



Automotive	Chemicals	Cutting Tools/ Abrasives	Electrical	Fasteners	Fluid Power	Safety/ Material Handling	Shop Supplies/ Hand Tools	Welding
Farming	Industrial	Manufacturing	Military	Mining	Recreation	Service		

Custom, Single-Purpose Fasteners Are Not Always Necessary

Problem

Obtaining custom fasteners to secure knives onto tire shredders was becoming too expensive and time consuming.

Review

- OEM recommended custom fasteners that would align the shoulder with the shear plane to provide extra shear strength.
- Knives were being routinely removed for resharping.
- Resharpener knives were being installed with three new fasteners.

Assessment

Application is more dependent on tensile strength than shear strength

Recommendation

Tru-Torq® and Falcon Grip® fasteners provide the necessary clamp load, which is the primary service load.

Result

- Reduced cost of not having to order custom-made fasteners.
- Reduced downtime associated with ordering custom fasteners with long lead times.



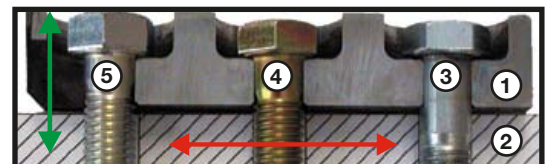
Rubber-tire shredder



Knife seat



Three fasteners per knife



Cut-away view simulating installed knife

- 1. Knife
 - 2. Knife seat
 - 3. Custom capscrew
 - 4. FalconGrip Grade 8 Capscrew
 - 5. Tru-Torq® Capscrew
- Tensile force
— Shear force