



**Safety**

## Gen-3 4-way Head Restraint

*OEM/Vehicle*

**Ford Motor Company  
2018 Ford F150**

*System Supplier*

**Windsor Machine and Stamping**

*Material Processor*

**Windsor Machine and Stamping**

*Material Supplier*

**Ravago**

*Resin*

**Hylon N1000STHL PA**

*Tooling/Equipment Supplier*

**Integrity Tool & Mold**



This low cost, low mass, head restraint provides exceptional rigidity for whiplash protection. Its flexible design allows the front surface of the head restraint to be translated closer to or further from the occupant by 60 mm without incurring costs (allowing for the precise balancing of comfort and safety). Using plastic, in place of steel, as the primary load bearing component is new to front row head restraints. The part design eliminates manufacturing complexity making use of intelligent geometries so that readily available materials could be used. A \$10.73 Million savings (\$2.80/vehicle) is projected by the end of MY2020.