



Penetrating Oils

By John Gibson

Machinist's Workshop magazine recently published some information on various penetrating oils that I found very interesting. Some of you might appreciate this. The magazine reports they tested penetrants for break out torque on rusted nuts. They arranged a subjective test of all the popular penetrates with the control being the torque required to remove the nut from a "scientifically rusted" environment.

The ATF-Acetone mix is a "home brew" mix of 50 - 50 automatic transmission fluid and acetone. Note this "home brew" released bolts better than any commercial product in this one particular test. Note also that "Liquid Wrench" is almost as good as "Kroil" for about 20% of the price. The ATF-Acetone mix is best, but you can also use ATF and lacquer thinner in a 50-50 mix.

*ATF=Automatic Transmission Fluid

Penetrating Oils	Average Torque Load to Loosen
No Oil	516 lbs.
WD-40	238 lbs.
PB Blaster	214 lbs.
Liquid Wrench	127 lbs.
Kano Kroil	106 lbs
*ATF Acetone Mix	53 lbs.