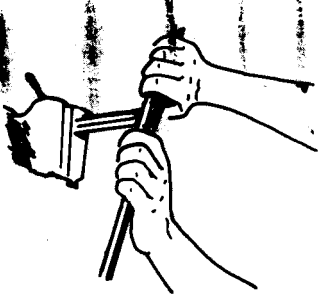


Tips . . . on cutting threads

PROFESSIONAL TAP & DIE SET

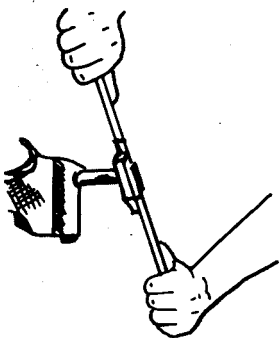
STARTING TAP

After hole has been made, hold piece securely with hole upright. Apply cutting oil. Grasp large wrench with both hands near tap and place tap in hole. (Grasp smaller wrenches with hand directly over tap). Press down and start tap clockwise. Relieve resistance by turning back to break chip. Make sure tap is square with surface of the work.



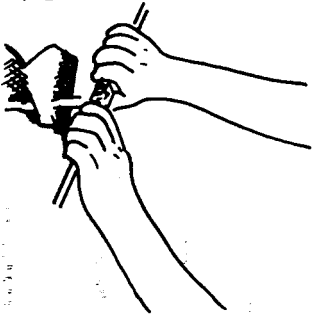
HOLDING TAP WRENCH AFTER THREAD START

Once thread is started properly, tap will draw itself into work. Downward pressure no longer needed. Grasp wrench by both handles and with steady movement continue turning tap. Relieve resistance by turning back to break chip. Do not force tap.



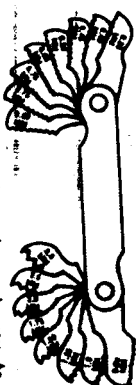
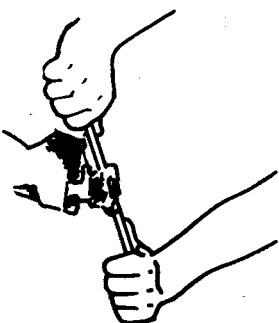
STARTING DIE

Before cutting threads make small bevel on edge to be threaded. Place die in stock with size marking visible. Tighten set screws. Adjust guide by turning cam so guide pins are against work. Apply cutting oil. Grasp stock with both hands near die and place tapered side of die over end. Press down firmly and work die back and forth, just as you work a tap. Be sure die goes on squarely.



HOLDING DIE STOCK AFTER THREAD START

After thread is started, grasp die stock by handles and with steady back and forth movement continue turning die onto work, advancing slightly with each turn. It is not necessary to press down as die will draw itself onto work.



The quickest and most exact way to find the number of threads per inch on a bolt or nut is with a Screw Pitch Gauge. Measure this "pitch" with either a Metric or U.S. Thread gauge as shown below.



Measuring EXTERNAL Threads



Measuring INTERNAL Threads

SEE REVERSE SIDE FOR

TAP-DRILL SELECTOR