides a lower load path into the structure

AHSS in the back up structure of the Rails and Dash Cross Member

DP1000 hydro-formed A-Pillar/Roof Rail provides load path to the upper structure

Front Rail utilizes “S-Brace” concept to distribute load to the Rocker and Sled Runner.

Martensitic Rocker Reinforcement provides strength to manage high axial loads
Frontal Impact
Frontal Offset
Load Path – Roof Strength / Side Impact

Martensitic Rocker Reinforcement provides transverse load distribution

Dual tube B-Pillar design utilizes DP1000 to provide resistance to buckling due to lateral and axial loads

Boron Moon Roof Ring provides path for cross vehicle load sharing

DP1000 hydro-formed A-Pillar/Roof Rail distributes load to A & C Pillars
Side Impact

31 Mph IIHS Side: CD391 FDJ
Time = 0
Side Impact

31 Mph IIHS Side: CD391 FDJ
Time = 0
Roof Strength
Thank You for your Attention