

ABS removal from a 2003 R1150 GS with servo brakes

Lets get a few things straight up front. I take no responsibility for the accuracy of any of the following. It worked for me. It might NOT work for you. I have a 2002 GSA and while my ABS (non servo) still works fine, I've always had a nagging thought that one day the technology will fail. I just got the opportunity to practice on someone else's bike that suddenly went to residual brakes. The dealer price to fix it was \$4500AUD. That is a bit steep for a bike that would be lucky to pull \$10k when it was all working fine so, seeing as ABS was an option it was decided to un-option it.

To do this you need more tools than came with the bike (remember when bikes had a tool kit instead of a free call number). If I need to explain the tools required then don't even attempt this. It involves mechanics, hydraulics and electrics. You will get dirty, maybe hurt yourself and maybe fry the electrics. Electricals are a mystery to me. Please read the following and understand that I am an ironworker.

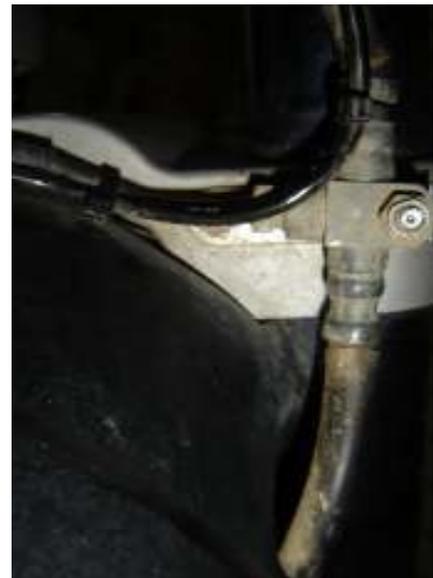
Ironworker's theory of electricrickerly.

Electricity in all forms is smoke. Stuff happens when smoke either gets into or out of electricrickenal parts that make other stuff happen. Smoke usually travels between electricrickenal stuff by wires. Sometimes when dumb people touch the wrong bits or connect wires to the wrong bits smoke either leaks out of or gets into stuff it isn't supposed to get into. If it gets into you it can stop that big pump called your heart. This could make you dead. Small leaks often appear only as smoke. Larger leaks can be like a small storm accompanied by rapid smoke leaks that crack like thunder and flash like lightning. These events are only ever funny if someone else does them. Usually nothing good happened if you had a rapid leak. As Elmer Fud said... Be vevy, vevy careful.

In some of the following pics you will see my digits here and there. They are generally pointing at stuff described adjacent to the image they are in.

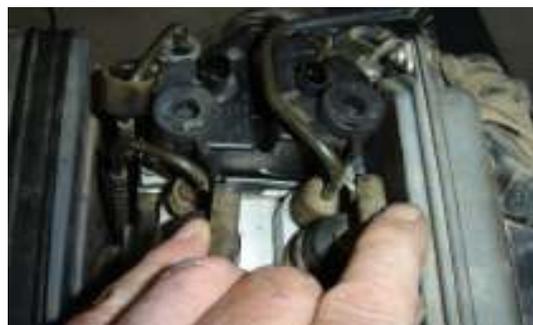


Above is front master cylinder banjo connection. At right is the 'T' piece to split hoses to each of the front calipers. We chucked all the brake lines and fitted a new braided set from HEL Performance that are all one piece. About \$320AUD incl tax.





Above left shows the existing rear hose. It can be transferred direct to the master cylinder where the steel line is connected. Above is the rear caliper banjo. Below left is one of the front caliper banjos. Below is brake line connection under the tank on the right side of the steering head. If you aren't fitting new one piece lines you need to replace this with a non ABS fitting.



Above left is the original rear brake hose connection from the ABS. This is redundant and can be removed. There is an M6 screw behind the frame tube. Pointing at the rubber caps on the brake lines on the servo unit. There are four of these. Slide them back up the lines. They've gotta go.



Above left. - Caps pulled back.
Above right. - Lever out the spring clips. (Note the previously bent screw driver from a previous over exertion. An unintentional handy modification).



Left - Now you can pull the lines out. I should have mentioned earlier. Pack lots of rags around stuff when pulling out the brake lines. Brake fluid goes everywhere and isn't as good as polish at keeping your bike looking new. Actually, it eats paint. Be careful!



Remove the three screws I'm pointing at. Remember the digits? The ABS servo can now be lifted out. Chuck it on the floor with all the other leftovers. See below. Congratulations your bike is now about 4Kg lighter.



Non ABS brake switches are required. They are Normally Closed. ABS ones are normally open. The part numbers we bought were. Front 61312305729 and Rear 61311459747. These had the wrong plugs on them so maybe they are off another model or maybe the non ABS has a different harness. No big deal anyway as the plug ends were just cut off and the old ones soldered back on the new switch wires. Heat shrink 'em and it should all work a treat.



This shows the servo unit plug with the wires snipped off and rejoined as per the rewiring diagram. They were soldered and triple heat shrink wrapped.



Plug then had the top clipped back on and the whole lot wrapped in a piece of old inner tube then cable tied to support it.

There all done. Now it's time for a beer or several.

Cheers
The Wobbler

