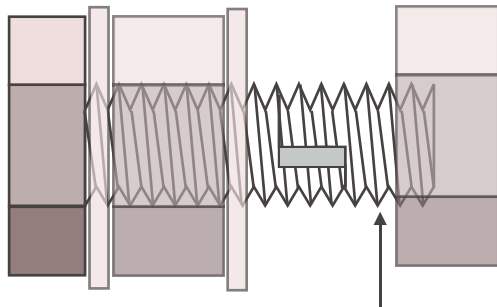
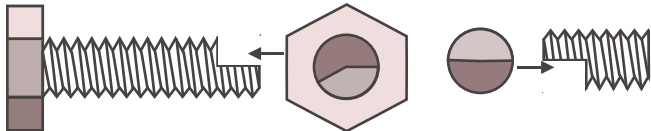


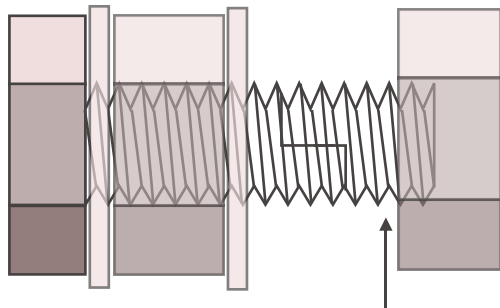
Homemade Puzzles

Nuts and Bolt-the Secret

The bolt is cut in two, near the plain end, and the two ends are "stepped" so that they fit back together. The step on the longer part has a small flat cut out, which allows the shorter end to turn very slightly anti clockwise when a nut is being taken off. This tiny movement is enough to misalign the threads, and the nut will lock.



The end part turns **clockwise** when the nut is being screwed on.



The end part turns **anti-clockwise** when the nut is being screwed off.



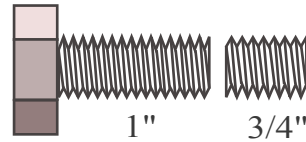
These solutions are provided free, because they are also available elsewhere on the Internet. If the puzzle is one of mine, the solution may help you decide to make that particular puzzle.

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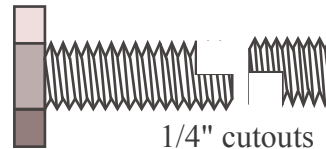
Making the Nuts and Bolt.

The bolt should have a thread of at least 1/2" diameter, and a threaded length of 1-3/4". The nuts should be 3/8" thick, washers 1/8".

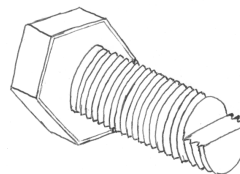
Cut a piece 3/4" long from the plain end.



Working on the newly cut ends, cut or file a segment out of the ends. This cutouts should be no longer than 1/4". Join the stepped ends together, and make sure that the nuts can still screw all the way along the bolt.

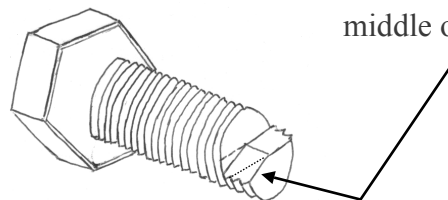


Cut or file a small wedge-shaped piece from the end of the longer part. The angle should be small to start with, about 10°. If the nut doesn't lock when unscrewing, make this angle larger. Do not cross the middle of the step.



The end of the bolt before cutting the wedge out.

The area to be cut away. Small angle to start with. Do not cut cross the middle of the step.



The best way I've found to get the nut off, is to hold the bolt head with your right forefinger, the other end with your right thumb: this will stop the end of the bolt from turning, and use your left hand to remove the outer nut.

Get more plans and solutions at **Homemade Puzzles.**

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