

I thought it would be a good idea that while I had my motor on the ground I would do a write up of what needs to be done to the KA lower harness to make it fit onto the RB.

Series II RB25DET S13, all S13s should be the same. Do this at your own risk!!! I will not be responsible for your mistakes and this is based on my knowledge and experience with my RB.

WARNING: do this at your own risk!! I am not responsible for *Jack* blah blah, you know how it goes. Now this guide is only for those that know basic engine wiring, have some clue so far on what is going one but just need to know the specifics to get it started. Thanks OpenSource...

Also included I will show you how to properly splice wires. Don't use gay splice/butt connectors they will only cause you pain in the long run and I will flame you. Spend the time and a little bit for materials and I promise all will go well and you will be glad you listened to me!
Now on with the show...

Prepping that Lower KA harness for your RB

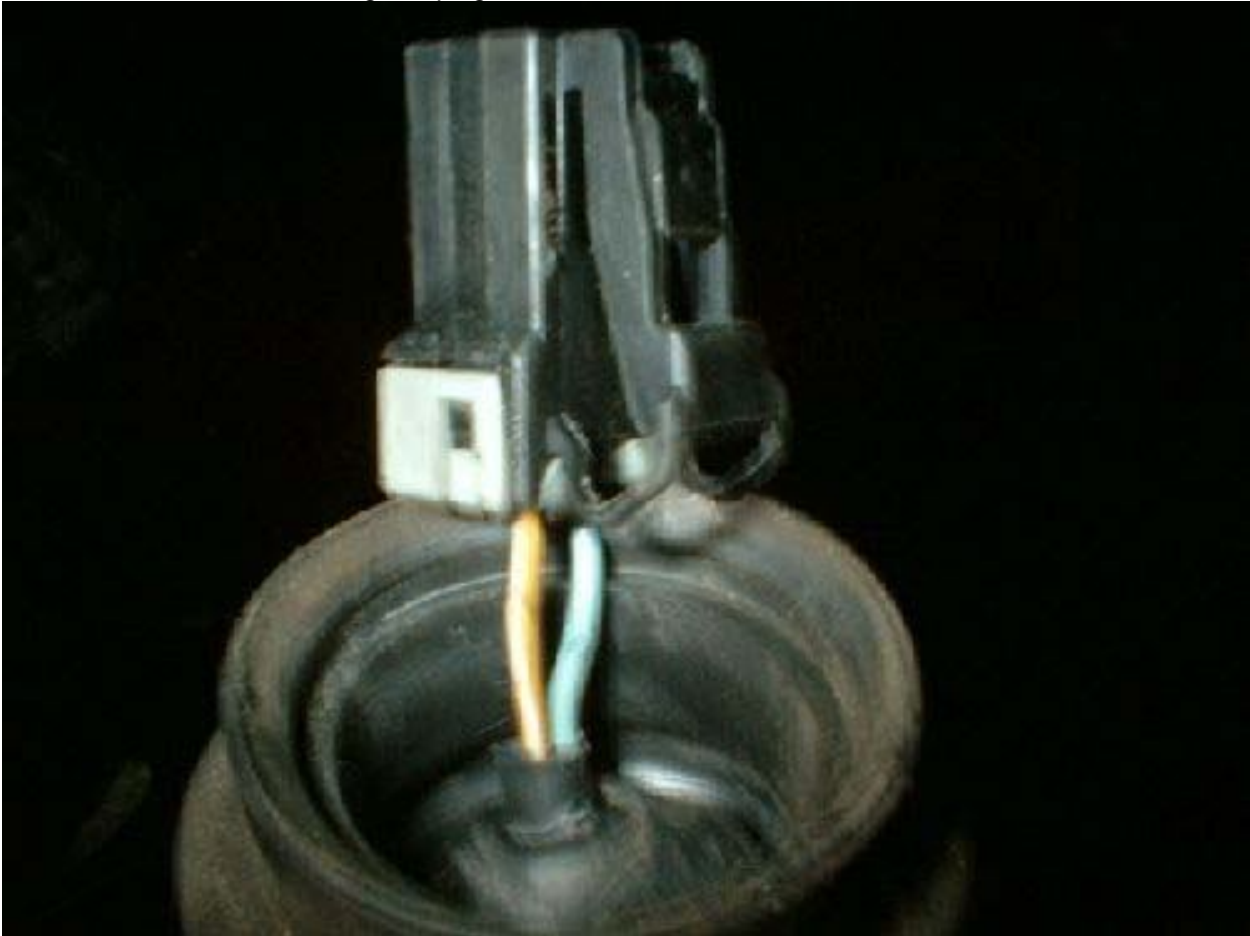
- 1) Take off both harnesses from the KA and your RB motor
- 2)
- 3) From your RB Harness cut off the Oil Pressure sending unit plug, it has two wires - YLW/WHT and B and it is located right next to the oil filter.
- 4)

Now you are going to want to cut at least this much off because it has to be slightly extended.

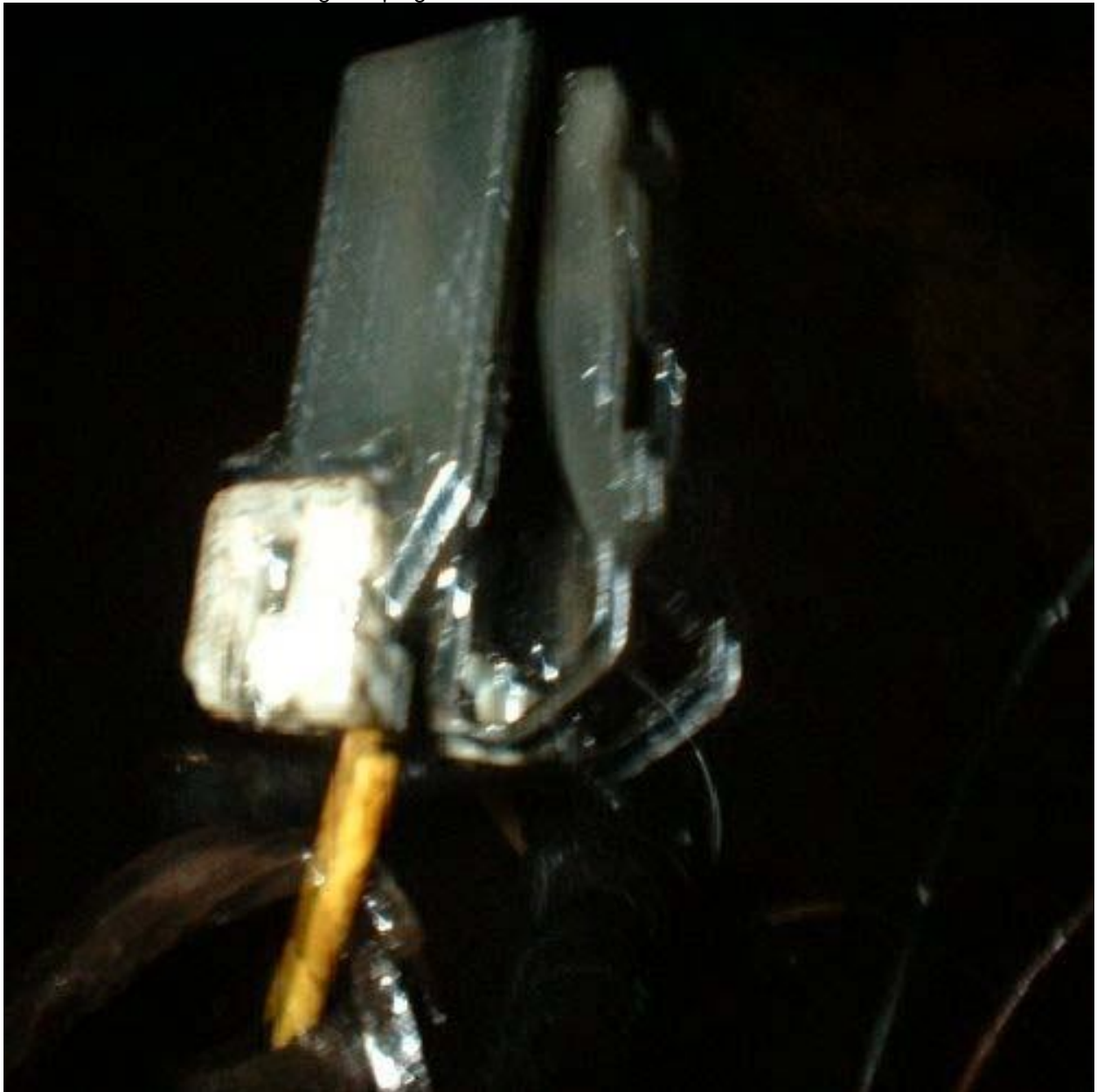


The Yellow with white wire is for the oil light and the blue wire is for the oil gauge. The stock KA cluster doesn't have an oil gauge so the blue wire won't be used. If you are using the RB gauge cluster than you want to be using this blue wire and are going to have to hard wire it to the cluster. If you are using the stock cluster than cut the blue wire, or leave a pig tail on it if you plan to use a oil pressure gauge because that's what its going to be hooked up to.

2 Wire RB Oil Pressure sending unit plug

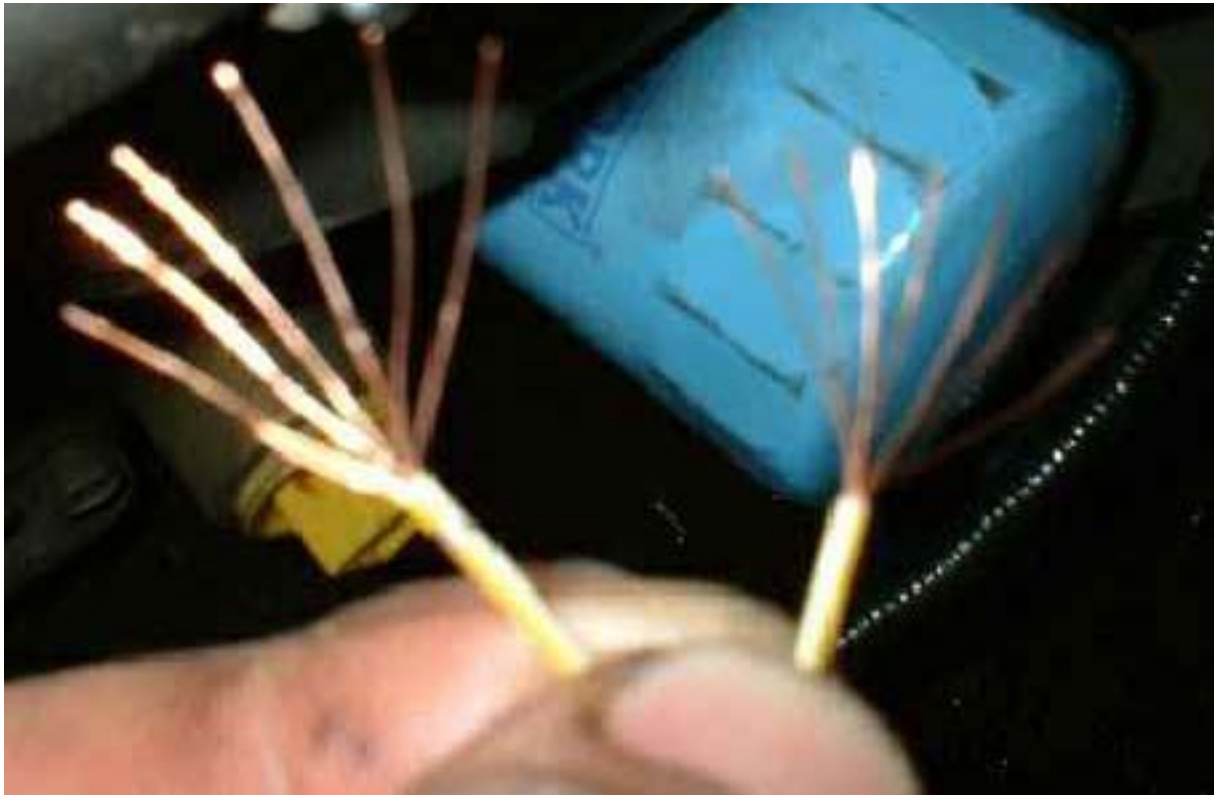


1 Wire KA Oil Pressure sending unit plug



Now here is how to PROPERLY splice wires:

Cut off about half an inch of insulation, throw shrink wrap on and fan the wires out. A lot of people use adhesive shrink tubing for insulation to keep moisture out of your connection. It is HIGHLY recommended. You'll forget to put shrink wrap on a couple of times until you get used to it ;-)



Now intertwine the fans and close them like so:



Now twist the wires opposite of each other. 1 clockwise the other counter clockwise. When that is done it should look like this:



Now *Solder* it in place don't go over board with it, lightly cover it and it WILL hold. Once again adhesive shrink tube helps. LET IT COOL DOWN! If you pull the shrink wrap over it you know what happens... you get to do it over. Let it cool then pull the shrink wrap over and heat that sucker up so it tightens.... Don't burn it.

End Product: Its Perfect!



3) The output wire from the alternator on the KA has a slightly smaller hole to fit over the stud of the RB harness. Ream out the hole from the KA harness to the RB alternator. I just used a dremel.

RB compared to KA



Here it is reamed:



4) From your RB harness unravel the looming and take out the knock sensor harness. The main plug is at the front of the intake. It's the Lower Plug of the 2. I made my harness pretty - loomed and taped it. I suggest you do the same because it's more protection than anything else is.

Lower plug for Knock sensors



Here what is should look like unraveled and separated:



5) With the main plug in bring the harness back and plug in the 2 knock sensors and the one sensor hiding under the intake.





Tape it in place and you are set for that part of the harness.

- 5) Run the wires back off the lower harness to the back of the tranny and all of these should plug right in except for the Vehicle speed sensor.



- 6) You are going to have to use the RB25DET speed sensor with the Rb25DET trans. The RB20 is the same as the KA but they differ from the 25. The 25 is about 2 inches longer than the KA speed sensor so it won't work. Plus, the KA speed sensor has a long harness attached to it with the plug located at the back of the motor while the 25 SS is a short plug having the RB harness run to the back of the motor.

Here is the RB compared to the KA:



You can obviously tell the difference. Resort? Extend the KA plug all the way back. The VSS plugs are both the same. Instead of using the KA plug I unwrapped the RB plug and cut the pig tail to the length I needed so I didn't have to make 4 splices instead of two. Use that brain of yours!

Here's the plug that won't reach for the VSS:



And here is the RB VSS in the transmission:



Now this is up to you. The Starter solenoid connection from the KA to the RB doesn't quite fit on the spade connector right. You can swap you RB plug onto it or leave your stock KA on it. It will fall off eventually and may even become a bigger problem later on. My suggestion is change it over.

Here's what that plug looks like RB compared to KA:



7) Plug everything in - Alternator, Starter, speed sensor, other misc. trans sensors, knock sensor harness, oil pressure sending unit etc.

8) Tape and zip tie it all in place and make sure your connections are good.

You are all done wasn't that easy!?



FREAKING DONE

Reverse lights work

Speedo works

Alternator works

Starter works

DONE!

This is SOOOO Easy that there is no extra step for a beer break!

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