



Process/Assembly/Enabling Technologies

Winged Spring Clip with 4 Way Locator

OEM/Vehicle

Ford Motor Company
2018 Expedition/Navigator

System Supplier

Magna Seating

Material Processor

Royal Technologies

Material Supplier

Advanced Composites

Resin

ADX 5017 TPO

Tooling/Equipment Supplier

Tri Tech Tooling, Inc.



Metal clips and springs were eliminated by designing an in-molded W shaped plastic clip with a 4-way locator providing efficient attachment per requirements and eliminating additional costs for fasteners and assembly. The plastic part comes out of the tool with the clips molded in. The patented winged spring clip design locates, locks and retains in a single snapping action. A cost save of \$0.17 per clip/\$2.19 per vehicle resulting in \$250K per year; and a 10% weight saving is achieved.