

## **ADVANEX PERFECTION**

## **Insert Collar Compression Limiters Our Approach**

Plastic components and assemblies are used extensively by the Aerospace, Automotive, Electronics, and Commercial Industries. Although the variety of plastic applications are endless, and design requirements are diverse, there is one common denominator - they all require reliable fastening solutions.

Advanex Insert Collars are compression limiters designed to safeguard plastic components of an assembly.

Insert Collars are manufactured from high strength carbon steel (per ASTM A1008). A zinc-nickel with clear chromate plating is applied for exceptional corrosion resistance.

Advanex compression limiters utilize Prism shaped impressions to provide superior pull-out and retention capability when compared to plain tube, split seam, grooved, and even solid knurled designs.

Compression loads generated from tightening forces cause plastic components to deform (compress) and/or crack under excessive loads.

Advanex Insert Collars protect the plastic parent material by absorbing and resisting excessive loads, thereby ensuring the integrity of the bolted assembly.

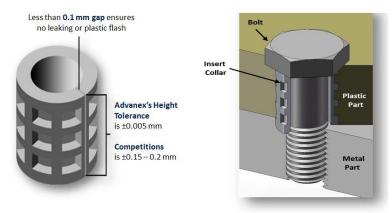
When a bolt in an assembly is tightened the plastic parent material compresses. Stresses in the plastic increase until the head of the bolt or washer comes in contact with the compression limiter. Further tightening of the bolt will cause the the compression limiter and plastic parent material to compress at the same rate.

Advanex Insert Collars absorb the additional clamping loads without further significant compression or increased stresses in the plastic parent

The prism shaped impressions in Advanex compression limiters prevents movement of the assembled components, and provides significant resistance to torsional and push-out/pull-out forces









**Ignition Coil Plastic Assembly** 

Automotive Sensor **Cluster Assembly** 



