GENERAL FASTENERS COMPANY

MNP CORPORATION

Engineering Center
Madison Heights, Michigan

Product Notes

Applications & Solutions

VTR Bolt: Pre-located bolts for assembly

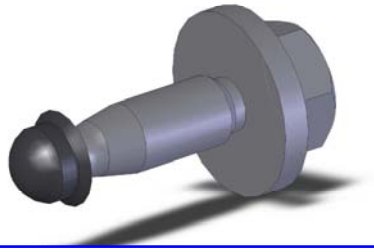
A bolt point feature that allows for a push-fit pre-assembly of the bolt to the nut member. Improves overhead or horizontal assembly applications

Application Need:
For the overhead assembly of an air bag module, the customer required that the bolt be capable of being pushed into the nut member (in this case an unthreaded weld nut) in such a way as to hold the weight of the air bag in place long enough for a second installer to drive the bolt and air bag module.

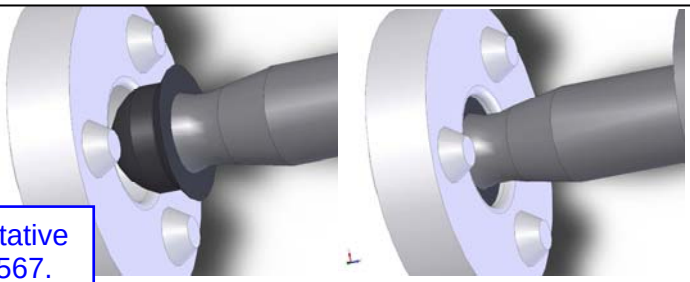
Solution:
A unique polymer mold design in conjuction with a unique point tip allows for enough load bearing capability to keep the mold from slipping in the nut and the bolt from slipping off of the mold.

Benefits:
- Retains load in vertical / overhead applications without engaging threads or twisting into the assembly.
- Ability for pre-located bolts to hold parts in place under nominal loads. Improves ergonomics and cycle time.
- Eliminates need for separate parts to hold assemblies in place prior to bolt installation.
- Bolt point is manufactured without costly secondary machining.
- Retains in smooth bore holes or threaded. (For self-threading or machine screws.)
- Low push-in force, high retention force. Mold geometry can be modified to suit the application needs (higher loads, need to remove and reassemble, etc.)
- Additional applications include any self-threading screw that cannot be hand-started.

NET COST SAVINGS!!!



Concept drawing showing that the point feature does not need to pass through the nut member to hold in place. (Accomodates back-side clearance.)



Contact your sales/engineering representative or contact the Eng Center at 248-307-0567.

This pre-located bolt design is pending patent application approval.