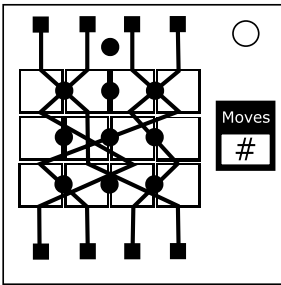# On the Subject of Tangled Wires

Whoever made a bomb this complex definitely lacked cable management skills.

To disarm this module, the wires must first be untangled, then the relevant wire should be cut. The more moves it takes the defuser to untangle the wires, the harder it will be to figure out which wire to cut!

Untangling the wires:

To untangle the wires, click on the orange pegs to swap the two squares adjacent to them. Each click of a peg counts as 1 move. The green peg will swap just the inputs and will count as 5 moves if clicked. It will never be required to press this peg more than 1 time.

Cutting the wire:

Begin with the first digit in the serial number. Repeat the steps in the bullet points below equal to the amount of moves taken to untangle the wires divided by 5, rounded up, e.g. if it took 17 moves, repeat the bullet pointed steps in order 4 times. If the amount of moves is greater than 60, do 12 repeats (not more).

- Add the last digit of the serial number to the number.
- Multiply the number by 2.
- If the current number is greater than 500, divide by 10, then only take the integer part of the number.

Once you've finished repeating the steps, take the least significant digit of the final number and cut the corresponding wire in the table below:

#	Wire to cut	#	Wire to cut
0	Cut the black wire.	5	Cut the blue wire.
1	Cut the red wire.	6	Cut the red wire.
2	Cut the blue wire.	7	Cut the yellow wire.
3	Cut the yellow wire.	8	Cut the blue wire.
4	Cut the yellow wire.	9	Cut the red wire.