

FEEL FREE TO MAIL ME AT:
nesworld@email.dk

Layout and text is copyright by
 NES WORLD © 2000

The NES features something called Nin10, or better known as the lockout chip, which prevents you from playing games not released in your territory (area). The Nin10 consists of two chips, one chip placed in the NES system and one in the cartridge. To be able to play a game these two chips has to be able to communicate with each other.

But a European NES cartridge cannot communicate with an American NES system, and vice versa. There are converters, like the [GameKey](#), which handles this problem, however they have their limitations and some games might not run.

The best way to be able to play games from other territories is to disable the Nin10 system, which this page will tell you how to. Please note that this wont let you play Japanese Famicom games, you still need a converter for them since they use a smaller cartridge slot that the NES does.

Dont do this unless you're absolutely sure of what you're doing or you'll break your NES system. I will not take responsibility for your errors, the operation this page provides has been tested on European NES systems and does work if its done correctly. But still, you're doing this at your own risk. Also note that some game still might not work due to differences between the European PAL tv signal and the American NTSC signal, but I'd say that about 98% of all games will work.

What you need for this operation:

- Philips screwdriver (crosspoint (X) screwdriver)
- A Diagonal cutter

Ok we're ready to begin then, if you want a larger scan of the picture just click on the one you want to see a larger scan of.

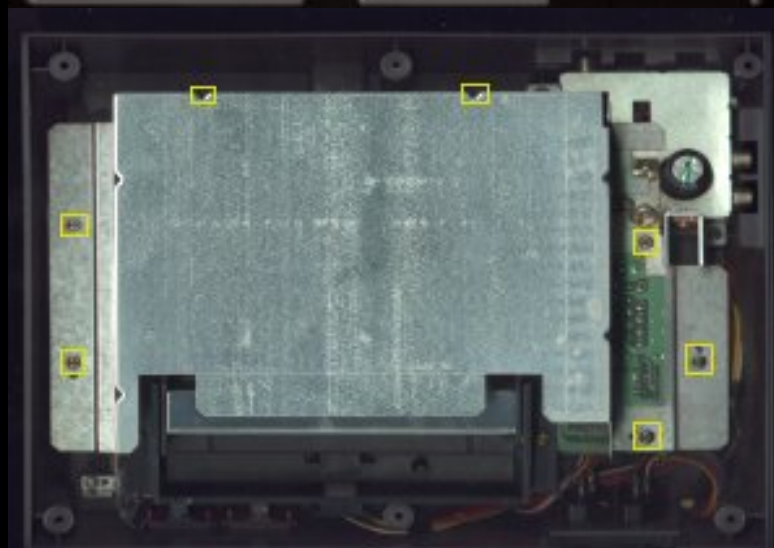
STEP 1:

Flip your NES around so that it's lying with the bottom up. Remove the 6 screws, normal Philips screws. Lift the bottom part, dark grey part, apart from the other half of the NES casing and place it on the table so that you now are facing the inner parts of the system.



STEP 2:

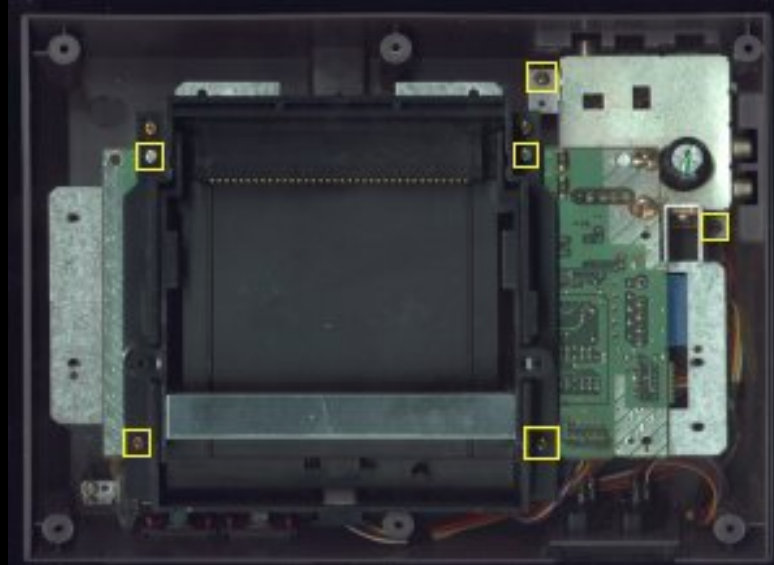
Now remove the 7 screws (marked with a yellow square) which holds the metal case covering the cartridge tray.

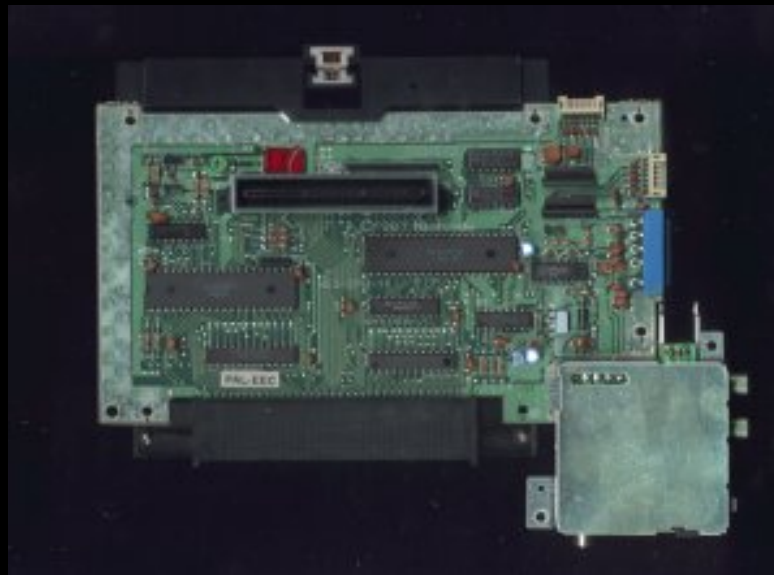


STEP 3:

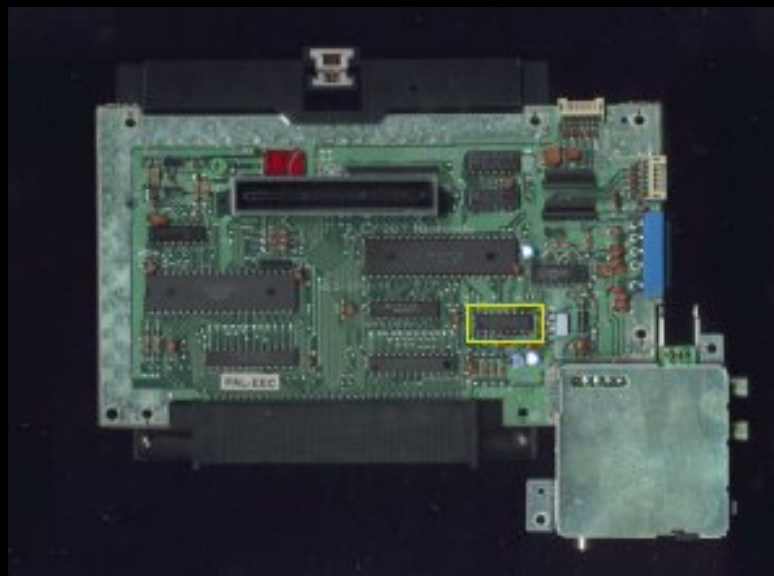
Now remove the 6 screws marked with the yellow square.

Please note the 2 blank screws, they have to go back in the exact same spot. There's no need to remove the two screws (one on each side) sitting close to the blank ones.

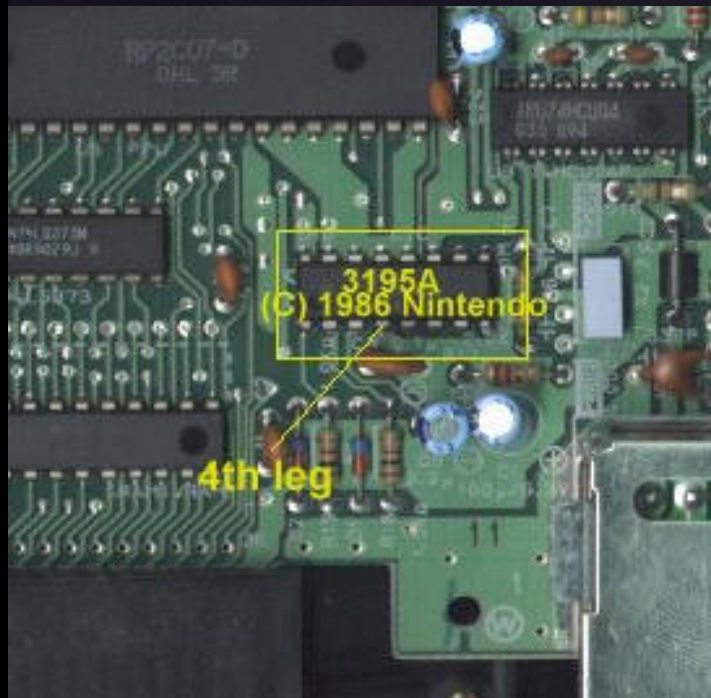


**STEP 4:**

You should now be able to lift up the motherboard (the cartridge slot and all) and turn it around 180 degrees' so you're facing all the chips on the board. There's no need to remove the 3 plugs with wires going into the motherboard, I only did it because it would be easier to make scans then.

**STEP 5:**

Ok this is where the hard part is. Look for the chip marked with the yellow square on the picture, the chip itself says "3195A" or something similar. Well its the only 16 (8 on each side) legged chip placed on that spot on the board and the only one which says "(C) 1986 Nintendo" as well. The weird dot on the chip marks "leg 1", it the leg closest to the dot. What you need to do now is cut the fourth leg with the diagonal cutter.



Make sure that the chip and the leg you cut is no longer touching each other, carefully bend it away from the motherboard or the chip, depending on where you cut the bone, just make sure that the chip and the leg is no longer in contact with each other.

**STEP 6:**

All you need to do now is reassemble the NES again. Flip the Motherboard back to normal position with the cartridge tray facing up, watch out for the wires going from the motherboard. Put the screws back into their positions, remember to put the two blank screws into the right spot. Go back and look at the pictures if you cant remember where to put them.

**CONGRATULATIONS!!
YOU NOW HAVE A
UNIVERSAL NINTENDO
ENTERTAINMENT
SYSTEM :)**