



SHEAR-STYLE HYDRAULIC CUTTER BLADE BREAKS CAUSING FIREFIGHTER INJURY

The Office of Fire Prevention & Control has received this report of a shear-style hydraulic cutter blade breaking and causing injury to a firefighter. There were no details provided as to where this incident occurred. We are passing this along as a Firefighter Safety Alert. Although the manufacturer is mentioned in this incident, this scenario could happen with any shear-style cutter. Firefighters and other personnel on the scene of an incident where this, or a similar, tool will be used should be wearing all personal protective equipment. Personnel on-scene who do not have PPE should be either provided proper PPE or moved back from the scene while cutting operations are being conducted.

Hydraulic cutting and spreading equipment should be inspected regularly for damage and wear. Cutting and spreading equipment should also be inspected after each use. Cutting blades and spreader arms should be inspected for nicks, chips, gouges, cracks, corrosion, and other physical damage. If damage is detected the tool should be removed from service until inspected by a qualified technician and repaired or replaced as necessary. It is important to make sure the main bolt on the cutter is tightened to the proper torque as prescribed by the manufacturer, if this bolt is loose it will allow material to get in between the blades and cause blade breakage.

With the increased use of High Strength – Low Alloy (HSLA) and Ultra High Strength Steel (UHSS) metals in today's vehicles, the chance of damage to rescue equipment is possible. Extrication technicians should also use caution when operating shear-style hydraulic cutters to be sure that the cutting edges are at right angles to the object being cut. If the cutting edges are angled, the scissors will tend to rotate or twist. This will place undue side pressure to the blades causing damage or breakage.



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