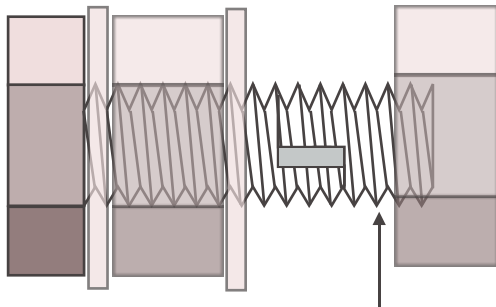
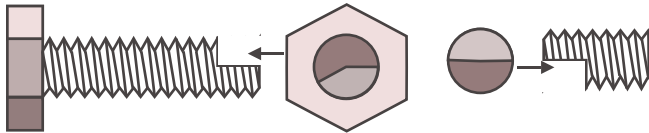


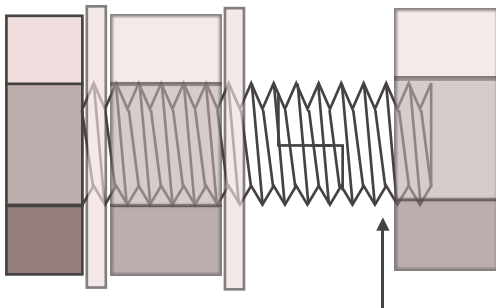
# Homemade Puzzles

## 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.



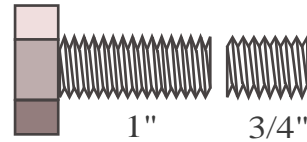
These solutions are provided free, because they are also available elsewhere on the Internet. If the puzzle is one of mine, the solution may help you decide to make that particular puzzle.

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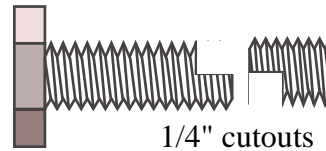
## Making the Nuts and Bolt.

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".

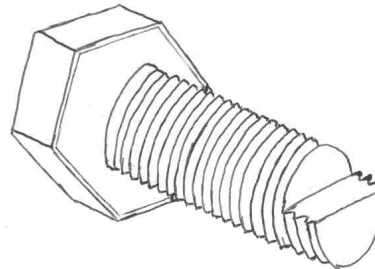
Cut a piece 3/4" long from the plain end.



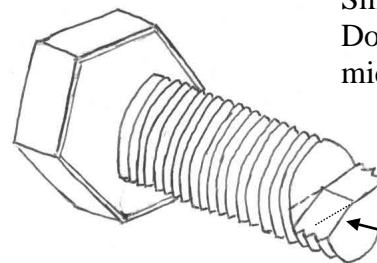
Working on the newly cut ends, cut or file a segment out of the ends. This cutouts should be no longer than 1/4". Join the stepped ends together, and make sure that the nuts can still screw all the way along the bolt.



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.**

Web address: [www.homemadepuzzles.co.uk](http://www.homemadepuzzles.co.uk)

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# Homemade Puzzles

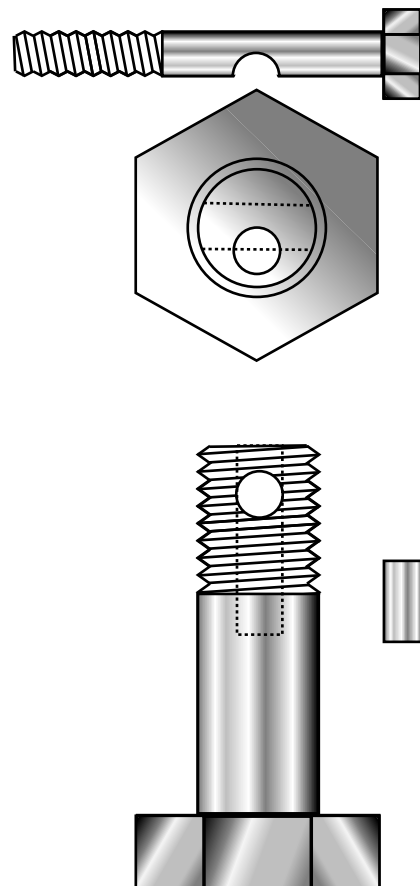
## Double Bolt Puzzle-the Secret

Supplied by Jon from Sweden

I've made my own nut and bolt puzzle based on my own design. There is a small (1.2 cm long) metallic cylinder inside the bolt that can run in a 2.5 centimeter long hole. This cylinder is attached to the magnet when everything is locked. In this position is the cylinder locking the small bolt in place. And this small bolt is locking the big nut. The magnet is glued on with super glue. The only way to remove the nut is to slam the bolt with the head first into for example your hand. This will let the small cylinder loose from the magnet and it moves deeper into the hole. It isn't enough to simply shake the bolt.

### Instructions:

The two holes have a diameter of 6 mm. The first hole is easy, simply drill thru both the nut and the bolt at the same time. Then attach the small bolt. Drill another hole in the magnet end of the bolt, near the edge of the bolt so that half of the attached small bolt is also drilled. Make the small cylinder out of a bolt and make sure that it is small enough to run freely. Glue the magnet on with super glue. I think it is very simple to make but pretty hard to solve. One could also use a smaller magnet and hide it better, maybe inside a glued bolt-end. That would make the puzzle harder.



Text and photos by Jon from Sweden  
Graphics by Bruce Viney

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

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# Homemade Puzzles

## The Bolt Puzzle-the Secret

Supplied by Bobj  
from Router Forums



It's more of a mind game than a puzzle like most...  
It's made for gear heads....and anyone that plays with fastners...

And anyone can make one easy with a bolt and nut and lock washer..

All that's needed is to hand it to a gear head and ask him to take off the lock washer--  
( that's the mind game); most will think how to get the lock washer off and not how it was put on...

In the picture you will see the nut is welded in place and no way to unscrew the nut off and  
the lock washers has been bent open just a little bit bigger than it should be..

You will also see two slots in the head, most think that's the way to get the lock washer  
off the bolt but it's not it's a mind thing..

The hint ,when you hand it to a gear head and they play with it for a bit and say it can't be done,,  
then just say put your thumb nail in the threads of the bolt and turn it, some will get it but most  
will not,, the thumb is going up the screw when one turns it...most have it stuck in the mind, turn  
left to remove a nut/bolt and they forget they make left hand bolts also...

Once they recall that it's easy the bolt comes right out and the lock washer comes right off...

All that's needed to make one is a left hand bolt and nut and a lock washer and a hack saw...  
and some Alum.paint to clean it up after the rework...



**Get more plans and solutions at Homemade Puzzles.**  
Web address: [www.homemadepuzzles.co.uk](http://www.homemadepuzzles.co.uk)  
E-mail: [bruce@homemadepuzzles.co.uk](mailto:bruce@homemadepuzzles.co.uk)