Visual step-by-step guide to repairing your ‘blinking’ Nintendo Entertainment System

text and photo by www.retrolution.dk

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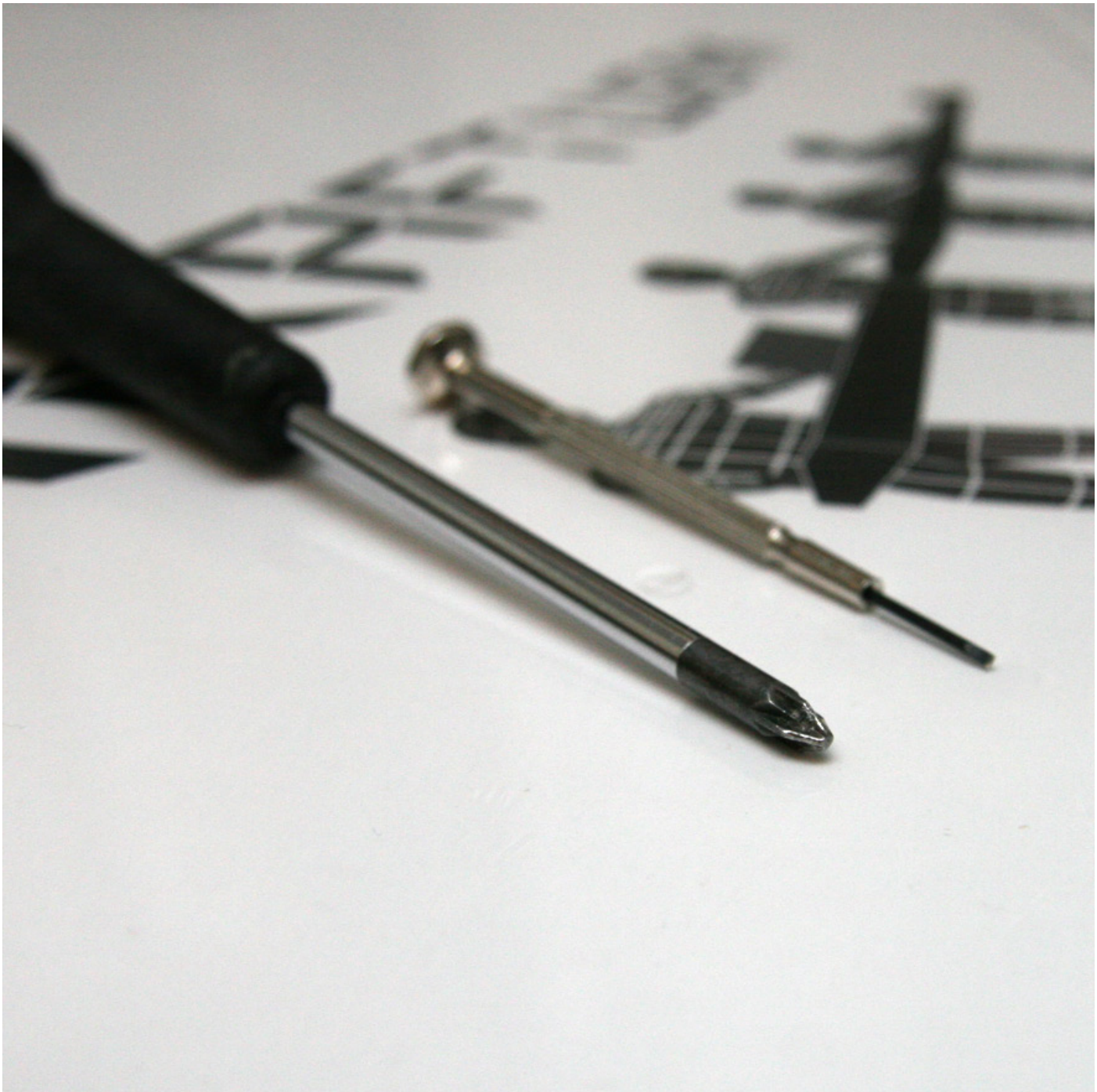
Introduction & equipment

This tutorial will take you through a visual step-by-step guide, showing you how to fix you old blinking Nintendo Entertainment System (NES).

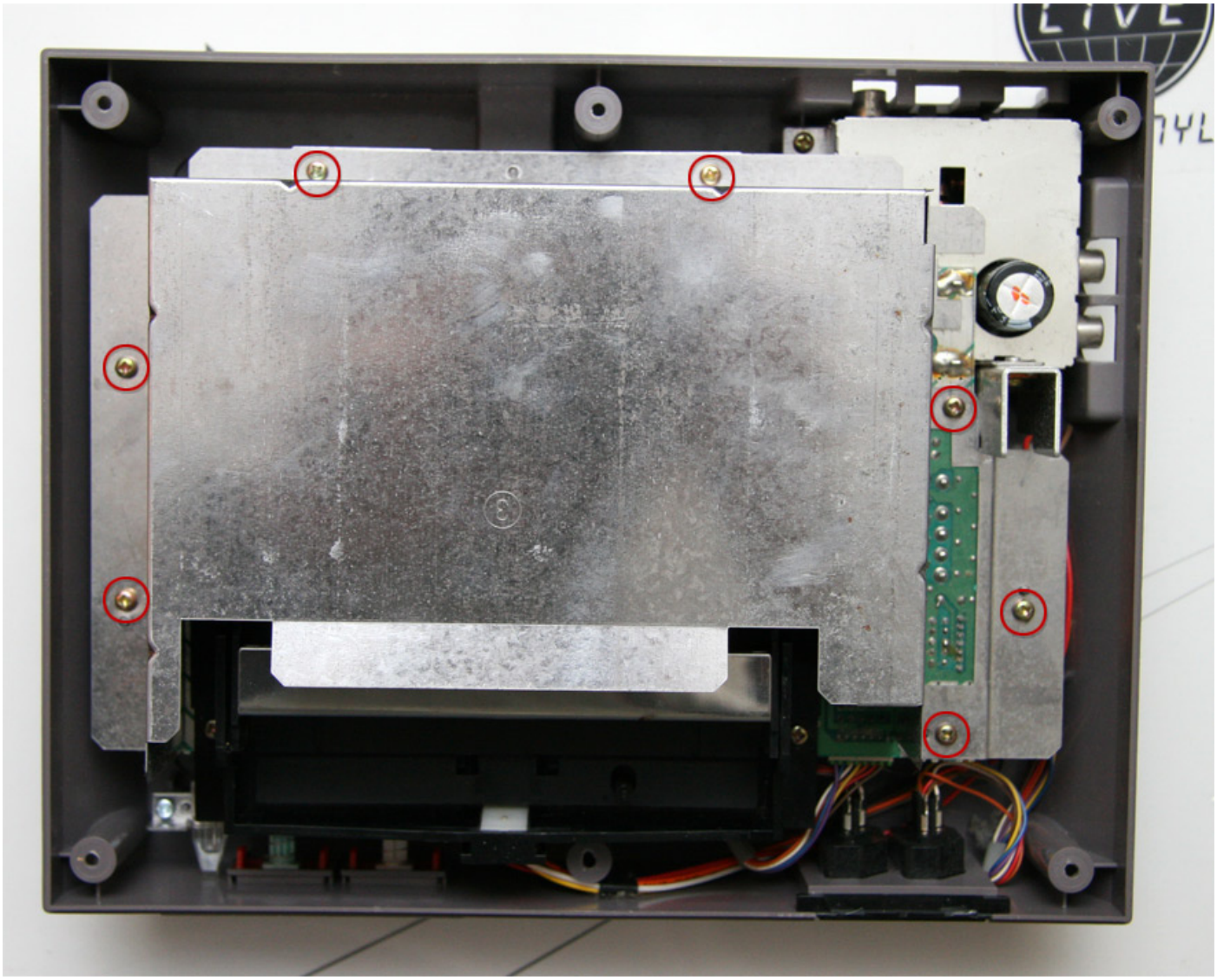
Basically everything you need is a worn out blinking NES, a thin standard Philips screwdriver, a mini screwdriver e.g. used by opticians - and maybe some good music on your turntable.



Opening the box

First thing to do is to take the top and bottom box apart. Flip over the box, and grab your Philips screwdriver – now unscrew the 6 screws located in the holes marked on the image below.

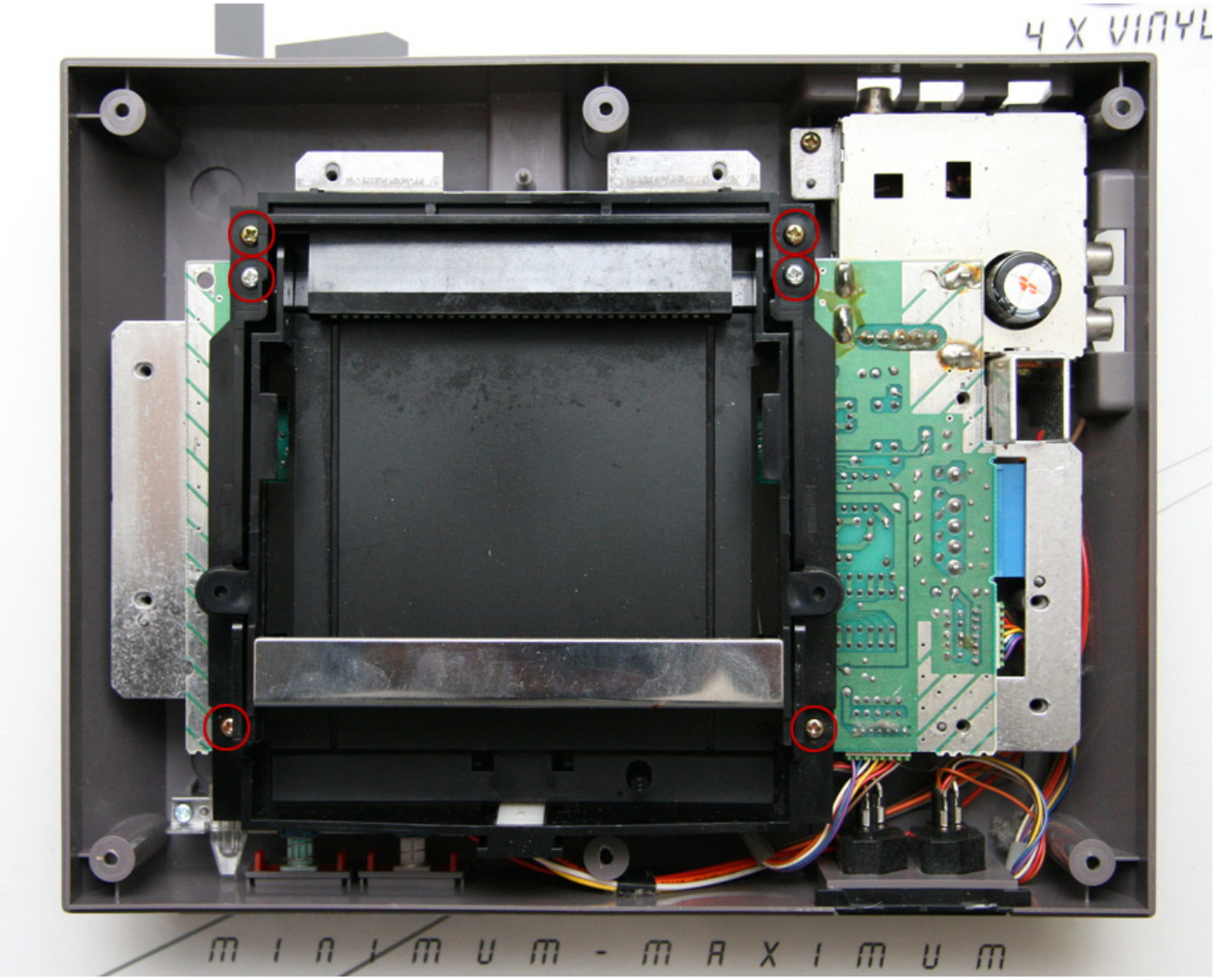
Now with the top off the protective metal shield comes visible. The shield is mounted with 7 Philips screws – unscrew every single one and remove the shield.



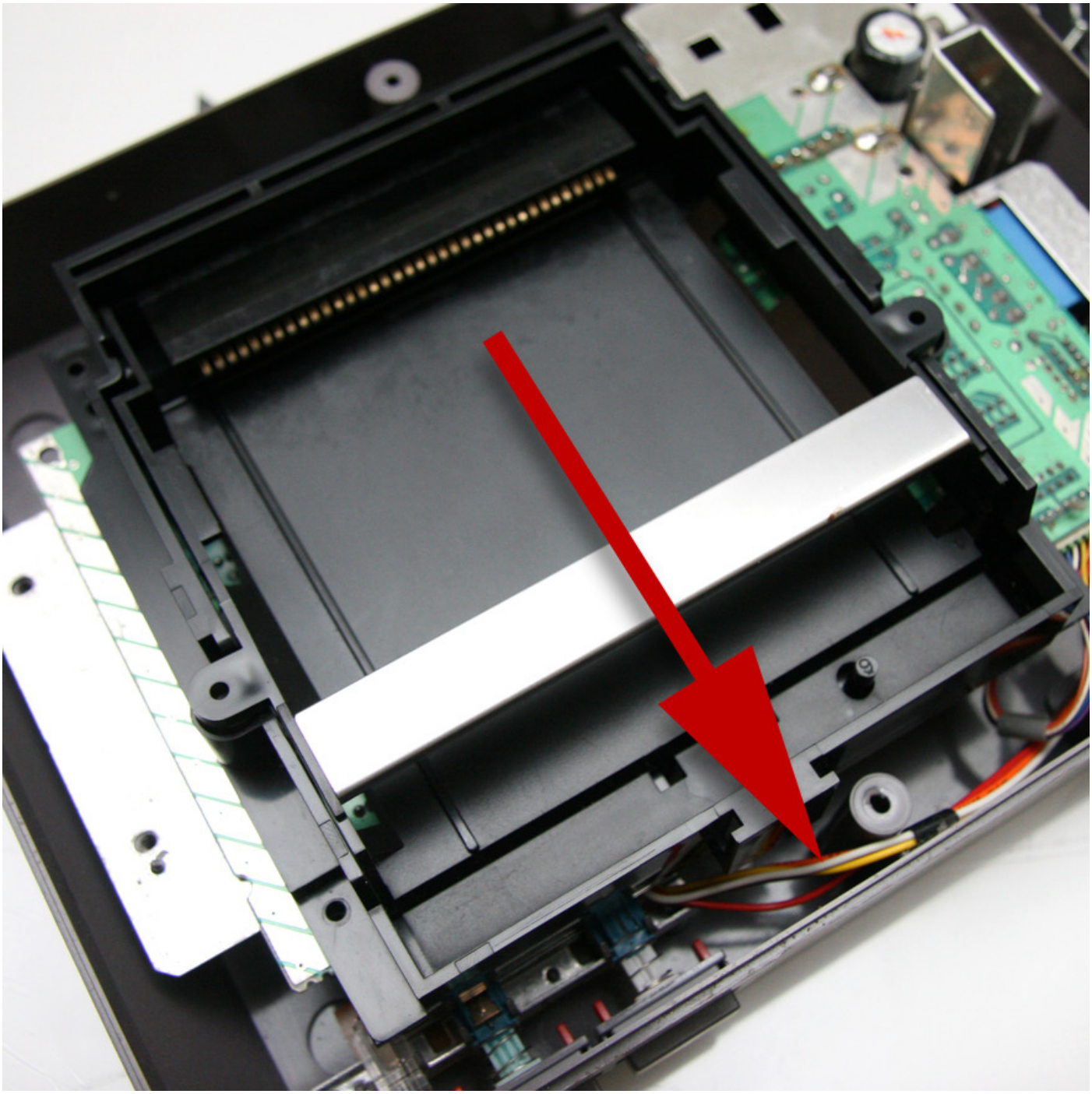
Detaching the cartridge cady

Once the metal shield is detached, the plastic cartridge cady is now visible.

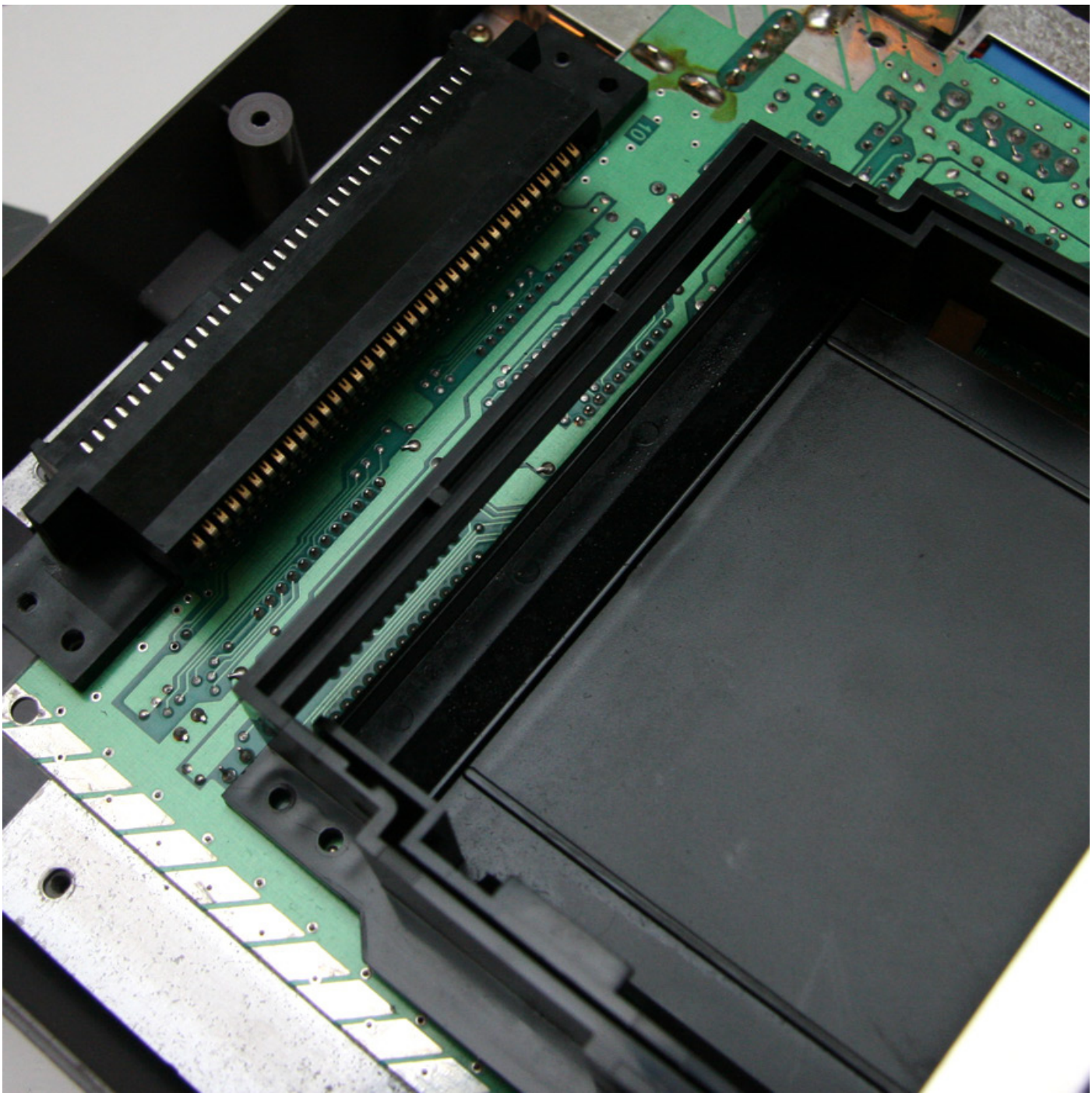
The Cady is mounted to the motherboard with 6 Philips screws – please notice 2 screws are a bit longer than the rest, and of course needs to be mounted correct when assembling the NES.



When the 6 Philips have been unscrewed, the cady can be separated from the connector – simply by pulling the cady toward the front as show on the image below.



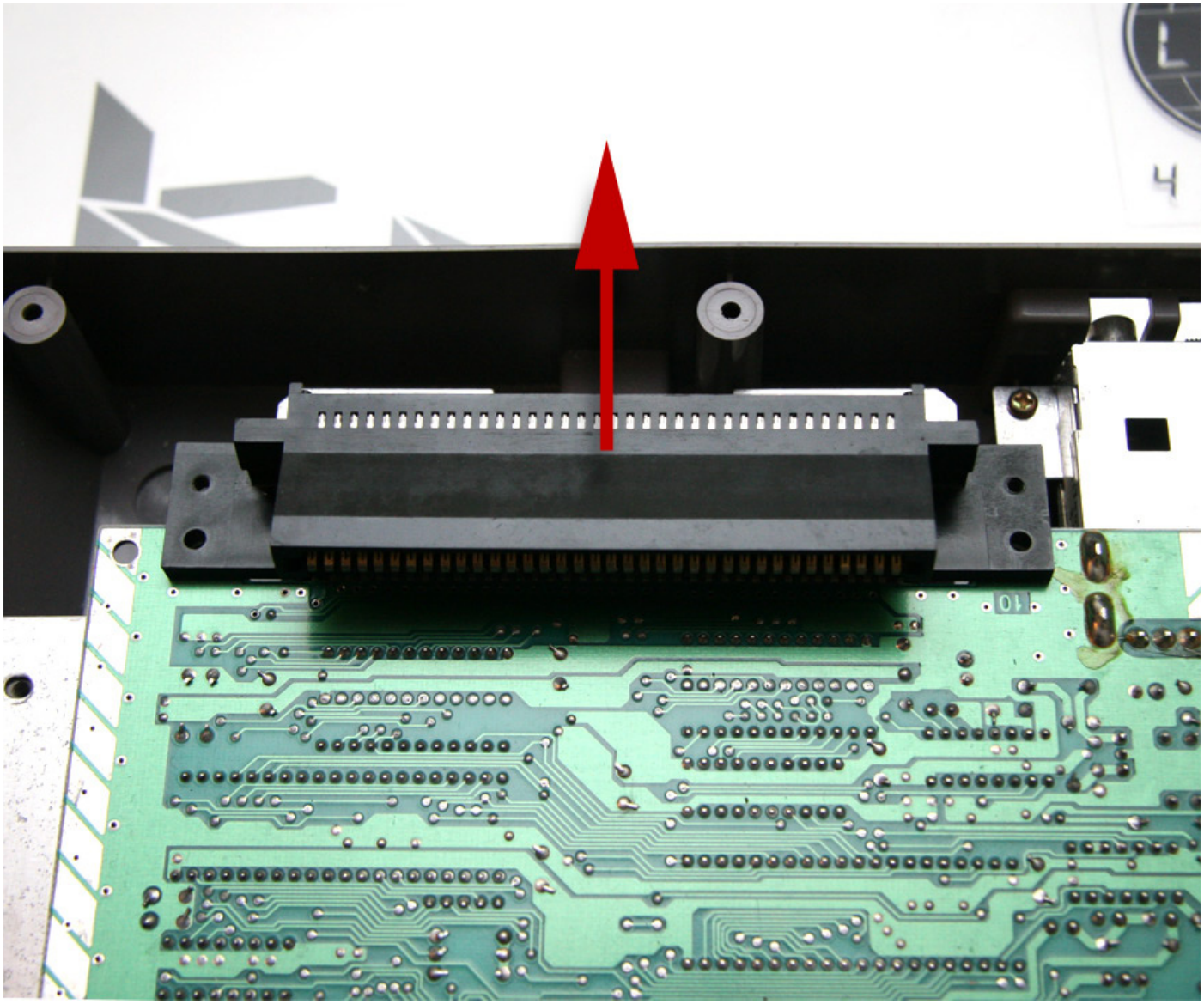
Cady and 72-pin connector separated



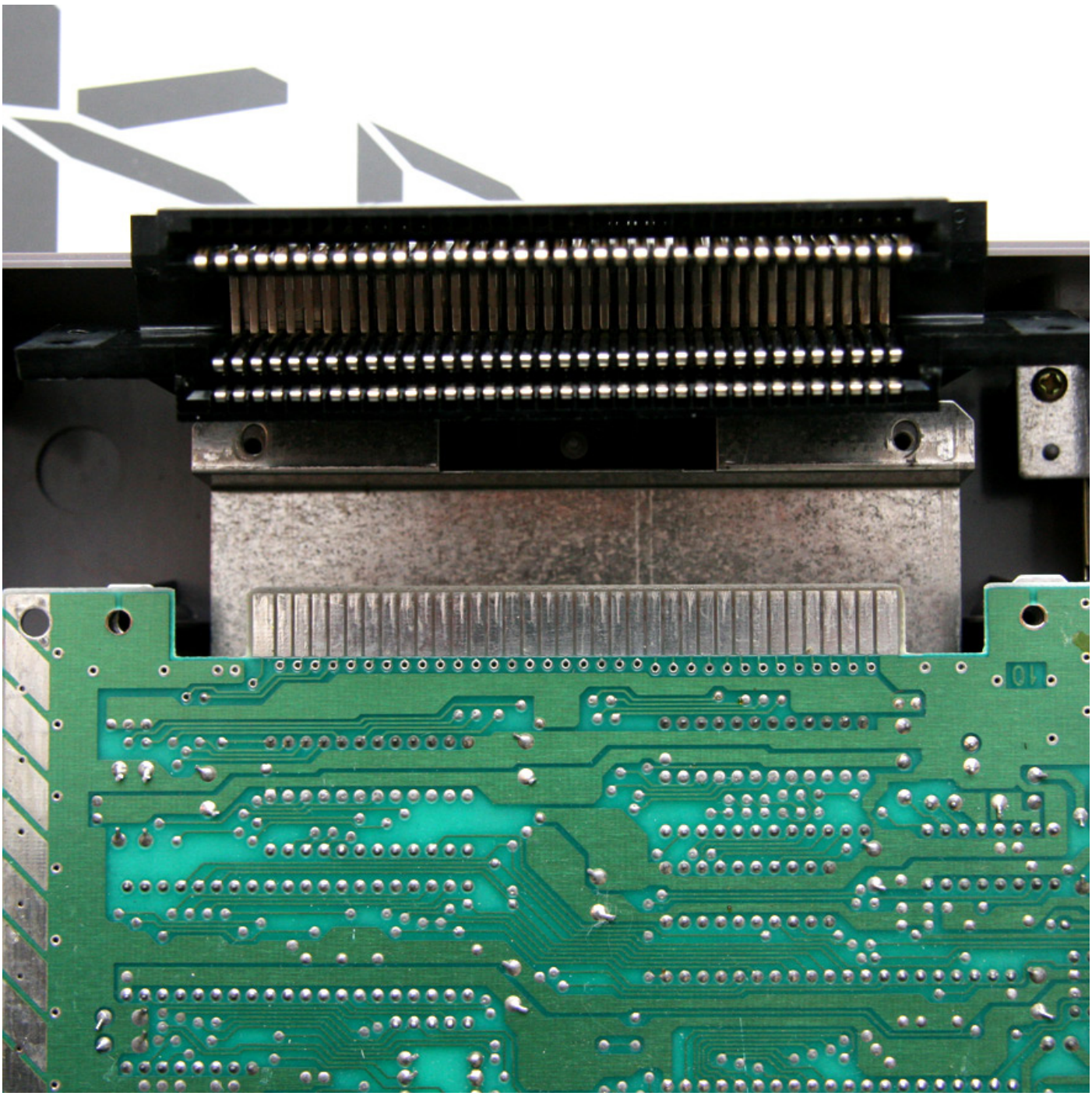
Detaching the 72-pin connector

Next up is detaching the connector from the motherboard.

The screws have already been removed, and the connector can now easily be detached by carefully pushing it backward.



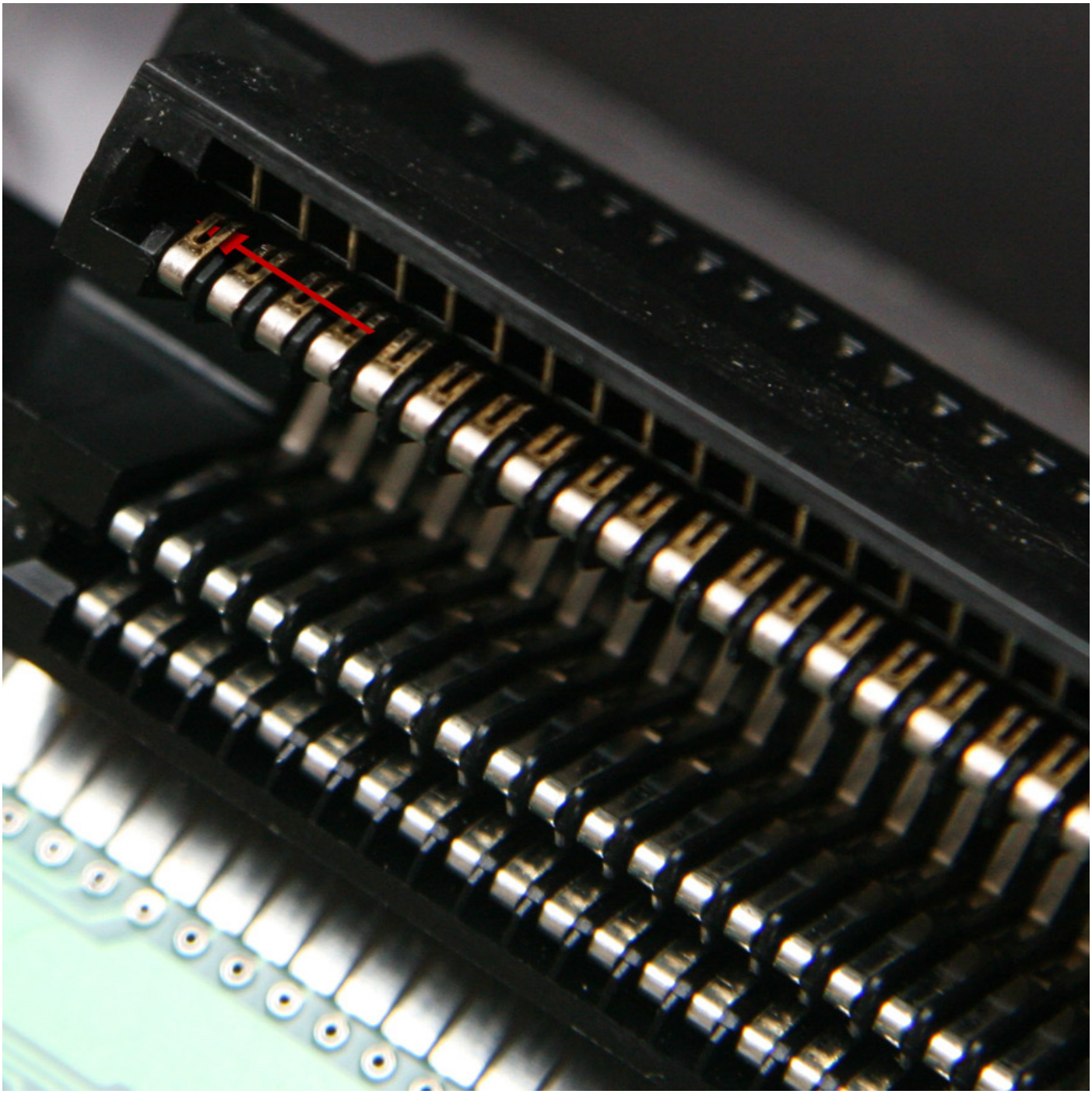
72-pin connector detached from the motherboard.



Fixing the 72-pin connector

The reason why you beloved NES started blinking and stopped working, is to be found in the construction of the connector.

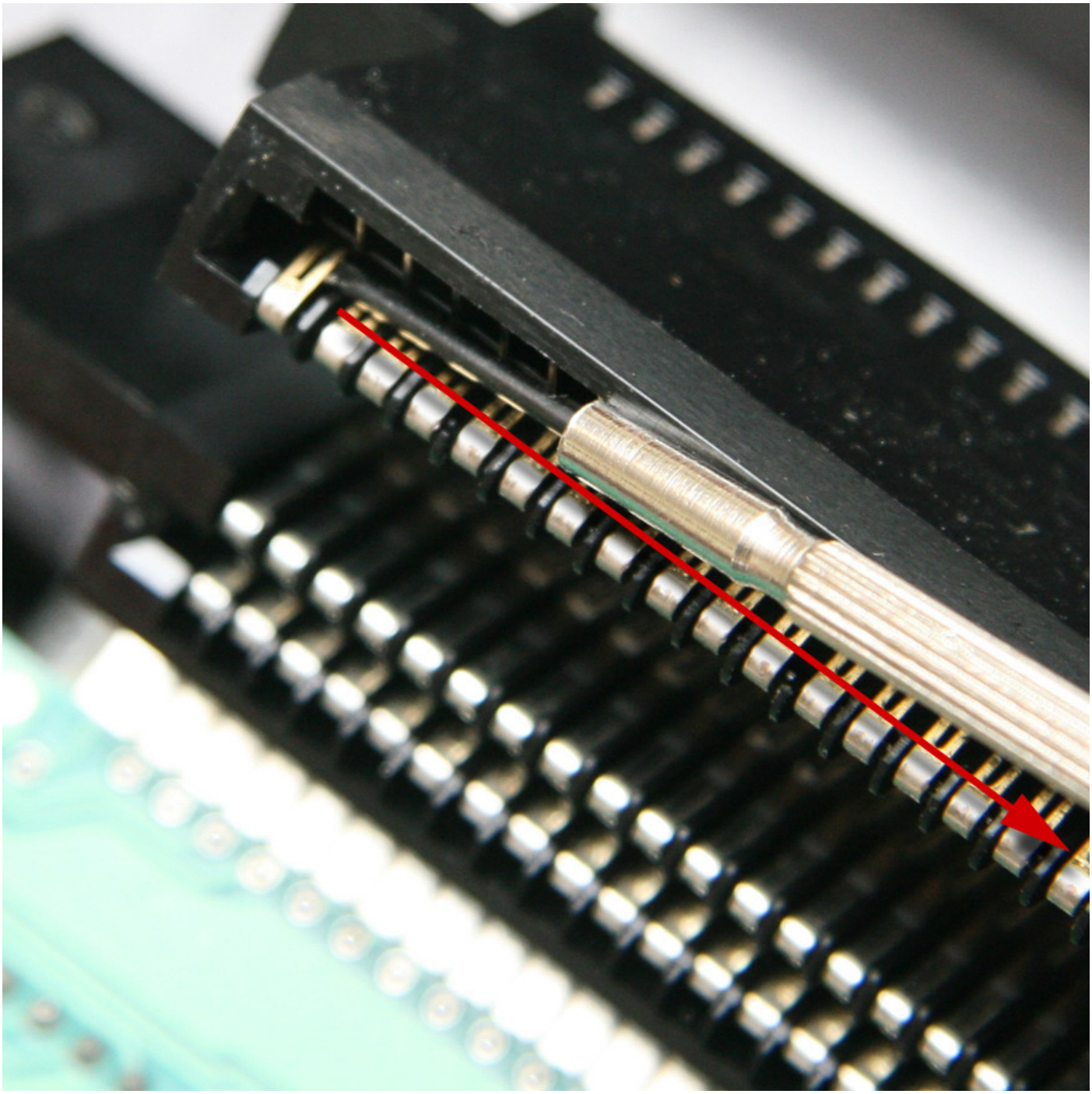
Each pin show on the picture below is like a tiny spring being pressed down a little bit each time connection between you game and the pins are established – in time the pins are being depressed so much that the game will not read. The NES cannot detect the game and blinks as when no game is insert.



Finally we're at our goal – let's get right into business.

Grab you optical screwdriver, push it underneath the first lower pin from the left – now twist it a bit to lift the pin into its original position – but beware, don't bend it too much! Continue to do so from the left to the right through all 36 bottom connector pins.

Once done, clean the pins with very fine sandpaper for maximum connectivity – and that's it!



Bringing the patient back to life

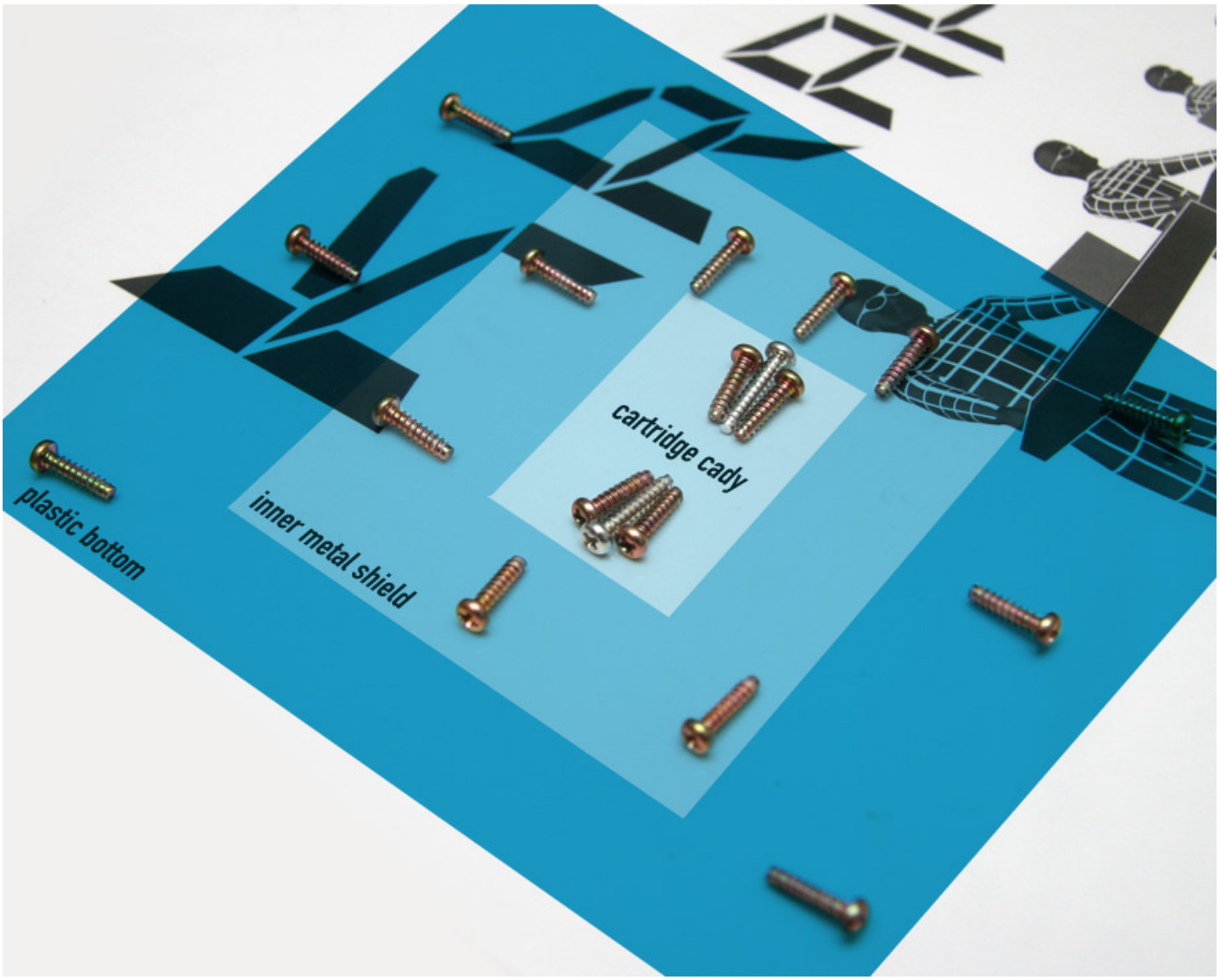
Before assembling the NES try inserting a cartridge and turn on the power – beware: do NOT touch anything as you might get “electrocuted”.

The red power light should now show a constant illumination! Voila your NES has been brought back to life!

Reassembling – list of screws

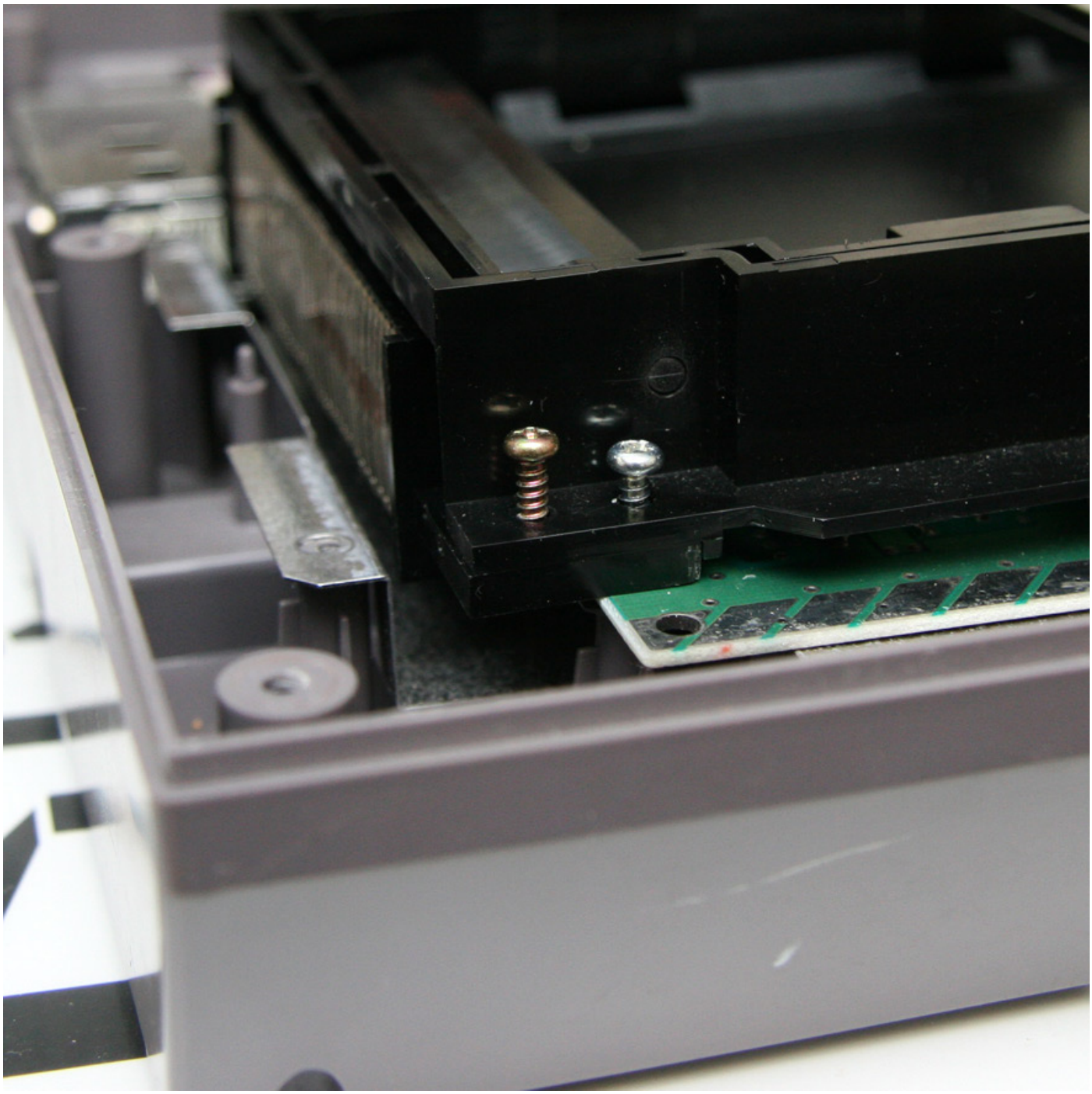
You're now ready to put things back together – below is a picture showing how many screws used from the inside out.

6 Philips screws used to mount the 72 pin connector and cady, 7 Philips screws to mount the protective shield and 6 Philips screws to assemble top and bottom base.



Reassembling – mounting the pin connector

As mentioned earlier, the 72-pin connector is mounted with 2 different lengths of Philip screws – please notice that you reassemble as shown on the picture below.



Reassembling – mounting the cady

My final comment is to inform you that when you mount the cady, please beware not to mount the screws to tight as this will result in the cady spring not to work!

Finally mount the inner metal shield and put together the top and bottom base.

Now you're ready to enjoy many hours of fun!