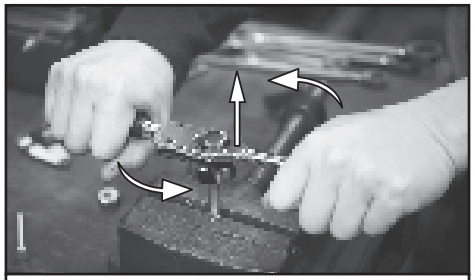
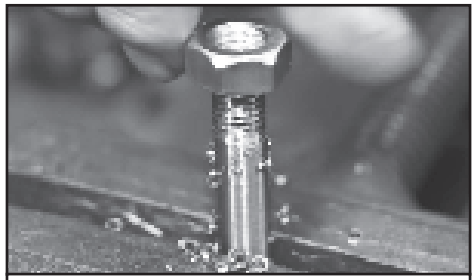
2. Cutting Male Threads (dies)



G. Set the handle to the reverse position. Use pressurized air to blow the chips from the work piece. Ratchet the bolt die counter-clockwise to remove the die from the workpiece.



H. Clean the rest of the chips from the threads and check your work with a threaded nut before installing bolt. It may be necessary to apply a small amount of oil or using a fine file to ease the edges of the threads before installation.

3. Storage

Apply a small amount of oil to the die and tap for storage. Store the product in a cold and dry place. Ensure that no condensation forms.

Produced in Taiwan for
Bileko Car Parts AB
P.O. Box 542
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Tel: +46 771 72 00 00
www.promeister.com

ProMeister

Usage Information

40 Pcs Tap & Die Set

Gewindeschneider-Satz, 40 Teile
Gängverktygssats, 40 delar
Gjengeverktøysett, 40 deler
Gevindskæresæt, 40 dele
Kierretyökalusarja, 40 osaa

Art. Nr: PT5942

RVNR-02

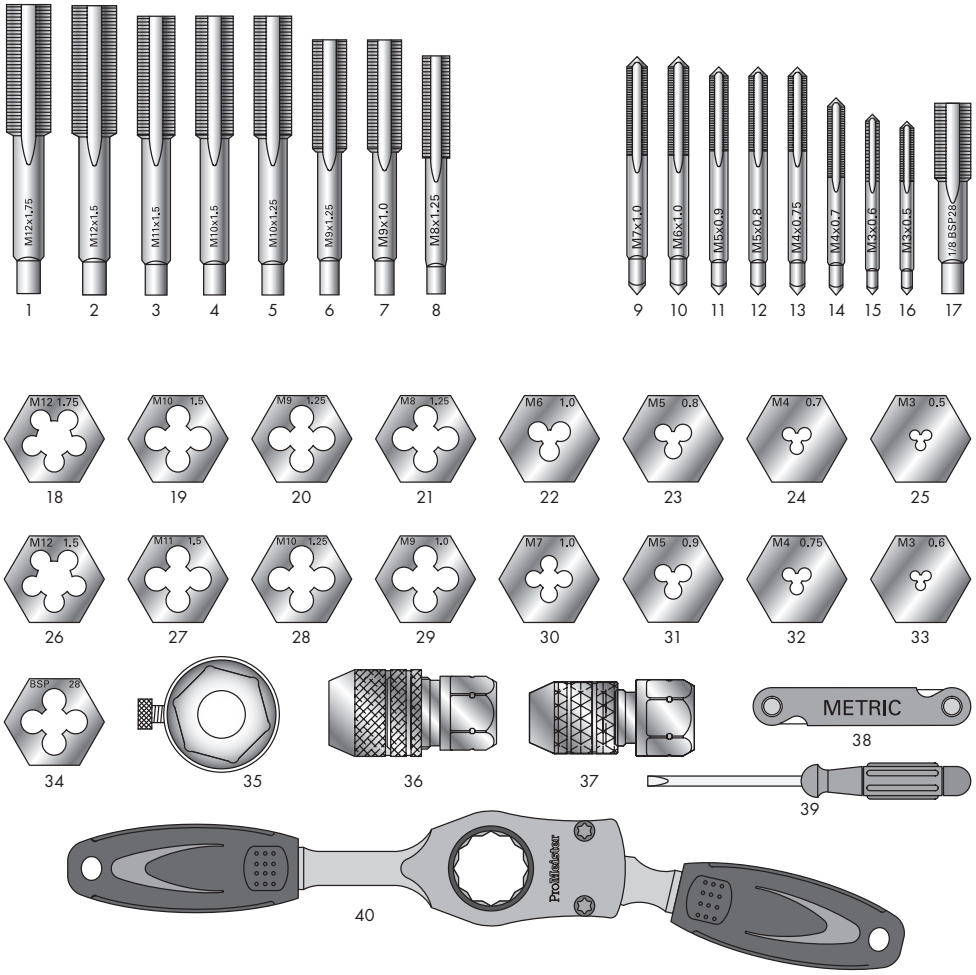
Tapping Hole Drill Guide

The chart below displays the approximate drill hole size and drill bit selection for 60% and 75% thread engagement. 60% is recommended for all applications that have a material thickness of at least 1.5X the hole diameter. A smaller hole diameter will require the tap to cut deeper threads (75%), and is well suited for thinner material.

Tapping undersized holes will cause damage to the tool or work piece

METRIC	60%	75%	Closest Fractional	Decimal Inches
M3x0.6	2.5mm	2.4mm	–	0.0984
M3x0.5	2.6mm	2.5mm	–	0.1024
M4x0.75	3.4mm	3.25mm	–	0.1338
M4x0.7	3.5mm	3.3mm	–	0.1360
M5x0.9	4.25mm	4.1mm	–	0.1653
M5x0.8	4.3mm	4.2mm	–	0.1693
M6x1.0	5.2mm	5.0mm	–	0.2047
M7x1.0	6.2mm	6.0mm	15/64″	0.2401
M8x1.25	7.0mm	6.75mm	17/64″	0.2716
M9x1.25	8.0mm	7.75mm	–	0.3110
M9x1.0	8.2mm	8.0mm	–	0.3189
1/8-28 BSP	21/64	–	21/64″	0.3281
M10x1.5	8.8mm	8.5mm	11/32″	0.3465
M10x1.25	9.0mm	8.75mm	11/32″	0.3503
M11x1.5	9.8mm	9.5mm	–	0.3818
M12x1.75	10.5mm	10.2mm	–	0.4133
M12x1.5	10.75mm	10.5mm	27/64″	0.4212

Parts Breakdown



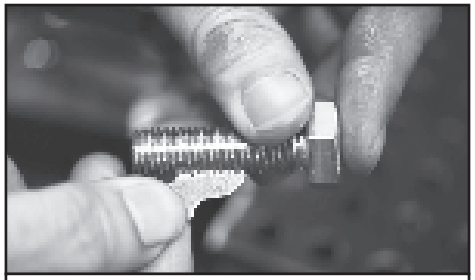
Index	Description
1	M12x1.75 Tap
2	M12x1.5 Tap
3	M11x1.5 Tap
4	M10x1.5 Tap
5	M10x1.25 Tap
6	M9x1.25 Tap
7	M9x1.0 Tap
8	M8x1.25 Tap
9	M7x1.0 Tap
10	M6x1.0 Tap
11	M5x0.9 Tap
12	M5x0.8 Tap
13	M4x0.75 Tap
14	M4x0.7 Tap

Index	Description
15	M3x0.6 Tap
16	M3x0.5 Tap
17	1/8BSP28 Tap
18	M12x1.75 Die
19	M10x1.5 Die
20	M9x1.25 Die
21	M8x1.25 Die
22	M6 1.0 Die
23	M5x0.8 Die
24	M4x0.7 Die
25	M3x0.5 Die
26	M12x1.5 Die
27	M11x1.5 Die
28	M10x1.25 Die

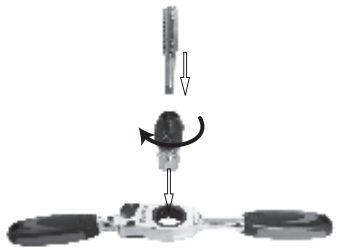
Index	Description
29	M9x1.0 Die
30	M7x1.0 Die
31	M5x0.9 Die
32	M4x0.75 Die
33	M3x0.6 Die
34	1/8BSP28 Die
35	Die Holder
36	M16-M12 Tap Holder
37	M3-M9 Tap Holder
38	Metric Pitch Gauge
39	Screw Driver
40	Rapid Select Ratchet

1. Cutting Female Threads (taps)

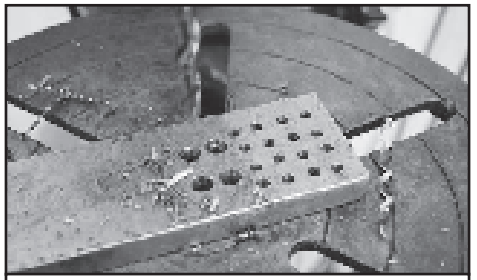
A. Measure the external diameter of the bolt you wish to use.



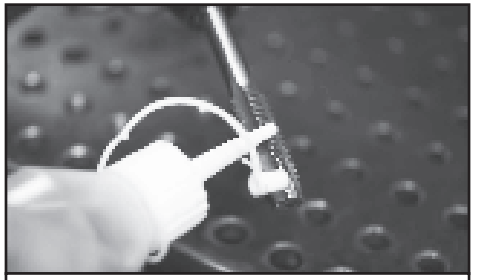
B. Determine the thread pitch using the thread gauge included with the product. The prongs on the thread pitch must fit exactly into the screw thread.



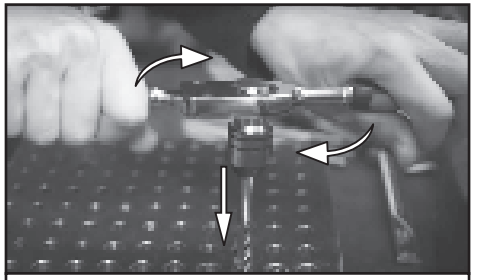
C. Choose the correct tap. The corresponding size information can be found on the thread gauge and the tap. Insert the tap into one of the two tap holders. Fix the tap in place so that it cannot fall out of the holder. Please note that one tap holder is designated for small taps and the other tap holder is designed for large taps. Insert the tap holder into the tap wrench.



D. Locate or drill your own appropriately sized hole for the tap being used (see chart on page).



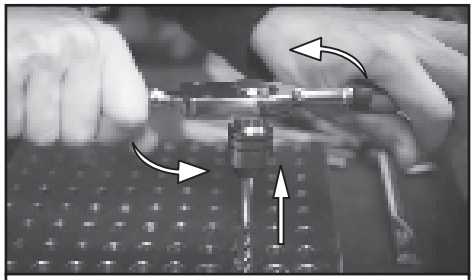
E. Apply a small amount of cutting oil to the trap.



F. Start to cut the thread. The first 4 cutting edges of the tap are chamfered to allow for alignment with the hole. Turn the handle in a clockwise direction, maintaining a 90° perpendicular relationship with tap and hole.

G. Depending on the hardness of the tapped material, you will likely have to back the tap out of the hole 1/4-1/2 turn every 2-3 full rotations, in order to break up chips and for safe consistent tapping. The rapid select ratchet allows you to switch between forward and reverse quickly in order to perform this procedure as effortlessly as possible.

1. Cutting Female Threads (taps)



H. When tapping of the hole is finished, from behind the tap, blow chips out with pressurized air. Move the arm on the ratchet to select reverse and slowly back the tap out of the hole, being careful on the last few turns not to catch and damage the threads when removing the tap.

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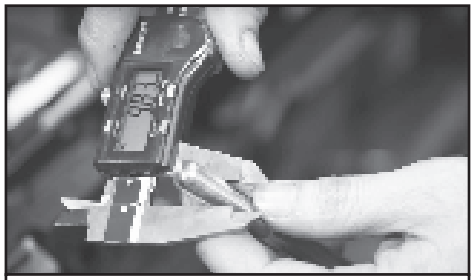
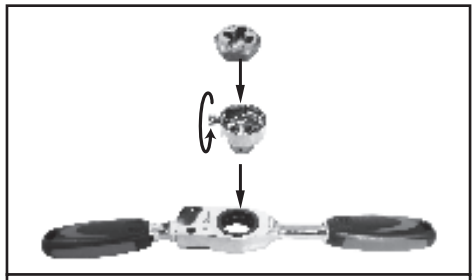
2. Cutting Male Threads (dies)



A. Measure the outside diameter of the blank or threaded bolt. If tracing the threads on a bolt, also measure the thread pitch with the thread gauge.

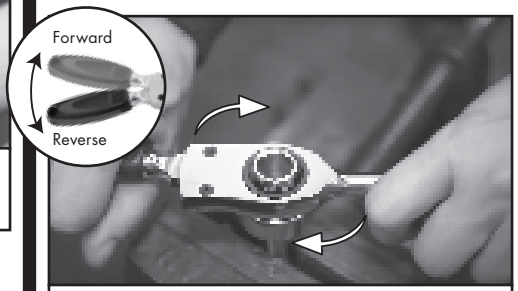
B. Choose the correct bolt die. Insert the bolt die into the die holder. Secure the bolt die using the screw on the die holder.



C. Insert the die holder into the tap wrench (ratchet).

D. Set the direction of rotation for the handle to the forward position.

E. Apply a small amount of cutting oil to the work piece. Ratchet the tool in a clockwise direction. Make sure the ratchet is aligned with the work piece.



F. Throughout the cut, use the Rapid select ratchet to quickly switch back and forth between forward and reverse to break up the chips for a cleaner cut.