

Engineering Center
Madison Heights, Michigan

Rotatable Captured Nut

Two-piece preassembled nut and washer assembly for stampings

Application Need:

Customer requested a nut that could be clinched to a stamped engine component and maintain ability to turn (stamping is assembled to an engine block with fixed studs). The application also requires that the nut be able to “float” in the stamped hole.

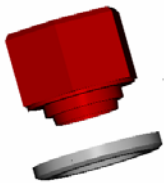
Solution:

A patented two-piece nut assembly that is permanently stamped in place by the stamping supplier.

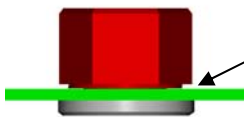
Benefits:

- Pre-assembled nut can be turned onto a fixed stud member.
- Nut is pre-assembled to stamping, eliminating need for customer to handle the loose nut.
- Assembly problems eliminated. Loose nuts no longer have possibility of being dropped into the engine block.
- Nut and washer in-die feed systems speed assembly for stamping source and sensors detect presence of all nuts and washers in the stamping.

NET COST SAVINGS!!!



Nut and washer prior to assembly



NUT ASSEMBLED TO STAMPING

- Gap allows free spinning of nut
- Nut is retained by the washer
- Gap is closed during nut assembly & generation of clamp load



Used and proven in an automotive V6 engine windage tray application (undisclosed savings for elimination of damaged engines)

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

The rotatable captured nut is patented by the General Fasteners Company (US patent # 6,932,044).