

De-restricting the Kawasaki ER-6N

By: Kiwi_ER-6F

The restrictor kit restricts the power output of the ER-6N to 33bhp (25kW) enabling restricted licence holders to legally ride the motorcycle which could otherwise be too powerful. It is likely that the kit fitted to the ER-6N is manufactured by Fi International and here is what they say:

"With more and more bikes being produced with fuel injection systems this type of restriction is becoming more popular. The basics of the kit are that a device is attached to the side of the injection bodies which stops the throttle cam from opening fully".

This appears to be combined with a shorting plug connected to the Self Diagnosis system Connector.

The following is a posting on an Italian forum describing the procedure for redistributing an ER-6N. Excuse the translation.

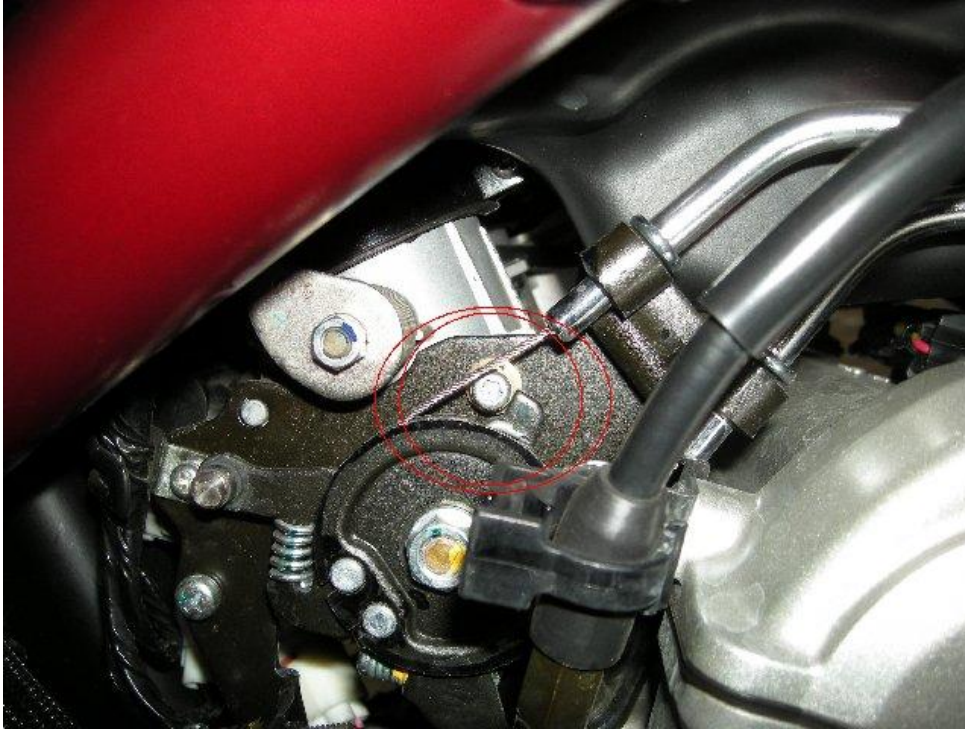
The following steps described below have been tested and carried out personally on my Kawasaki ER-6N. They should not cause damage to the bike, but I do not assume responsibility for any damage caused immediately or long term to the bike. I have no certainty that the same operation is possible on the model ER-6F (Ninja 650R) or the Versys.

There are two restrictions on our bikes, mechanical and electronic.

1 - Mechanical lock: The screw.

It consists of a screw that is blocking the run of the accelerator more or less half way down. It is located on the right side of the bike, near the chassis with the throttle plate. It is easy to find on a motorbike follow the accelerator cable and you will see that there is a kind of plastic wheel that moves. Here is a picture

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To remove it you need a Torx T20 model with the hole in the center.



I got one from a hardware store, paid € 9.53.

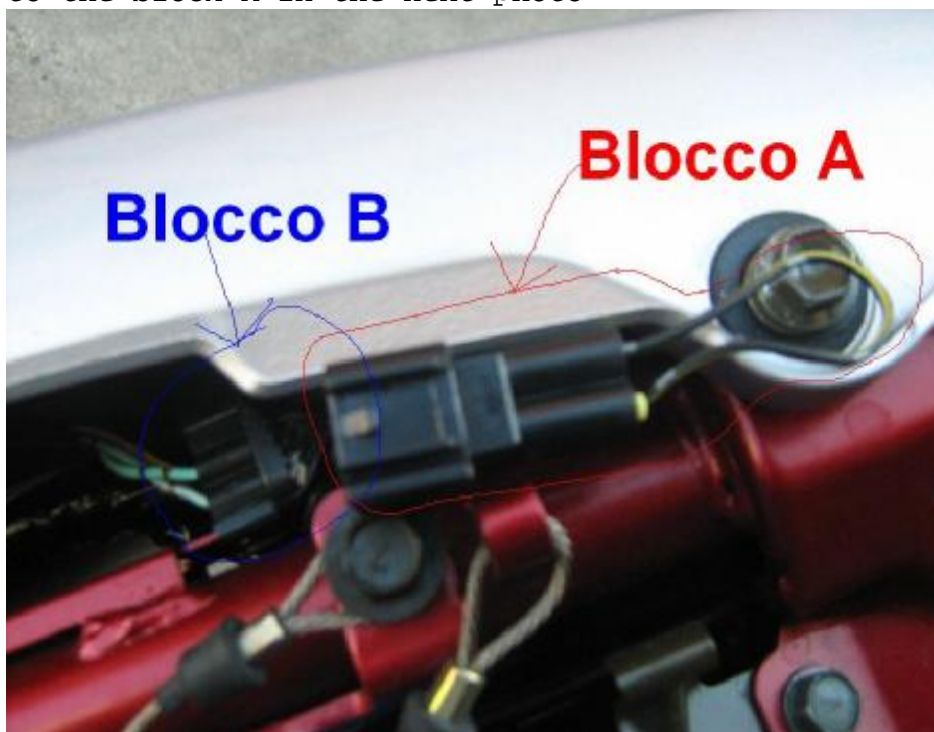
Caution: When you unscrew the screw away from the bronze

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medium in which it is engaged, be careful to keep it with your fingers to prevent the screw falling and getting lost in the engine of the bike.

2 - Electronic lock: The bridge.

It consists of a bridge that changes the advance and takes away power and torque of the bike. It corresponds to the block A in the next photo



Block A is attached to the block B. To remove the bridge you have two possibilities, either simply cut the yellow and black wire on block A, or detached and isolated the block B with the tape.

Opening the seat or side panel you can easily find the block B according to the picture, try to remove it using your hands, even if it is difficult. A tip, lift the handles of the screws, then you force on the connector so as to push outward and have more space and try to remove the block, If you need to you could even remove the whole tail and remove the block with ease. It's important, after you have disconnected, isolated block B with the tape.



Advice: Update the vehicle registration document, because otherwise you have just done something ILLEGAL!

Keep the screw and bridge as you never know when you will need it.

Another posting on a UK Motorcycle forum describes the de-restriction as follows:

"The ER-6 Restrictor from Kawasaki has a small connector and one small lead shorting two connectors, one that goes back to the ECU and one that goes to the earth. It plugs into the diagnostic connector (Self Diagnosis System Connector) under the seat on the right hand side just behind the panel. It should be attached to a small welded lug on the frame. Just remove the diagnostic connector from the frame and unplug the connector with the two inch piece of lead from it. Replace the diagnostic connector (push fit) onto the welded lug on the frame. The next thing to do is to remove the hex screw from just behind the throttle pulley on the right hand side of the engine."

Restrictor & GiPro-DS Gear Indicator

Owners who wish to fit a GiPro-DS gear Indicator on a restricted bike have the problem that they need to utilise the same Self Diagnosis System electrical

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connector for both the gear indicator wiring and restrictor plug. This is a solution provided by a UK owner:

The gear indicator has been successfully installed and the wiring for the restrictor reinstated without needing any drastic surgery or additional parts. If anyone else wants to do the same the process is very straightforward:

- 1. Attach the gear indicator and route the wiring back to the diagnostic connector.*
- 2. Remove the restrictor plug from the diagnostic connector. This simply has a loop of wire connecting one pin to the earth which is diagonally opposite.*
- 3. Remove the loop of wire and connectors from the restrictor plug. This is very straightforward when you know the yellow plastic is a locking plate and has to be removed 1st!*
- 4) Insert one end of the wire from 2) into the unused connector which is part of the plug connected to the gear indicator (again remove the yellow locking plastic 1st).*
- 5) Connect the gear indicator to the diagnostic plug.*
- 6) The other end of the wire from 2 needs to be earthed. Conveniently there is an earth point right beside the diagnostic connector the perfect distance away.*

That's it! The diagnostic connector for the restrictor is still earthed and the gear indicator works flawlessly.

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