

Kawasaki Ninja 650R (ER6F) & ER-6N Exhaust Oxygen Sensor Guide

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I've had a few non-US Ninja 650R (ER-6F) and ER-6N owners ask me recently why the exhausts they ordered from the US, such as Two Brothers, AreaP and Yoshimura don't have a sensor bung (port) for the exhaust sensor on their bikes.

(It can be a bit of a rude awakening to order an expensive exhaust only to discover that it will not install without some modification.)

Exhausts from Europe such as Arrow and Leo Vince include an exhaust sensor port. You can see the ports on the Arrow cans in this picture:



Most US brand exhausts do NOT include an exhaust sensor port because the Ninja 650R and ER-6N sold in the US has a different fuel injection system and does not require an exhaust sensor.

Here's my Two Brothers pipe after I welded on a bung for the sensor:



Figured it's worth starting a new thread since this question keeps coming up and seems to create some confusion.

The Ninja 650R and ER-6N sold in the US does not have an exhaust sensor (perhaps California does?) (*it doesn't - Ed*) because the US bikes have a "open loop" FI system while the cleaner running EURO III compliant ER-6F (Ninja 650R) and ER-6N sold in most other countries (and perhaps California?) (*it doesn't - Ed*) features a "closed loop" FI system which requires an exhaust sensor in order for the ECU to properly determine proper fuel - air ratio.

As you can see in this picture, the stock open loop Ninja 650R / ER6n has an exhaust sensor while the Two Brothers pipe does not have a bung for the sensor:

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I'm not 100% sure but I think that Two Brothers and Yoshimura make pipes for export that DO have the exhaust bung, so if you have a bike with an exhaust sensor and want to order a pipe that's made in the US you might want to ask before you order if the manufacturer makes an exhaust for your bike that includes the exhaust sensor port.

Of course many US retailers won't know what you are talking about since it's not an issue in the US where there is no exhaust sensor on the Ninja 650R / ER-6N.

Can anyone in California tell us if your CA spec 650R / ER-6N has an exhaust sensor?
(they don't – Ed)

Bottom line- before you buy an exhaust double check to see if you need an exhaust with a sensor port or not.

It's not difficult or expensive to have a port welded on to your pipe if needed.



Some have asked if they can ride without the exhaust sensor installed.

If you have a Ninja 650R / ER-6N / ER-6F with an exhaust sensor and you buy an aftermarket exhaust that doesn't have a port for the sensor **DO NOT RIDE YOUR BIKE WITHOUT THE EXHAUST SENSOR CONNECTED!**

You will get a FI warning light and you run the risk of your bike running lean and cooking your pistons.

Ride On!

Tony