

Ask Jon Eakes

A safety correction about penetrating oils and propane torches.

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David from Victoria, British Columbia is a safety officer in his workplace. Last year he saw me putting penetrating oil on a rusted nut and then heating it with a propane torch to break it loose. Bad stuff he says. Heating oils like that can be very bad for your health, as was the case of a custodian where he worked who developed serious health problems from heating penetrating oils.

David specifically mentioned WD-40, so we contacted their technicians to see what they thought about this. They pointed out that none of these oils were intended to be heated to high temperatures and that in fact at 300 degrees F all the solvents will evaporate -- and breathing hot solvent fumes is definitely not a good idea. At 600 degrees F the oil turns to ash and releases carbon monoxide, also definitely not a good idea.

Using the torch to expand the nut and "activate" the penetrating oil was an old hand-me-down technique that I had learned from my grandfather, before the days of workplace safety controls. Here is proof positive that some of the "good old techniques" are not as good as more enlightened practices. I stand corrected. Using a torch on oil to loosen a nut does work, but you are nuts to do it. Try penetrating oils and vibration, like a sander, to work the oil in. I would like to thank both David in Victoria and the technician with the WD-40 company for helping me set the record straight. For a tip on how using paraffin wax with a torch can release rusted bolts without any dangerous fumes, [click here](#).

Keywords:

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