

Alternative Cam Bolt Assembly Design

Threaded fastener with preassembled cam plate(s) for use in a vehicle suspension system to adjust wheel alignment.

Application Need:

Improve fine adjustment capability over that of existing D-shape or broached-flats designs. In addition, lower total cost of assembly through material reduction.

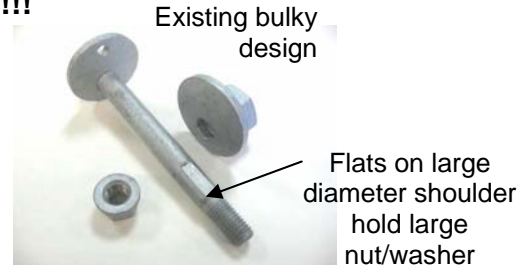
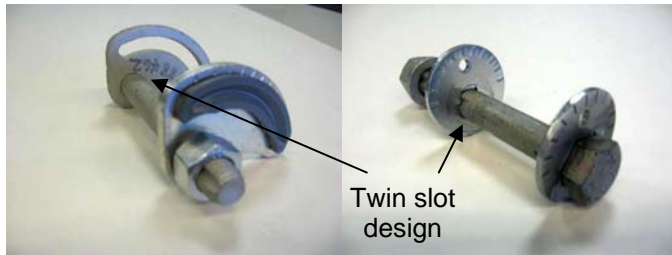
Solution:

Patented design offers alternative means of fixing the cam plates to the bolt. Capturing the cam plates with knurls and/or unique machined grooves offers tighter clearance and finer adjustment while maintaining a high proof load capability.

Benefits:

- Bridged slot design allows a high proof load capability even with machined grooves in the threads – allowing for use of smaller diameters and material savings (weight and cost).
- Twin slot design allows for more thread bearing area than a D shape part for more repeatable torque tension numbers.
- The twin slots allow the part to accept a cam washer with very little variance in rotation from cam to cam (+/- 2.0 degrees), which allows for finer wheel alignment adjustment.
- The staking and knurl design allows for very high twist-out numbers.
- Because the part has a full shank it can more readily fit standard suspension bushings.

NET COST SAVINGS!!!



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H3 Hummer (GMT345)
GM Lambda (GM996)
GM Colorado & Canyon (GMT355)

GM 166,168
GMT 900 3500

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This cam bolt assembly design is a proprietary design that is exclusively licensed for assembly with MNP/Genfast product.